

City of Romulus

Site Plan Submission Checklist

SUBMISSION CHECKLIST

For initial submission of all projects the following **must** be provided:

- | | |
|--|---|
| _____ Signed Site Plan Application | _____ Special Land Use/Rezoning Application (if applicable) |
| _____ Cover Letter with Project Description | _____ Proof of Ownership |
| _____ Environmental Protection Screening Application | _____ Review Fee |
| _____ SEMCOG Nonresidential Data Monitoring Form | _____ Electronic Version of Site Plan in PDF Format |

SITE PLAN PACKET CONTENT

PLANS WILL NOT BE ACCEPTED UNLESS THEY ARE COLLATED, FOLDED (9"x 12") AND STAPLED TO INCLUDE THE FOLLOWING:

- | | |
|---|---|
| _____ Site Plan | _____ Circulation Plan |
| _____ Aerial Photo (with site plan outline overlaid on top) | _____ Architectural Plans (Elevations and Floor plan) |
| _____ Survey/Topo | _____ Lighting Plan |
| _____ Schematic Utility Plan | _____ Tree & Woodland Plan (s) or affidavit |
| _____ Landscape Plan | _____ Special Land Use Criteria, if applicable |

All supporting data/documents must be attached to each set of plans in submission.

TIPS FOR SUBMISSION

- ✓ Contact the Planning Department (734) 955-4530 for questions we are here to assist you with your submission.
- ✓ Review the checklists provided by various departments with the application. This is your best guide to required information on the plans. Use the Zoning Ordinance, Engineering Design standards and Tree and Woodland Ordinance to aid in your submission (see www.romulusgov.com)
- ✓ Do not wait until the filing deadline – submitting prior to the designated deadline date and time will permit extra time for you to submit or correct any deficiencies with the application.
- ✓ Make sure you have proof of ownership (warranty deed, option to purchase or lease agreement) only one copy is required. If submitting an option or lease agreement it must show the terms (expiration of agreement).
- ✓ Designate one project representative as indicated on the application form, all correspondence both written and verbal will be done directly with the designated project representative only. Make sure this contact person is familiar with the process and can communicate requirements to your consultant team.
- ✓ Original, notarized signatures on original application are required. Required fee is due at time of submission.

City of Romulus

SITE PLAN REVIEW APPLICATION

Planning Department 11111 Wayne Road, Romulus MI 48174 Phone: (734) 955-4530 Fax (734) 941-5842 Romulusgov.com

Applications to the Planning Commission must be administratively reviewed by staff and found "substantially complete" prior to being placed on the Planning Commission agenda. The application must be accompanied by the data specified in the Zoning Ordinance, the Development Review Guidelines and Application, plus the required review fees.

Site Information:

Property Address: _____

Parcel ID#'s: _____

The property is located on the NORTH/SOUTH/EAST/WEST side of _____ Road; between _____ Road & _____ Road.

Frontage of _____ feet and a depth of _____ feet.

Total Gross Acreage: _____ Total Net Acreage: _____

Total Acreage of Development Area: _____

Project Description:

Name of Project: _____

Property Zoning: _____

Proposed Use: _____

A written description of the **existing** and **proposed uses**, including but not limited to the hours of operation, number of employees on largest shift, number of company vehicles MUST be included on the Site Plan

Is this Use considered a **Special Land Use**? ___ YES/ ___ NO
(if yes a separate application must be filed)

Are there any public roads, alleys or utilities, which must be **vacated** by the City? ___ YES/ ___ NO
(if yes, approval of the vacation must be approved prior to site plan approval)

Project Information: *This Section to be filled out by City*

Case Number: PC- _____

Date Submitted: _____

Non-refundable Planning Fee: _____

Initial Escrow Fee: _____

Total Fee: _____

Project Detail: Check Use:

___ Industrial ___ Commercial ___ Office

___ Institutional ___ Cell Tower/WECS

___ Site Condo. ___ MF/Apartments

___ Subdivision Plat – Tentative Preliminary Plat

___ Subdivision Plat Final Preliminary Plat

___ Part of PDA

___ New Construction

___ Expansion/Modification to Existing Building/Site

Sq. Ft. of Existing Buildings _____

Sq. Ft. of Addition/Expansion: _____

Sq. Ft. of Proposed Buildings _____

No. of Units/Lots/Buildings Proposed _____

No. of Units/Lots/Buildings Existing _____

Tree and Woodland Information:

Each Application must comply with Chapter 38 of the Code of Ordinances

Does the site contain regulated trees or woodland area?
___ YES/ ___ NO

If there are no trees and/or no regulated trees on site then a "No Tree Affidavit" must be submitted with this application signed by a licensed engineer, forester or other qualified individual.

Wayne County Roads:

Does the project require any curb cuts onto any Wayne County roads? ___ YES/ ___ NO

Please contact Wayne County DPS-Permits at 734-595-6504 for a permit application.

City of Romulus
SITE PLAN REVIEW APPLICATION Pg. 2

Applicant Information:

Name: _____
 Street: _____

 City: _____
 State: _____ Zip: _____
 Phone: () _____
 Email/Fax: () _____

Project Representative:

Name: _____
 Street: _____

 City: _____
 State: _____ Zip: _____
 Phone: () _____
 Email/Fax: () _____

Property Owner Information:

Name: _____
 Street: _____

 City: _____
 State: _____ Zip: _____
 Phone: () _____
 Email/Fax: () _____

Affidavit of Petitioner:

I, The undersigned petitioner, being duly sworn, depose and say that the statements and information herewith submitted are true and correct to the best of his/her knowledge, information and belief; further that s/he is authorized to submit this petition. I further acknowledge that the City and its employees shall not be held liable for any claims that arise as a result of acceptance, processing, or approval of this site plan application. I also understand that by signing this application I authorize City staff and/or its representatives to conduct visits to the subject property and allow for reasonable access to the premises.

_____	_____
Print Applicant Name	Date
_____	_____
Signature of Applicant	Date
_____	_____
Print Property Owners Name	Date
_____	_____
Signature of Property Owner	Date

Property Restrictions:

Legally binding development constraints such as a Planned Development Agreement, deed restrictions or court rulings may limit the developmental capacity of your site. It is your responsibility to be aware of such restriction.

 Applicants Initial

Notary for Applicant:

Subscribed and sworn before me, this ____day of _____20____. A Notary Public in and for _____ County, Michigan.

 (Signature)
 Notary Public

My Commission expires _____, 20____.

Notary for Property Owner:

Subscribed and sworn before me, this ____day of _____20____. A Notary Public in and for _____ County, Michigan.

 (Signature)
 Notary Public

My Commission expires _____, 20____.

City of Romulus

Site Plan Review Check List

According to Article 17 of the Zoning Ordinance the following data shall be included with and as part of the site plan submitted for review.

Additional data may be included with the site plan where determined necessary by the nature of the proposed use or site conditions.

- ❖ **Site plans shall be prepared by a professional engineer or registered architect licensed to practice in the State of Michigan.**
- ❖ **ALL SITE PLANS MUST BE COLLATED AND FOLDED TO 9" x 12"**
- ❖ **Site plans MUST be accompanied by a completed site plan application and proper proof of ownership for processing**
- ❖ **If any of the items are missing, the site plan shall list each missing item and the reason(s) why each listed item is not considered applicable.**

Site Plan Data –	Provided
General Descriptive and Identification Data:	
Description of proposed project or use, type of building or structures, and name of proposed development, if applicable. Use statement must include the proposed number of employees and hours of operation	
Description of proposed use(s) as permitted or special land use(s), including any demolition of existing structures.	
If use considered a special land use, has separate application been filed?	
Notation of any variances which have or must be secured	
Site plans shall consist of a plan for the entire development, drawn to an engineer's scale of not less than 1 inch = 50 feet for property less than 3 acres, or 1 inch = 100 feet for property 3 acres or more in size.	
Sheet size shall be at least 24 x 36 inches, collated according to sheet number and folded to a size of 9 x 12 inches. If a large development is shown in sections on multiple sheets, then one overall composite sheet shall be included	
Title block with sheet number/title; name, address and telephone number of the applicant and firm or individual who prepared the plans; and date(s) of submission and any revisions (month, day, year)	
Scale and north-point	
Location map drawn to a separate scale with north-point, showing surrounding land, zoning and streets within a mile	
Legal and common description of property and acreage	
Identification and signature over the seal of the architect or engineer who prepared drawings	
Zoning classification of the site and all abutting parcels	
Proximity to section corner and major thoroughfares	
Net acreage (minus rights-of-way) and total acreage	
Notation that says, "Not to be Used as Construction Drawing"	

City of Romulus
Site Plan Review Check List

Site Plan Data –	Provided
Aerial photograph showing the site and all areas within 150 feet of the site. <i>(recommended to overlay/outline the site plan on top)</i>	
Site Data:	
Summary table of site data indicating the gross and useable floor area, number of required and provided parking spaces, site area in square feet, building dimensions, required setbacks of the zoning district and the proposed setbacks of the project, open space and lot coverage.	
Existing lot lines, building lines, structures, parking areas and other improvements on the site and within 200 feet of the site	
Building footprints, floor plans and floor areas	
On parcels of more than one (1) acre, topography on the site and within 100 feet of the site at two-foot contour intervals, referenced to USGS NGVD 29 Datum	
Proposed lot lines, lot dimensions, property lines, setback dimensions, structures, and other improvements on the site and within 200 feet of the site	
Location of existing drainage courses, wetlands, lakes, streams, and floodplains with elevations	
Tree and woodlands inventory as required by the Woodlands Ordinance, with an identification of materials to be removed, materials to be preserved and methods for woodlands preservation	
All existing and proposed easements	
Location of waste receptacle(s) and transformer pad(s) and method of screening	
Extent of any outdoor sales display or storage area	
Location, height, and outside dimensions of all storage areas and facilities	
Project phasing, if proposed	
Access and Circulation:	
Existing and planned right-of-way for all streets	
Dimensions, curve radii and centerlines of existing and proposed access points, roads and road rights-of-way or access easements within 100 feet of the site	
Opposing driveways and intersections within 250 feet of site	
Location and cross section details of proposed roads, driveways, parking lots, sidewalks and non-motorized paths illustrating materials and thickness	
Dimensions of acceleration, deceleration, and passing lanes	
Dimensions of parking spaces including barrier free, islands, circulation aisles and loading zones (including loading dock/door orientation and screening)	
Dimension and location of all clear vision areas	
Calculations for required number of parking, stacking and loading spaces	
Shared parking and access easements, if shared parking or access is proposed	
Designation of fire lanes	
Details of traffic regulatory signs, pavement markings and curbing	
Notation that all “Internal signs shall meet city standards and shall be paid for and installed at the developers expense”	
Truck circulation plan showing turning templates for trucks and emergency vehicles	
Location of existing and proposed sidewalks/pathways	
Location, dimension and cross-section of sidewalks	
Landscape Plans:	

**City of Romulus
Site Plan Review Check List**

Site Plan Data –	Provided
Existing woodlands being preserved	
All landscaping installation and maintenance notes, indicating compliance with the requirements of Article 13	
Summary table of calculations of all landscape requirements, as set forth in Article 13 Table should detail requirements (quantity, size) and proposed planting list (caliper size or height of material, method of installation, botanical and common names, and) for each individual area requirement.	
Details of the proposed irrigation system	
Description of methods to preserve existing landscaping, including fence details	
The location of existing and proposed lawns and landscaped areas	
Landscape plan, including location and type of all existing and proposed shrubs, trees, and other live plant material	
Location, size, height and material of construction for all obscuring wall(s) or berm(s) with cross-sections, where required	
Approximate dates of plant installation	
Fences and Screening requirements Article 13.03	
Mechanical Equipment location and screening	
Building and Structure Details:	
Building elevations for all facades, along with photos or color renderings of the building. Elevation drawings shall indicate the height of building, materials, colors, architectural quality	
Location, height, and outside dimensions of all proposed buildings or structures	
Building floor plans and total floor area	
Details on accessory structures and any screening	
Location, size, height, and lighting of all proposed site and wall signs	
Building facade elevations for all sides, drawn at an appropriate scale, including cross-sections and details of any proposed rooftop equipment and screening	
Description of exterior building materials and colors (samples may be required by the Planning Commission)	
Sign base, location and size	
Lighting Details - Article 13.05:	
Photometric plan (must show location of fixtures on site including building, ground mounted and sign lighting)	
Indication of metal halide fixtures with full cut-off shields	
Height and design of light poles	
Manufactures specification for all lighting fixtures shown on the site plan	
Waste Receptacle Details – Article 13.06:	
Location, access, construction and screening	
Information Concerning Existing and Proposed Utilities, Drainage and Related Issues:	
Location of sanitary sewers and septic systems	
Location and size of water mains, well sites, water service, storm sewers loads, and fire hydrants	
Indication of site grading, drainage patterns and other stormwater management measures	

City of Romulus
Site Plan Review Check List

Site Plan Data –	Provided
Stormwater retention and detention ponds, including grading, side slopes, depth, high water elevation, volume and outfalls with calculations	
Location and size of underground storm sewers and drains	
Location of above and below ground gas, electric and telephone lines	
Location of transformers and utility boxes	
Locations, description and quantities of hazardous materials to be stored on the site and details for best management practices, such as secondary containment	
Location, size, height and method of shielding for all site and building lighting	
Lighting plan with details for light fixtures on the lighting plans and a photometric plan showing light intensities on the site	
Standard Site Plan Notes	
<i>“Not to be used for Construction Drawings”</i>	
<i>Landscaping Maintenance - “Landscaping shall be maintained in good condition to present a healthy, neat, and orderly appearance free from refuse and debris. All unhealthy and dead material shall be replaced within one (1) year of the next appropriate planting period.”</i>	
<i>Landscaping Substitution - “Any substitutions of plant material from approved site plan will be approved by the Planning Department prior to installation”.</i>	
<i>Above Ground Utilities, if locations are unknown- “future locations and landscape screening will be reviewed and approved by both the Building and Planning Departments prior to installation”.</i>	
<i>Lighting – “All fixtures shall be metal halide have full cut-off fixtures and be directed downward away from roadways and adjacent properties”</i>	
<i>Vacant Areas of Site - “Not for outdoor storage”</i>	
<i>Land Banked Parking - “The land banked area will be paved, at the expense of the owner if the City determines that adequate parking has not been provided and is needed on site.”</i>	
<i>Business Signs - “No signs are approved as part of this site plan approval and prior to erecting a sign, an application and appropriate submissions shall be made to the Building Department for review, approval and issuance of a sign permit”.</i>	
<i>Onsite Signs (fire lane, no parking, etc)– “Signs shall be paid for and installed by the developer”</i>	
Additional information required for Residential Development	
The number and location of each type of residential unit (one bedroom units, two bedroom units, etc.)	
Density calculations by type of residential unit (dwelling units per acre)	
Garage or carport locations and details, if proposed	
Location and design of mailbox clusters	
Location, dimensions, floor plans and elevations of common building(s) (e.g., recreation, laundry, etc.), if applicable	
Swimming pool fencing detail, including height and type of fence, if applicable	
Location and size of recreation and open space areas	
Indication of type of recreation facilities proposed for recreation area	
Description of any performance, site and/or noise impacts	

City of Romulus

ENVIRONMENTAL PROTECTION SCREENING APPLICATION



Planning Department 11111 Wayne Road, Romulus MI 48174 Phone: (734) 955-4530 Fax (734) 941-5842

Building and Safety Department 12600 Wayne Road, Romulus MI 48174 Phone: (734) 942-7550 Fax (734) 941-5799

www.romulusgov.com

The Environmental Protection Ordinance Screening Application **MUST** accompany all applications to the Planning Commission/Planning Department. Any YES answer will automatically be referred to the Environmental Protection Board prior to being placed on the Planning Commission or Board of Appeals (where applicable) agenda.

The Environmental Protection Board is administered through the Building and Safety Department and can be reached at (734) 942-7550 for further information.

Name of Development/Project: _____
 Property Address: _____
 Parcel ID#s: _____

The property is located on the NORTH/SOUTH/EAST/WEST side of _____ Road; Between _____ Road and _____ Road.
 The property has a frontage of _____ feet and a Depth of _____ Feet.

Property Zoning: _____ Proposed Use/Development: _____

This Section to be filled out by City

Case Number: _____

Date Submitted: _____

Date Filed: _____

Are any of the boxes below checked **YES**? If so, transmit to Building Department.

Date Transmitted to Building Department: _____

Environmental Screening Questionnaire: All Questions **MUST** be answered.

Please answer if the proposed use of the site will involve construction/modification and/or operation of any of the following:	YES	NO
1. A hazardous waste disposal facility, as defined in MCL 324.11102(b)		
2. A hazardous waste treatment facility, as defined in MCL 324.11104(a)		
3. A hazardous waste storage facility, as defined in MCL 324.11104(4)		
4. A hazardous waste limited storage facility, as defined in MCL 324.11103(7)		
5. A hazardous waste transfer facility as defined in Michigan Administrative Code R 299.9108 (f)		
6. A solid waste disposal area, as defined in MCL 324.11503 (2)		
7. A liquid industrial waste disposal area, as defined in MCL 324.1210 (7)		
8. A waste disposal well, as defined in MCL 324.62501 (c)		
9. A source or sources of any contaminants which require(s) a renewal operating permit pursuant to MCL 324.5506		
10. Will the proposed use of the site involve the presence of any extremely hazardous substances identified under 40 CFR Part 355 at or above threshold planning levels for those substances?		

City of Romulus

ENVIRONMENTAL PROTECTION SCREENING APPLICATION Pg. 2

Property Owner Information:

Name: _____
Street: _____
City: _____
State: _____ Zip: _____
Phone: () _____
E-mail _____

Applicant Information:

Name: _____
Street: _____
City: _____
State: _____ Zip: _____
Phone: () _____
E-mail: _____

Affidavit of Petitioner:

I, The undersigned petitioner, being duly sworn, depose and say that the statements and information herewith submitted are true and correct to the best of his/her knowledge, information and belief; further that s/he is authorized to submit this petition. I further acknowledge that the City and its employees shall not be held liable for any claims that arise as a result of acceptance, processing, or approval of this site plan application.

Notary for Property Owner:

Subscribed and sworn before me, this ____ day
of _____ 20____. A Notary Public in and for
_____ County, Michigan.

(Signature)
Notary Public

My Commission expires _____, 20____.

Notary for Applicant:

Subscribed and sworn before me, this ____ day
of _____ 20____. A Notary Public in and for
_____ County, Michigan.

(Signature)
Notary Public

My Commission expires _____, 20____.



City of Romulus Engineering/DPW Site Plan Checklist

General Requirements

- [] 1. Submitted on 24" x 36" paper with a minimum horizontal scale of 1" = 50' and vertical of 1" = 5'. Oversize plans will not be accepted.
- [] 2. General plan at 1" = 100' or 1" = 200' when size of site prohibits a single plan sheet. Show street names, units, utilities, pavement, site dimensions, phase lines.
- [] 3. Plan completion date with most recent revision date.
- [] 4. Location map showing section number and major thoroughfares.
- [] 5. Lot number, parcel dimensions and adjoining rights-of-way (existing and proposed) clearly shown.
- [] 6. Professional engineer seal (State of Michigan) for all site civil drawings.
- [] 7. Name, address and phone number of engineer, architect and the owner.
- [] 8. Title block, scale and north arrow for each sheet.
- [] 9. Legal description of property that closes within acceptable limits. Provide legal description of R.O.W. dedication, if applicable. Confirm lot and right-of-way consistent with current Tax I.D. Maps and future Right-of-Way Map.
- [] 10. Striping plan for parking lot.
- [] 11. Loading spaces indicated.
- [] 12. Building use indicated and other uses of property including any outdoor storage areas.
- [] 13. Traffic study may be required based on existing conditions. Traffic Division of City Engineer to review plans.
- [] 14. Separate landscape plan. Verify no trees in existing or proposed public easements.
- [] 15. Based on the extent of the improvements, a note shall be added to the plans if a batch plant is necessary onsite or adjacent to the development. Zoning Board of Appeals approval required if this is the case. Note on cover sheet regardless.
- [] 16. Underground utilities shall not be located closer than 10' from any building or structure.
- [] 17. For residential sites, all private utilities (i.e. gas, electric, etc.) shall be placed in backyards. A note shall be added to the site plan.

- [] 18. Phasing limits shall be clearly identified on the plans.
- [] 19. Minimum throat width at driveways is 30'. Minimum radius of 35'; 45' if tractor-trailers will enter the site. Truck circulation plan provided with turning movements shown for the largest vehicle.
- [] 20. For residential or multi-unit development, a Development Agreement/Association/Master Deed document with "Exhibit B" must be submitted with maintenance outlined for all improvements, including public road acceptance.
- [] 21. The applicant is strongly encouraged to meet with the Wayne County Permit Office early in the site plan process to discuss items under their jurisdiction (e.g. County Drain, County right-of-way, stormwater management). The County may raise significant site layout issues.

Topographical Survey

- [] 22. A separate current existing conditions and topography plan sheet shall be submitted, sealed by a Professional Surveyor or Engineer licensed to practice in the State of Michigan.
- [] 23. Indicate USGS NGVD 29 benchmarks (minimum of two).
- [] 24. Property lines shown by bearing and distance (Lines to match legal description).
- [] 25. Existing off-site elevations at a minimum of 50' and 100' around the property. Elevations at property corners and along property lines and sufficient on-site elevations or contours to establish site drainage.
- [] 26. Show existing conditions; ditches, culverts, utilities (invert and casting elevations), sidewalks, power poles, easements, and finish grade of adjacent buildings.
- [] 27. Show the locations of all existing gas, electric, cable and telephone lines.
- [] 28. Indicate the zoning of all adjacent parcels.
- [] 29. Show existing adjacent roads with both existing right-of-way and future right-of-way per the master plan. Grades must be shown at ditch centerline, top of bank, edge of shoulder, edge of pavement (or top of curb) and pavement centerline. Grades must be shown on both sides of road.
- [] 30. Limits of existing wetlands, regulated or unregulated, shall be shown and any impacts indicated and quantified. If none are located within the influence of the site a note shall be added on the plans.
- [] 31. In accordance with the Huron Watershed Council, the natural drainage pattern of land shall not be altered in any way that might cause adverse effects to existing wetlands.

- [] 32. County drains identified by name with easements shown. "Natural Drainage Courses" also identified (MDEQ jurisdiction).

Water Main

- [] 33. Public water main shall be located in a greenbelt whenever feasible including new gate wells. In the event that the majority of public main is proposed under pavement, a note shall be added to the plan indicating it's the property owner's responsibility for any pavement repairs as a result of City maintenance.
- [] 34. Minimum size water main is 8". Maximum dead-end main lengths are: 40' for 6" fire hydrant lead; 400' for 8" main; 1,000' for 12" main all originating from water main of equal or greater size. Loop mains if these minimums cannot be met, with a gate valve and well provided between the two connection points.
- [] 35. All dead end mains must end with a flushing hydrant then a gate valve and well.
- [] 36. Water main shall extend to adjacent properties as necessary to facilitate future development.
- [] 37. Show water service and size. No private services allowed from 6" hydrant lead or water main larger than 24" in diameter.
- [] 38. A 10' horizontal separation must be maintained between the water main and sanitary or storm sewers.
- [] 39. Minimum 12' wide public easement must be shown on the plans. Permanent structures of any type, including but not limited to, trees, light poles, drainage structures, etc. will not be allowed within the influence of public easements. Verify against landscape plan.
- [] 40. Valve spacing:

In the event of a breakage; three valves to isolate break, four maximum, no more than two hydrants out of service, no more than 24 single-family units or 30 multiple units out of service. Gate valve and wells shall be placed near intersections wherever practical.
- [] 41. Hydrant spacing: Maximum of 500' or as determined by Fire Department.
- [] 42. No parking within a 15' radius of a hydrant.
- [] 43. Water main pipe material shall be shown (see Section V).
- [] 44. For new developments with proposed cul-de-sacs, water main shall be extended around the entire cul-de-sac to facilitate service taps.

- [] 45. Any public water main proposed on adjacent properties will require a public easement. A letter of understanding with sketch shall be provided from the adjacent owner prior to site plan approval.

Sanitary Sewer

- [] 46. Verify that existing sanitary system has capacity to handle the new sanitary flow. Applicant to provide preliminary calculations for City Engineer to check against Romulus Sanitary Tracking Tool (iTrack Sewer).
- [] 47. Public sanitary sewer shall be located in a greenbelt whenever feasible including new manholes. In the event that the majority of public sewer is proposed under pavement, a note shall be added to the plan indicating it's the property owner's responsibility for any pavement repairs as a result of City maintenance.
- [] 48. Sanitary sewer shall extend to adjacent properties as necessary to facilitate future development. Adequate depth must be provided for service area.
- [] 49. Minimum 20' wide, public easement must be shown on the plans. Wider easement may be required based on depth of sewer. Permanent structures of any type, including but not limited to, trees, light poles, drainage structures, etc. will not be allowed within influence of public sewer easement. Verify against landscape plan.
- [] 50. Pump stations/lift stations will not be accepted unless there is no other feasible alternative. If a pump station is proposed, special language and requirements will be needed in the Development Agreement and on plans (see Appendix M). The owner or Association is responsible for all monthly utility bills (e.g. electric, phone).
- [] 51. Show building lead size and location (6" Sch. 40 at minimum 1.0% slope).
- [] 52. Provide minimum of 10' of separation from other utilities.
- [] 53. Sanitary sewer pipe material shall be shown (see Section VI).
- [] 54. Any public sanitary sewer proposed on adjacent properties will require a public easement. A letter of understanding with sketch shall be provided from the adjacent owner prior to site plan approval.

Storm Sewer

- [] 55. Underground storm sewer systems are required for new developments (12" minimum diameter). Private easements indicated as necessary.
- [] 56. Proposed collection points, system layout, sizes and outlets must be shown on the site plan. Also show preliminary invert and rim elevations.

- [] 57. Pump stations will not be accepted unless there is no other feasible alternative. Pump stations must be labeled as private with easements indicated and appropriate maintenance language in the Development Agreement/Association/Master Deed documents. Utility bills and maintenance costs are the responsibility of the developer and/or association.
- [] 58. If connecting to an existing system, provide calculations showing capacity of existing system based on as-built information.
- [] 59. All sump pump drains shall be indicated and must connect to a storm structure.
- [] 60. Minimum 2.5' of cover over system.
- [] 61. Storm sewer pipe material shall be shown (see Section VII).
- [] 62. Upstream/offsite drainage must be accommodated.

Detention

- [] 63. Supply preliminary calculations for site plan review per Wayne County Storm Water Management Standards latest edition. Detention volume required and provided calculations shall be shown.
- [] 64. Verify that a permanent four (4) foot water level is provided in the detention pond and is not included in storage volume calculations.
- [] 65. Acceptable means of detention are open basins, underground storage systems, bioswales, and rain gardens.
- [] 66. A sediment forebay or other treatment structure (e.g. CDS System, Vortechinics) is required for all new detention systems.
- [] 67. Aerators shall be incorporated into detention basins and noted on the drawings.
- [] 68. Location and size of detention ponds shown with side slopes indicated.
- [] 69. Detention ponds shall be fenced. Building Department may require additional safety measures or external indemnification from applicant based on pond location and depth.

Paving and Right-of-Way Improvements

- [] 70. On-site paving requirements:
 - a. Pavement cross-section must be shown. Minimums are:
 - 1) Commercial and multiple: 4" asphalt on 6" aggregate base or 6" concrete on 6" aggregate base.
 - 2) Industrial: 4" asphalt on 8" aggregate base or 8" concrete on 6" aggregate base.

- b. Minimum slope:
 - 1) Asphalt: 1.0%
 - 2) Concrete: 0.5%
- c. Maximum slope:
 - 1) Asphalt: 6.0%
 - 2) Concrete: 6.0%
- d. Concrete curb for entire perimeter of drive or parking areas.

[] 71. Public right-of-way (City):

- a. Pavement cross-sections must be shown with 6" aggregate base. Minimums are:
 - 1) Concrete major/collector road: 8" concrete.
 - 2) Asphalt major/collector road: 9 1/2" asphalt.
 - 3) Concrete local road: 7" concrete.
 - 4) Asphalt local road: 8 1/2" asphalt.
 - 5) "Class A" roads must adhere to county standards.
- b. All public roads must have curb and gutter unless otherwise approved by the Administrative Review Committee.
- c. Turning improvements, center-turn lane, acceleration lane and taper, deceleration lane and taper as necessary to facilitate traffic flow.

[] 72. Sidewalks required along the frontage of all roads except in districts zoned "RE".

- a. Located 1' from ultimate right-of-way line.
- b. Sidewalk ramps noted, in accordance with A.D.A. standards.
- c. All structures, hydrants, poles, etc., noted and moved or adjusted as necessary.

Site Grading

[] 73. Sufficient proposed grades indicated to ensure that:

- a. Drainage is adequately discharged offsite consistent with current drainage pattern.
- b. No upstream drainage is restricted.
- c. Paving slopes are adequate.
- d. The site generally drains without standing water.

[] 74. Elevation representing the brick ledge, finished grade and the first floor grade must be indicated.

- [] 75. Proposed grading will meet abutting property line elevations. Differentials in grade must incorporate a one on four maximum slope to the abutting property line.
- [] 76. Temporary easement from adjacent property owner will be required for any grading necessary on off-site property. Appropriate notes shall be added to the site plan if this is applicable with a letter of understanding submitted.
- [] 77. Location of any proposed retaining walls shall be shown on plans. Walls separating a grade differential of more than 18" are considered retaining walls and require a structural engineering design and review. Design engineer must supply calculations with engineering plan submittal (see Appendix F for retaining wall review guidelines).

City of Romulus Fire Department Site Plan Review Checklist

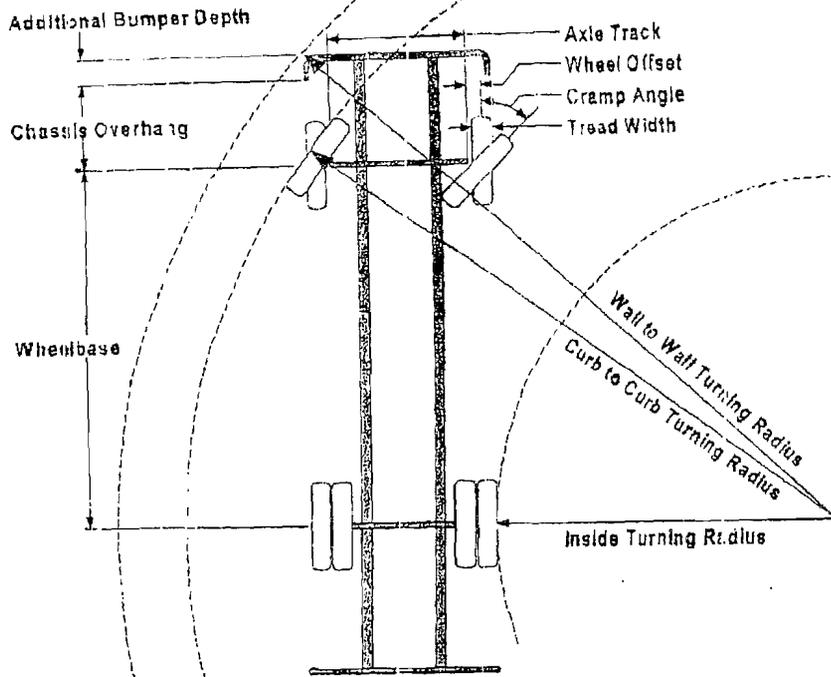
The following checklist is a guideline from the Fire Department to assist all developers with the submission of plans to the City of Romulus. The requirements are from the City of Romulus Engineering Standards, the International Fire Code 2000 and NFPA Standards. Reviews are based upon Fire Department related Health and Safety items only. Any questions regarding this information should be directed to the Romulus Fire Department at (734) 941-8585.

- _____ Use group is to be provided and consistent throughout the submitted documentation.
- _____ Romulus Fire Department and the City require a minimum of an eight (8") inch water main and fire hydrant coverage as required in the International Fire Code for the building **along a normal drive-able route**, (radial coverage shall not be approved), accessible by fire department vehicles. Each hydrant shall provide a minimum of 250' (feet) coverage with a maximum distance between hydrants being 500'(feet). See the City of Romulus Engineering Standards for additional information.
- _____ Loop water main systems shall be required per City of Romulus Engineering specifications.
- _____ Maximum length for an 8" (inch) water main is 250' (feet) and the maximum length for a 12" (inch) water main is 750'(feet).
- _____ Romulus Fire Department requires that an eight (8") inch water main to serve for the "fire line" supplying any fire suppression system.
- _____ A hydrant is required fifty (50') feet to one hundred (100') feet of the Fire Department five (5") inch storz connection. Fire Department connection shall be located on the front of the building only unless approved by the Fire Department.
- _____ 20 ft. Fire Lane (Posted) is required, 26 ft. at the hydrants, with an adequate turn around for fire department vehicles and shall be properly maintained. Fire lane drives shall be of an asphalt or concrete type surface only.
- _____ Provide a truck circulation plans incorporating the turning radius template provided.
- _____ All new fire hydrants to be installed shall have one quick-connect 5" storz outlet. *Required with the submittal of building plans.*
- _____ Post "NO PARKING" sign(s) near hydrant if needed for access by Fire Department. *Required with the submittal of building plans.*
- _____ No Parking, storage, or any other type of obstruction shall be permitted within a 15' (feet) radius of any hydrant.
- _____ No Parking, storage, or any other type of obstruction shall be permitted within 15' (feet) of the fire department connection.
- _____ Fire Suppression is required as determined by the use group under the International Fire Code 2000. All fire-suppressed building are to be sprinkled per N.F.P.A.

- _____ Horn/Strobes to be installed for indication of water flow instead of a bell, on the outside wall facing the street, above the Fire Department connection as well as the inside of the building for visibility. *Required with the submittal of building plans.*
- _____ Fire Suppression control valves to be located in a separate fire rated room, isolated from other occupancies in multi-tenant developments or multi-use developments (example a manufacturing facility that will also be warehousing product.) This room shall have a separate exterior access.
- _____ Dumpster locations shall be indicated or method of trash removal from all sites. Dumpster enclosures shall be located a minimum of 15' (feet) from the exterior wall of any structure. No dumpsters shall be permitted with in any structure.
- _____ Provide adequate amounts of portable fire extinguishers with signs, for the occupancy of the building per NFPA 10. All extinguishers shall be of an industrial type and shall meet the approval of the Fire Department.
- _____ Provide emergency means of egress lighting in building with independent power source. *Required with the submittal of building plans*
- _____ After occupancy of the building, an electrician shall furnish to this department the foot candlepower measurements on all egress areas. Documentation shall bear the seal of an architect and be notarized stating the measurement, and shall meet the criteria of the Department per the International Fire Code 2000. *Required for final approval.*
- _____ Provide exit lighting with an independent power source to indicate all means of egress. *Required with the submittal of building plans.*
- _____ Address numbers at least five (5") inches high required on front of building, and shall be visible from the street. *Required for final approval.*
- _____ All proposed storage shall be submitted for approval. Submittal shall include type, height, and method of storage. Warehouses shall indicate maximum amounts of intended storage. A notarized letter of verification that proper fire suppression coverage for the stored or produced commodity will be required prior to the occupancy approval.
- _____ Installation of a KNOX lock box shall be required.

Due to construction and material alterations and/or changes, additional items may be required upon inspection for final approval. Be advised that reviews are based on information submitted and does not imply that all items have been addressed. In addition, other items may be required not indicated above based on information provided by the contractor(s)/architect.

Turning Performance Analysis



Parameters:

Inside Cramp Angle:	45.00 °
Acle Track:	81.92 in.
Wheel Offset:	6.12 in.
Tread Width:	17.70 in.
Chassis Overhang:	65.99 in.
Additional Bumper Depth:	22.00 in.
Front Overhang	147.60 in.
Wheelbase:	256.00 in.

Calculated Turning Radii:

Inside Turn:	20 ft. 1 in.
Curb to Curb:	36 ft. 7 in.
Wall to Wall:	44 ft. 8 in.

Comments:

Aerial Application

JOB# 10592 fax# 248-353-4148 attn Nader
2pages

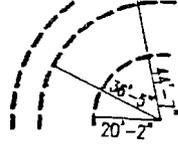
Components	PRIDE #	Description
Front Tires	0031621	Tires, Michelin, 425/65R22.50 20 ply XZY tread
Chassis	0060024	Lance-2000 Chassis, Aerials/Tankers Tandem 48K
Front Bumper	0012246	Bumper, 22" extended - all chassis'
Aerial Device	0022160	Aerial, 100' Pierce Platform

Notes:

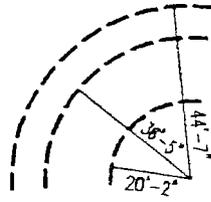
Actual Inside Cramp Angle may be less due to highly specialized options.

Curb to Curb turning radius calculated for a 9.00 inch curb.

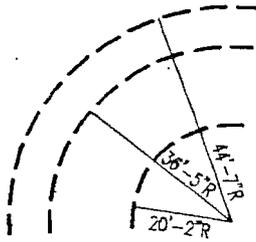
Reduce turning radius by 33% if vehicle is equipped with all-wheel steer.



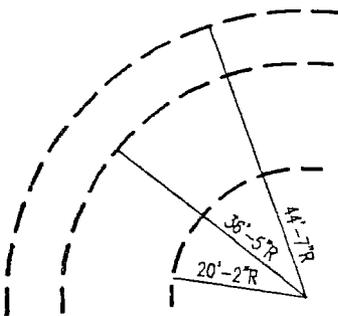
1"=60'



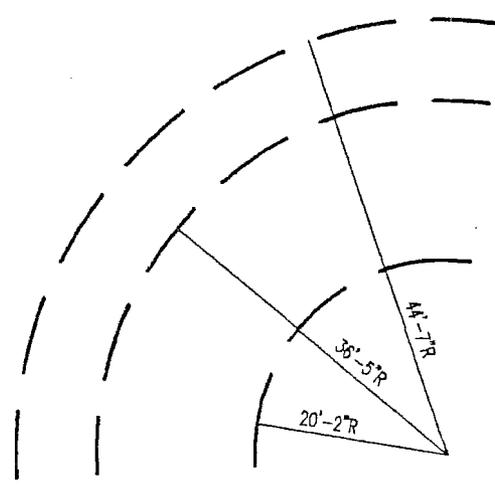
1"=50'



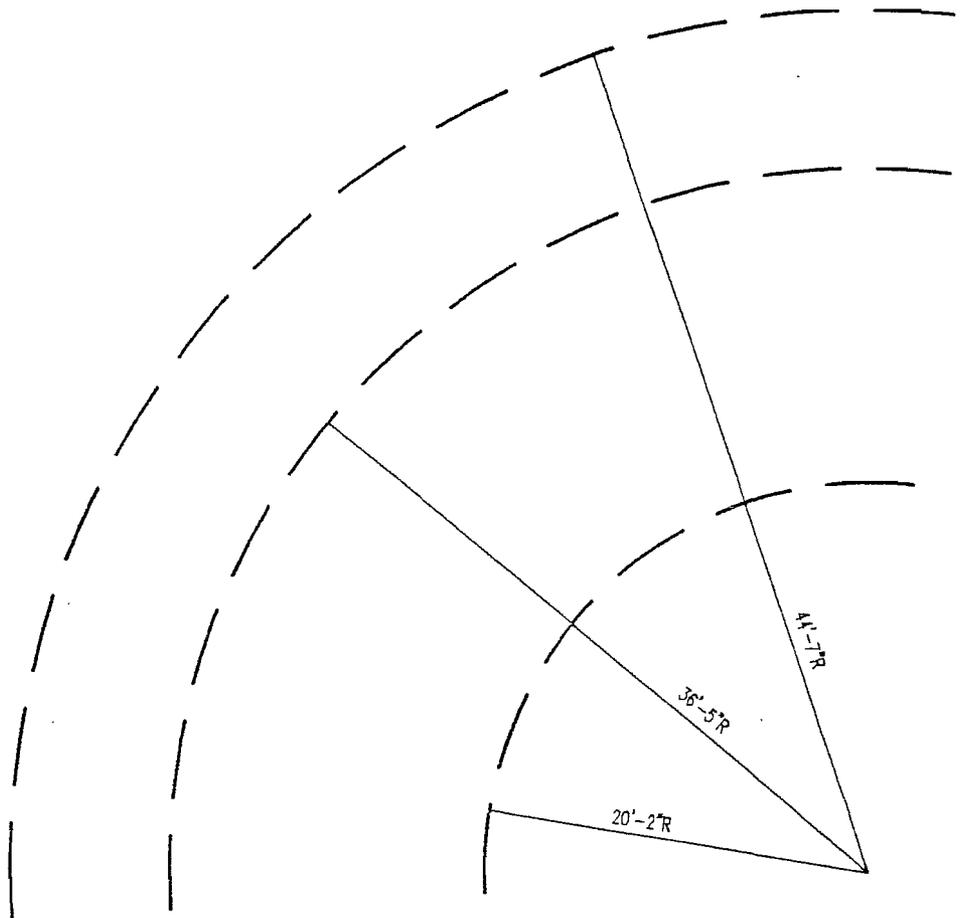
1"=40'



1"=30'



1"=20'



1"=10'

CITY OF ROMULUS – FIRE DEPARTMENT
TURNING RADII – 50 FEET LENGTH VEHICLE – 100 LADDER
INNER ARC = INSIDE WHEELS ; MID ARC= OUTSIDE WHEELS ; OUTER ARC = OUTER BUMPER

