



## **CIVIL SITE REVIEW CHECKLIST**

*Revised: 11/23/16*

Note: Depending on permit submittal capacity and assuming all proper items are submitted, three to four weeks shall be allotted for review by City staff. For certain requirements, a lengthened review time may be necessary as determined by City Staff. The following are the minimum engineering requirements that shall be shown on the plans submitted for the Civil site portion of the permit:

### **GENERAL**

- Project name and address.
- Legal Description and boundary of property (i.e. lot, block, plat)
- Name and address of plan preparer and date prepared.
- Name of contact person.
- North arrow and legend on all applicable sheets.
- Survey uses 1929 datum (NGVD 29) which is listed and correlates to plan elevations.
- Work within the City right-of-way and easements shall have associated details in the plans that conform to the City of West Fargo Standard Details. Sidewalks, driveways, and underground utilities are some examples. These City Standards are available at Moore Engineering, Inc.
- Plans Stamped by Registered Engineer in the State of North Dakota, and the name and address of Engineer if other than the primary plan preparer.
- Note, these plans may be done either by hand or generated by computer aided design, but must be legible and to scale. Non-conforming plans will be returned to plan preparer for resubmission. Time for review will be initiated when legible plans are accepted by the City Building Inspections Department.

### **SITE PLAN**

- Easements of record with dimensions, including proposed easements and associated documentation, if any.
- ADA ramps in the right-of-way shall meet all ADA requirements, including truncated dome assemblies oriented perpendicular to the walk.
- Driveway locations, dimensions, city details, and any other access control.
- List the building gross square area and open space requirement and provided open space area.
- List the total site area and total impervious area of the site. This should also be listed as a percent impervious area which will correlate to the retention requirements.
- Other Department - Sanitation receptacles (dumpsters) identified and located in an accessible location. Questions can be directed to Tom Clark, Sanitation Manager, at (701) 433-5400.
- Other Department - List the number of parking and ADA stalls required and the number of parking and ADA stalls provided. Questions can be directed to Tim Solberg, City Planner at (701) 433-5320
- Detailed and dimensioned site plans including setbacks to building and parking lots.

### **GRADING**

- Provide benchmark(s) and elevations using 1929 datum (NGVD 29).
- Existing ground elevations in discernible intervals to interpret existing drainage patterns on the site and surrounding areas and corresponding benchmark(s).
- City Drainage Plan for the associated plat(s) should be listed on the plans and the pre-determined elevations should be used, which requires showing proposed finish grade elevations at all property corners, property pins, highpoints, low points, and intermediate grade break elevations.
- Proposed detailed site grading plan(s) including spot elevations (or contours) on the site showing drainage patterns, first floor of structures listed, and any spot elevations on perimeter of land boundary to accommodate drainage on adjacent properties if needed.



### **SANITARY SEWER**

- Sanitary sewer service locations, sizes (minimum 6" within City right-of-way or easements), cleanout locations, manhole locations, connection locations and method of connection, and any abandonment and method of abandonment.
- Sanitary service lines will require cleanouts at least every 100' or manholes every 400'.
- For single service mainline connections, it is preferred to connect to the mainline with a wye rather than at a manhole. Situations may vary which requires City Engineer approval.

### **WATER SERVICES**

- Water service locations and sizes (1" minimum within City right-of-way or easements), valve locations, curb stop locations, fire line locations, and any abandonment and method of abandonment.
- Water service line shut off valves shall be placed within City easements or right-of-way and on the meter side of the street.
- All water services to a building or structure shall be metered and shall come off of a City main line, but may not come off of a City trunk line (i.e. 16" watermain) nor off of a fire line.
- One meter allowed per occupied and addressable building.
- Separate irrigation meters are not allowed unless they have a separate physical address.

### **STORM SEWER**

- No concentrated streams of storm water shall be allowed into the City's right-of-way except through underground storm sewers.
- Storm sewer locations including: pipe lengths and sizes (12" minimum), location of catch basins, location of manholes, and methods of tie-ins into existing storm sewer system whether private or within public easements and right-of-ways.
- If vehicular traffic (i.e. roadways, driveways, etc.) will be above storm sewer pipe within the City's right-of-way or easements, this storm pipe shall be reinforced concrete pipe (RCP). Similarly, for driveways where a culvert lies within the right-of-way, this culvert should be RCP as well.
- City provided regional retention and its correlating percent impervious area; and required local (onsite) retention shall be listed and addressed.

### **REQUIRED PLAN INFORMATION**

- All connections to City utilities shall meet City standards and shall be shown on the plans.
- If performing sidewalk or curb and gutter removal in the City's right-of-way, add the following note: "Replacement of curb and gutter and/or sidewalk shall be done within five working days."
- Any traffic control shall be shown or addressed within the City right-of-way. Traffic control will be required when work operations disrupt the normal traffic flow of pedestrians and/or vehicles such as lane closures or sidewalk closures and shall follow MUTCD standards.
- Notes on the site plans stating the following:
  1. All work within the City right-of-way or easements shall require an Excavation Permit from the City of West Fargo Public Works Department.
  2. Any work on existing City-owned utilities shall require notification to the City of West Fargo Public Work Department by the Contractor 24 hours prior to commencing work.
  3. If the land boundary denoted on the plans encompasses more than 1 acre, a Notice of Intent to obtain a Storm Water Pollution Control Permit shall be acquired by the Contractor and Owner from the North Dakota State Health Department 7 days prior to construction. This notice of intent shall be provided with the building permit application.
  4. The City's Storm Water Management Permit must be submitted with the SWPPP.

## **PUBLIC UTILITIES**

*Note: In order for Public Works to accept any public utilities, all materials and installation methods shall adhere to city standards (construction details and specifications are available at Moore Engineering) and requires City inspection and documentation of the installation. A minimum 48-hour notice is needed to schedule City inspection of the installation. The City must approve the utilities and documentation prior to accepting ownership of the utilities.*

- Water Main
  1. All water mains (minimum 8" PVC C900 DR18), hydrants, and hydrant leads (minimum 6" PVC C900 DR18) shall be placed within an easement of adequate width (minimum 20') to allow the City of West Fargo to access and maintain these water mains/appurtenances.
  2. Gate valves shall be placed a maximum of 500' along water mains and located near hydrants if possible.
  3. Water service line shut off valves shall be placed within City easements or right-of-way and on the meter side of the street.
  4. All mains shall be buried to a depth of 7.5' to top of main.
  5. Hydrants shall be placed no more than 10' (typically 5') from curb or edge of roadway.
  6. Hydrant nozzles shall be placed 2.5' above finish grade.
  7. Multiple hydrants shall not be allowed on dead end lines, unless calculations provided demonstrating pressure losses are adequate.
  8. All existing hydrants within 250' of the site shall be shown or addressed.
  9. Existing hydrants that need to be relocated should be removed and brought to Public Works and a new hydrant shall be installed.
  10. All water mains and structures shall have tracer wire installed per city standards.
  
- Sanitary Sewer Main
  1. All sanitary sewer mains (minimum 8" PVC SDR 35), cleanouts, and manholes shall be placed within an easement of adequate width (minimum 20') to allow the City of West Fargo to access and maintain these water mains/appurtenances.
  2. Manholes shall be placed a maximum of 400' apart along sanitary sewer mains.
  3. All mains shall be buried to a depth of 7.5' to top of main.
  4. All sanitary sewer mains and structures shall have tracer wire installed per city standards.
  
- Documentation - Building Inspections, Engineering and Public Works require the following documentation provided prior to the issuance of a Certificate of Occupancy and the acceptance of the public utilities.
  1. ND Department of Health letter of approval
  2. Filed easement documentation
  3. Passing reports for:
    - Compaction of backfill (min 95% of Standard Proctor Maximum Density)
    - Bacteria Test on water main
    - Pressure Test on water main
  4. Inspection reports verifying field observation by an approved construction inspector or third party materials testing firm.
  5. Televising tapes (in electronic video format) for all sanitary sewer pipes demonstrating acceptable sanitary sewer mains.
  6. Record survey to verify location of all public utilities such as sewer, water and storm mains (dwg and pdf file format). GPS points shall be taken at the center of all public utility surface structures including manhole castings, valves, hydrants, etc. and the survey point data will need to be submitted in electronic format (dwg and csv files) to the City Engineer and Public Works Director. This information is necessary to update city maps and records as well as confirm utilities are located within easements.