



Common Plan Errors and Omissions Found in DPS Permit Applications

Commercial Building Plans

1. Submitted drawings provide design live load information that is not complete and/or not in compliance with the current code (Section 1603 of IBC 2012 and County amendments). For alterations and smaller projects the applicable design live load information is often completely omitted (canopies, signs, roof top equipment additions, retaining walls).
2. Sketches are submitted without seal and signature on all sheets.
3. Drawings for alterations do not identify the weights and locations of all proposed mechanical / electrical / plumbing equipment or other non-uniform loads. The drawings do not provide the existing structural systems, method of support / attachment to the existing structure, and reinforcement of the existing structure, if required. This applies, but is not limited, to:
 - a. Roof Top Units (RTU).
 - b. Kitchen Hoods, including associated fans and make-up-air units.
 - c. Water Heaters hung above the ceiling or bracketed to partition walls.
 - d. Transformers hung above the ceiling.
 - e. High-density file systems.
 - f. Operable Partitions
4. Drawings for alterations that indicate new floor penetrations through existing elevated concrete slabs (e.g., plumbing cores, duct chases), do not provide structural information related to the new penetrations. Procedures, prepared by an engineer registered in Maryland, for locating new penetrations to avoid damage to critical structural components should be provided with the application for permit.
5. Missing geotechnical report for projects of significant size or for smaller projects which utilize bearing pressures in excess of 2,000 psf.

6. Missing structural analysis for installation of additional equipment to existing communication towers.
7. Structural drawings prepared under the provisions of the International Existing Building Code (IEBC) do not identify the method of compliance as defined in Chapter 3 of the IEBC.
8. The lateral force resisting system is not clearly identified in the plans/sections/elevations.
9. Drawings do not provide information for shop drawing submittal requirements.
10. Shop drawings are submitted to the County prior to the review and approval of the structural engineer of record.
11. Special inspections are provided on the plans, but are not updated to match the requirements of the currently enforced edition of IBC or the Montgomery County Special Inspections Program.
12. The compressive strength of concrete (including slabs on grade per sections 1901.2 and 1904.2) do not comply with the minimum compressive strength and w/c ratio to meet the durability requirements of ACI 318-11, chapter 4.

Electrical Plans

1. Good understanding of grounding and bonding per NEC Article 250;
2. Not sufficient information to approve the electrical work shown;
3. Patient Care Wiring Method is not on the plan;
4. The riser may not agree with the panel schedules;
5. Lack of complete and correct information on the E plan for fire pumps, generators, services and outdoor feeders.

Fire Protection System Plans

1. Plans or details on the plans are too small to read;
2. A lack of details shown on the plans such as water supply information, fire pump details, fire department connection locations, standpipe locations;

3. Failure to provide supporting documents such as hydraulic calculations, battery calculations or catalog cut submittals;
4. Failure to provide a detailed scope of work;
5. Failure to show the proper hydraulic reference points to support the hydraulic calculations;
6. Lack of proper dimensions;
7. Incorrect sprinkler or fire alarm device spacing.

Mechanical Plans

1. Missing Scope of work;
2. Missing Code analysis;
3. Outside air calculations;
4. Missing IECC energy envelope (mechanical & lighting);
5. Lack of coordination between hood manufacturer fan schedule and mechanical engineer's schedule.

Miscellaneous Right of Way (Driveway and Utility Installation, etc.)

1. Incomplete permit application package.
2. Incomplete plans (missing existing features and condition, ROW line and unclear proposed design, etc.)
3. Not enough copies of plans.
4. Incorrect contact person information if engineer, permit runner, or GC need to be contacted.
5. Application filing fee of \$148.50 not paid.
6. Unrealistic "Anticipated Starting Date" for construction by utility companies.
7. Missing additional information such as Preliminary Plan, MNCPPC Certified Site Plan, Mandatory Referrals and Record Plat.

Residential Building Plans

1. Portions of the permit application left blank or improperly completed;
2. Construction notes and design criteria missing;
3. Missing or incomplete index of all plans and documentation submitted;

4. Building codes and standards referenced on plans are not current. Also the information provided shows lack of knowledge of these standards;
5. Complete elevations and floor plans not provided;
6. No framing plans and/or beams and headers inadequately designed. Unreliable drawing scales and dimensions not provided;
7. Window/Door schedule not provided;
8. Notes on the existing structures to which new construction is added or alteration performed missing;
9. Plans not legible (too light or hand drawn);
10. Complete wall and foundation sections not provided. Too often "typical wall section" provided does not match or resemble actual construction proposed;
11. Missing cross-sections through the building, including existing or proposed stairways;
12. Manufacturer information on products that are not specified in codes or standards;
13. Missing energy calculations and notes as required.

Sediment Control and Stormwater Management Plans

1. Failure to use current Standard Notes and Certifications ;
2. Failure to provide a complete Sequence of Construction on the plans ;
3. Failure to obtain permission for work outside the subject property;
4. Failure to provide required soil testing at initial submittal;
5. Failure to initiate Forest Conservation review early in the sediment control review process;
6. Unfamiliarity with Montgomery County design requirements and standards for stormwater management design, as opposed to the standard MDE requirements;
7. Failure to use correct, current stormwater management easement documents;
8. Failure to file for a Notice of Intent with MDE when total proposed disturbance is one acre or more.

Sign Plans

1. Incomplete sign permit application including missing sign detail information, not signing the application and not completing the affidavit when required.

2. Submission of a super-imposed photo of a building elevation in lieu of a scaled elevation drawing.
3. A site plan or building elevation drawing which has been reduced and is not represented in the scale indicated on the plan.

Storm Drain and Paving Plan Review

1. Plans submitted without approved preliminary plan. (Engineers who try to get SD&P review started early when Prelim Plan is still with Park & Planning).
2. Plans submitted without DOT letter (for Preliminary Plan).
3. Non-county standards used.
4. Sidewalk ramps drawn at an angle (single ramp) and not perpendicular to roadway (dual ramp).
5. TR-55 used to calculate runoff quantities for storm drain capacity instead of Rational Formula.
6. Wrong Time of Concentration used (Tc). Not using June 1, 1991 memorandum correlating Tc with "C" factor.
7. Missing drip stone and manhole ladder for structures deeper than 12'.
8. Easements for public storm drain system on private property.

Subdivision Record Plats

1. Right of way reference for the existing road is incorrect or not listed.
2. County right of ways and easements are overlapped by private easements.
3. The Department of Transportation's Preliminary Plan approval letter is not provided.
4. The trustee is not listed in the owner's certificate.
5. Existing easements are not shown on the plat.
6. Existing property markers are not shown nor labeled.
7. Symbols don't agree with each other on different sections of the plat.
8. A lot or parcel is landlocked.
9. The area of the lots and parcels does not agree with the total area.
10. The individual lot distances do not agree with the total line distance.
11. Consultant doesn't acquire DEP approval of the subdivision record plat.

12. Various legal documents required in the Department of Transportation's Preliminary Plan approval letter are not provided with the initial submittal and hold up plat approval. Examples are: PIE, PIA, various covenants, and maintenance and liability agreements.
13. Acquiring needed DPS Permits required for improvements in the County R/W lag behind and hold up plat approval.
14. Consultant does not submit plat to DPS for an additional review but submits plat to MNCPPC for final approval and DPS Reviewer does not know if DPS comments have been adequately addressed to allow the plat to go before the Planning Board.

Well and Septic

1. Plans not drawn to scale;
2. Well & Septic locations not shown according to record plat or approved well & septic plans;
3. Septic plans without "Best Available Treatment" device indicated;
4. Additional site elements, such as storm-water infiltration devices, not shown on plans.