

DETAILED GRADING PLAN CHECKLIST (TEARDOWN/REDEVELOPMENT/IN-FILL LOT)

ADDRESS: _____

PERMIT #: _____ **DATE:** _____

GENERAL

Developer Use		City Use		
<u>Compl.</u>			<u>Not</u>	
<u>With</u>	<u>N/A</u>	<u>Sat.</u>	<u>Sat.</u>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. Plan is signed and sealed by an Illinois registered professional engineer including date signed and license expiration date. If a Master Grading plan is available, then an Illinois Professional Land Surveyor can sign and stamp the plan.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. A North arrow is included and the drawing is at a 1:10 scale.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. The City requires NAVD 1988 vertical datum and NAD83 horizontal datum. At least one City of Batavia benchmark must be referenced.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4. Development of properties adjacent to a river or creek is subject to review and permitting by other agencies, including Kane County, the Illinois Department of Natural Resources and the US Army Corps of Engineers.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5. Mapped floodplain and wetlands should be shown on the plan.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6. A Legal description is included.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7. The dimensions of the home to the property lines must be shown. The required setbacks (front, sides and rear) must be shown or provided in a table.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8. A 5-foot utility and drainage easement must be shown along both sides of property line.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9. A 10-foot Public Utility easement must be shown along the front and rear property line.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10. Known hardscape features (i.e. decks, patios, sidewalks, etc.) should be shown on the detailed grading plan. If unknown, please note that a permit may be required for certain installations.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11. A disposition of comments should be included in all subsequent submittals.

Comments:

DRIVEWAY

Developer Use

City Use

Compl.

Not

With

N/A

Sat.

Sat.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. Concrete, asphalt, and brick pavers (including permeable) are acceptable materials; gravel may not be used. A note must be added to the plans that states that "If any material other than conventional concrete or asphalt is used within the public right-of-way, a signed right-of-way covenant must be submitted to the city prior to final inspection.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. The driveway slopes must be between 2% and 8% and direct water away from the house. Permeable pavements are allowed to have slopes less than 2%. If the surrounding terrain is flat, slopes as low as 1% are allowed for concrete driveways.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. The apron slopes must be between 2% and 6%. Permeable pavements are allowed to have slopes less than 2%. If the surrounding terrain is flat, slopes as low as 1% are allowed for concrete driveways.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4. The driveway width at the right-of-way line must be between 14 and 18 feet. The driveway width should flare such that the width at the curb is increased by 2 feet on each side. Refer to Standard Detail 7.17 – Typical Residential Driveway.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5. Driveways shall not encroach over the property line extension in the parkway.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6. Where a driveway width exceeds 20 feet at the garage doors, a driveway must taper down to 18 feet wide at the property line. The taper must begin no further than fifteen feet from the front yard setback line (away from the house). A curvilinear taper may be used provided that all driveway pavement is located within an area formed by a straight line between the start and end of the taper.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7. Where a driveway is located close to a property line (within 5 feet), a curb should be provided along the edge of the driveway for drainage purposes unless written approval is granted by the adjacent property owner.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8. Refer to Standard Detail 7.17 – Typical Residential Driveway for additional requirements pertaining to circular driveways and driveways located near intersections.
				<p>Circular driveways on corner lots are constructed in accordance with the requirements of Municipal code, including proximity to intersections and allowance of one driveway per street.</p> <p>If there is more than one driveway entrance onto the street, the lot frontage must exceed 75' and the sum of the driveway widths at the property line does not exceed 26.7% of the lot frontage. $(W1 + W2 \leq F/75*20)$</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9. Where an existing driveway that has depressed curb is relocated, the depressed curb must be replaced with a curb of like kind.

Comments:

GRADING

Developer Use		City Use		
<u>Compl.</u>			<u>Not</u>	
<u>With</u>	<u>N/A</u>	<u>Sat.</u>	<u>Sat.</u>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. Existing spot grade elevations must be shown at the location where the building setback line intersects with the side property line.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. The proposed top of foundation for the subject lot and existing top of foundations for the adjacent houses must be shown. The location of any changes in the top of foundation elevation must be shown. <ul style="list-style-type: none"> <input type="checkbox"/> The top of foundation should be a minimum of 0.5 feet higher than grading around the structure except at points of ingress/egress. <input type="checkbox"/> Proposed Basement floor elevation <input type="checkbox"/> The top of foundation must be a minimum of 18 inches above a high water line or side yard swale line where the home is located adjacent to an overland flow route, detention basin or floodplain. <input type="checkbox"/> A note should be added to the plans that states that "A masonry treatment or drop siding is required to ensure that no more than six inches of the foundation remain exposed in any location."
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. One foot contours must be provided.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4. Grading should allow existing drainage patterns to be maintained such that additional flows are not directed onto neighboring properties. Neighboring grades up to 10 feet may be required for this to be confirmed.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5. Slopes within landscape areas should be between 2 and 25 percent, with 20 percent being the preferred maximum slope where space allows.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6. Swales must be provided to facilitate proper drainage. Swales must be completely contained on the subject property unless neighboring property owners provide written permission to allow grading to be completed on their property.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7. Spot elevations should be indicated at break points. Flow arrows should be shown on the plan.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8. Proposed retaining walls must be shown, with the top and bottom of the wall elevations called out. Walls greater than three feet in height require submittal of structural calculations prepared and signed and sealed by an Illinois registered Structural Engineer.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9. Where the minimum yard slopes cannot be achieved, a private storm sewer system must be installed. The private storm sewer must be connected to an available public storm sewer when one is available. See the Utilities section below for the storm sewer requirements.

- | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 10. Window wells must be shown on the plan and meet the following requirements: <ul style="list-style-type: none"> • The elevations for the tops of the window wells must be shown. • Window wells may not encroach into any easements. • Window wells may not be located adjacent to an overland flow route or floodplain. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 11. If the property has an overland overflow route, the black arrow and typical cross-section should be shown. |

Comments:

SIDEWALKS

Developer Use		City Use		
<u>Compl.</u>			<u>Not</u>	
<u>With</u>	<u>N/A</u>	<u>Sat.</u>	<u>Sat.</u>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. Sidewalk must be provided along all street frontages.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. Sidewalk must be five feet wide and located within the public right-of-way, one foot off the property line. Sidewalk location may vary in order to save mature parkway trees, unless the Public Works Department recommends removal of the tree.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. Carriage walks are not permitted. Where a carriage walk currently exists, the sidewalk must be removed and relocated such that the front edge is a minimum of three feet from the back of curb. In these instances the sidewalk width may be reduced to four feet if the standard width cannot be accommodated.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4. Sidewalks must be constructed through driveways. Refer to Standard Detail 7.17 – Typical Residential Driveway.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5. Accessible curb ramps must be provided at intersections. Follow current IDOT standard details for curb ramps.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6. Where a sidewalk cannot be accommodated within the public right-of-way, the sidewalk may be located on the subject property. A sidewalk easement must be provided for the installation.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7. The cross-slope of the public sidewalk can not exceed 2% even through the driveway. Spot grades should be provided at the four corners of sidewalk where it intersects with the driveway. A design of 1.5% is preferred to ensure that the slope is less than or equal to 2% when constructed.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8. Any sidewalk that is damaged or not ADA compliant, including sidewalk ramps, must be replaced prior to final inspection approval.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9. No Private access walks are allowed in the Public Right-of-way

Comments:

EROSION CONTROL

Developer Use		City Use		
<u>Compl.</u>			<u>Not</u>	
<u>With</u>	<u>N/A</u>	<u>Sat.</u>	<u>Sat.</u>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. Perimeter erosion barrier (silt fence or other) must be shown.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. Existing storm structures must be protected during construction. Filter baskets are the preferred method of protection (see City Details)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. A stabilized construction entrance must be called out.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4. Tree protection must be shown for any trees to be saved in the construction area. A tree removal permit is required for any tree removal in the public right-of-way.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5. A note is provided on the plan stating, "A concrete washout area should be provided on-site. Concrete cannot be washed out into the public right-of-way or storm sewer system."

Comments:

UTILITIES

Developer Use

City Use

Compl.

Not

With

N/A

Sat.

Sat.

1. All existing utilities must be shown on the plan, including but not limited to storm sewer, water main, sanitary sewers, electric and street lighting. All structures must be shown including poles and overhead wires. Where existing overhead facilities are to remain, code clearances must be maintained.

2. The proposed water service and sanitary service must be shown, including the connection points and details.

All new services must connect to the main unless the Department of Public Works confirms that the existing services are suitable for reuse.

New water service line and b-box location must be shown on the plans. B-Box must be shown outside the driveway and sidewalk.

Sanitary sewer clean-out location must be shown on the plans. Clean-out shall be of the same size and material as the new sewer service pipe. Any cleanouts shall be the 'Tee' type, located outside of the building, and easily accessible.

Existing water and sanitary services to be removed and terminated as per city requirement

3. Private storm sewer systems must meet the following requirements:

Storm sewers must be a minimum of 6 inches or greater RCP, PVC SDR 26, ductile iron or HDPE smooth-lined pipe. The City recommends a minimum of 8 inches for maintenance.

Connection to the public storm sewer must be made at a structure (new or existing); blind connections are not permitted. Connections must be machined cored.

The private and public portions of the system must be clearly labeled.

4. Public storm sewer systems must meet the following requirements:

Storm sewers must be 12 inches or greater RCP type.

Structures must follow the City of Batavia standard details. Rear yard structures should be located within the rear yard easement to allow for connection from adjacent properties.

5. Dry wells may be permitted under special circumstances where a public storm sewer is not available. The following requirements must be met:

Inlets must be provided.

Dry wells and structures may not be located within any easement.

Follow City Standard Details

6. Open cuts are not permitted within the street, except in special circumstances.

UTILITIES - Continued

Developer Use		City Use	
<u>Compl.</u>			<u>Not</u>
<u>With</u>	<u>N/A</u>	<u>Sat.</u>	<u>Sat.</u>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- Stormwater runoff should not be directed onto the adjacent properties. The City requires tying sump pumps into a public storm sewer system when available, private system or directing the flow toward the rear of the property away from adjacent buildings or public sidewalk. Connections to a public storm sewer structure require a permit from the City.
- Bubbler Outlet shall be 10' from sidewalk and minimum of 3' from property line.

Comments:

BEST MANAGEMENT PRACTICES (BMP'S)

Developer Use		City Use	
<u>Compl.</u>			<u>Not</u>
<u>With</u>	<u>N/A</u>	<u>Sat.</u>	<u>Sat.</u>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- A table outlining the existing impervious area, the proposed impervious area and the calculated difference should be included on the detailed grading plan (see attached examples). A statement regarding whether Best Management Practices are required must accompany the table.
- If BMP's are required, the following shall be provided on the detailed grading plan:
 - The location of the BMP(s) should be called out.
 - Details of the BMP design should be included (type, dimensions, etc).
- Please note: If BMP's are required, documentation will be required to be submitted with the Final Grading Survey to demonstrate that the BMP is restricted by an easement.

Comments:

DETAILS

Developer Use City Use

<u>Compl.</u> <u>With</u>	<u>N/A</u>	<u>Sat.</u>	<u>Not</u> <u>Sat.</u>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

1. Include any City standard details that are applicable. PDF copies of the standard details are located at <http://www.cityofbatavia.net/183/Batavia-Details>. The following are commonly required:

- Typical Residential Driveway (7.17)
- Sidewalk (7.08)
- Sump Pump Connection (4.10)
- Appropriate drainage structures and storm sewer details (4.01-4.09)
- Utility Trench Paving Section (7.14 or 7.15)
- Sanitary and water connection details (6.07, 5.03)
- Inlet Filter-Flex Storm Detail (4.13)
- Other _____

Comments:

EASEMENTS/COVENANTS

Developer Use		City Use	
<u>Compl.</u> <u>With</u>	<u>N/A</u>	<u>Sat.</u>	<u>Not</u> <u>Sat.</u>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

1. Sidewalk easement required?
2. Driveway covenant required for brick pavers or other non-standard Material?