

MINIMUM REQUIREMENTS FOR PERMITTED PROJECTS

PRE-APPLICATION - 30% REVIEW (OPTIONAL)

<i>GENERAL</i>	YES	NO	N/A	SEE COMMENTS
DESIGN AND DRAFT ALL PLANS ON 24"X36" (SIZE D) OR 30"X42" (SIZE E) SHEETS				
CLEARLY DISPLAY THE NAME OF THE SUBDIVISION OR PROJECT				
DATE				
NORTH ARROW ALL SHEETS				
SHOW WETLANDS AN ALL PLANS (WHERE APPLICABLE) WITH RESPECT TO ALL UTILITIES				
IF ONSITE PWC UTILITY EASEMENTS WILL BE NEEDED, DETERMINE WHETHER IT WILL BE BLANKET OR DEDICATED AND ADDRESS ACCORDINGLY				
IF THE PROJECT IS WITHIN MUNICIPAL INFLUENCE AREA (MIA) OF FAYETTEVILLE OR HOPE MILLS, A PETITION FOR ANNEXATION MUST BE SUBMITTED TO THE APPLICABLE MUNICIPALITY.				
<i>UTILITY COVER</i>	YES	NO	N/A	SEE COMMENTS
LABEL ALL STREET NAMES: INCLUDE STATE ROAD NUMBER (LOCAL NAME - XXXXXX RD), AS WELL AS ANY STATE ROAD IDENTIFIER (SR #####)				
SHOW AND LABEL ROADSIDE DITCHES AND DRIVEWAYS				
SHOW AND LABEL SIDEWALKS, INCLUDE WIDTH WITHIN THE LABEL				
SHOW THE EXISTING AND PROPOSED CONTOURS WITH LABELS (CONTOUR INTERVALS SHOULD NOT EXCEED 2 FEET)				
EXISTING UTILITY LINES SHOULD BE LABELED BY SIZE & MATERIAL (IF MATERIAL IS KNOWN)				
SHOW LOCATION OF ANY EXISTING STRUCTURES THAT WILL REMAIN ON SITE, INCLUDING BUT NOT LIMITED TO WELLS, FENCES, HOUSES, ETC.				
LABEL THE WIDTH OF ALL EXISTING AND PROPOSED EASEMENTS; LABEL APPROPRIATE EASEMENTS AS "PWC UTILITY EASEMENT". EXISTING EASEMENTS MUST BE LABELED TO INCLUDE A DB AND PG NUMBER FOR EACH EASEMENT.				
STORM DRAINAGE MAY NOT BE DISCHARGED IN FRONT OF OR ON TOP OF WATER AND SEWER MAINS AND EASEMENTS; STORM OUTLETS SHOULD BE EXTENDED PAST THE FULL WIDTH OF THE EASEMENT				
THE BOTTOM RIGHT HAND CORNER OF EACH PAGE SHOULD BE LEFT BLANK FOR PWC APPROVAL STAMPS (7" H X 5" W)				
INCLUDE A VICINITY MAP WITH A NORTH ARROW				
INCLUDE A SCALE - HORIZONTAL (TO INCLUDE GRAPHICAL & WRITTEN SCALE), VERTICAL (TO INCLUDE WRITTEN)				
INCLUDE A LEGEND WITH ALL LINE TYPES AND SYMBOLS. ALTERNATIVELY, LINES AND SYMBOLS SHOULD BE INDIVIDUALLY LABELED.				
SHOW PIN/REID WITH OWNER FOR PROJECT PARCEL(S)				
SHOW PIN/REID WITH OWNER FOR ALL NEIGHBORING PARCELS				
SHOW THE PROPOSED WATER MAINS WITH SIZE AND MATERIAL. (8" C-900). "PVC" IS NOT AN ADEQUATE MATERIAL LABEL				
SHOW THE PROPOSED SEWER MAINS WITH SIZE, LENGTH, MATERIAL, SLOPE AND DIRECTIONAL FLOW ARROWS (125 LF-8" SDR-26 @ 0.45%). USE THE LENGTH FROM MANHOLE CENTER TO MANHOLE CENTER TO CALCULATE SLOPE. "PVC" IS NOT AN ADEQUATE MATERIAL LABEL.				
PROPOSED VERSUS EXISTING UTILITIES SHOULD BE DIFFERENTIATED BY LINE TYPE				
PRELIMINARY REVIEW - 60% REVIEW (REQUIRED)				
<i>GENERAL</i>	YES	NO	N/A	SEE COMMENTS
TITLE SHEET INCLUDED ON ITS OWN PAGE				
THE PROJECT NAME SHOULD BE EXACT AND CONSISTENT ACROSS ALL INCLUDED SHEETS AND ACCOMPANYING DOCUMENTS, AND SHOULD BE UNIQUE TO EACH PROJECT				
SHEET INDEX WITH THE TOTAL NUMBER OF SHEETS AND DESCRIPTIONS				
IF PROJECT IS IN CITY OF FAYETTEVILLE OR TOWN OF HOPE MILLS MIA, INCLUDE EVIDENCE OF THE PETITION FOR ANNEXATION OF AND/OR PROOF OF WAIVER.				
PROVIDE JUSTIFICATION FOR ANY METER SIZE 2" OR LARGER. PWC WILL PROVIDE METER DATA SHEETS UPON REQUESTS FOR YOUR INFORMATION.				
<i>UTILITY COVER</i>	YES	NO	N/A	SEE COMMENTS
PLANS SHOULD SHOW ALL PROPOSED LIFT STATIONS, THEIR LOCATION, AND BE SIZED TO SERVE ADDITIONAL DEVELOPMENTS (i.e., REGIONAL LIFT STATIONS)				
THERE MAY NOT BE MORE THAN 4-4" OR 3-6" SEWER LATERALS IN 4' DIAMETER MANHOLES, DEPENDING ON INDIVIDUAL DESIGNS. REFER TO PWC DETAIL S.2 FOR MORE INFORMATION				
IF BORE & JACK IS REQUIRED, YOU MUST SHOW ALL DETAILS REQUIRED (CASING, LENGTH, ENTRY/RECEIVING BORE PITS, BEGIN AND END STATION, ETC.)				
RESTAURANT/FOOD SERVICE - A GREASE TRAP IS MANDATORY FOR ALL RESTAURANT/FOOD SERVICE DESIGNS AND MUST BE SHOWN AND LABELED				
CAR WASH - AN OIL SEPARATOR IS MANDATORY FOR ALL CAR WASH DESIGNS AND MUST BE SHOWN AND LABELED				
LABEL ALL FITTINGS ON ALL WATER AND SEWER LINES WITH STATION NUMBERS AND INDIVIDUAL ASSET LABELS (TAPS, BENDS, FHs, ETC.)				
EACH MANHOLE MUST BE LABELED WITH ITS UNIQUE MANHOLE NUMBER, ITS RIM ELEVATION, ITS STATION NUMBER, AND ALL INVERT IN AND INVERT OUT ELEVATIONS, BOTH EXISTING AND PROPOSED.				
SHOW AND LABEL ALL EXISTING AND PROPOSED STORMWATER MANAGEMENT FEATURES				
SHOW PROPOSED AND EXISTING TURNING LANE ARROWS				
ENCROACHMENTS INTO PWC EASEMENTS MUST BE CLEARLY SHOWN AND LABELED				

DETERMINE WHETHER THE EASEMENT WILL BE BLANKET OR DEDICATED AND ADDRESS ACCORDINGLY				
<i>WATER PLAN/PROFILE</i>	YES	NO	N/A	<i>SEE COMMENTS</i>
EVERY DESIGN IS REQUIRED TO HAVE AT LEAST 3.5 FT OF COVER FOR ALL WATER AND SHOW PIPE DEPTHS WITH DIMENSION ARROWS ON EACH PROFILE				
SEPARATION DISTANCES BETWEEN UTILITIES SHOULD BE LABELED WITH ACTUAL SEPARATION DISTANCES FOR EACH CROSSING. YOU WILL NEED TO CALL OUT SPECIAL CONDITIONS WHEN MINIMUM SEPARATIONS ARE NOT MET (i.e., DI PIPE USED)				
EXISTING AND PROPOSED GRADES MUST BOTH BE CLEARLY SHOWN AND LABELED IN PROFILE VIEW				
LABEL EACH FITTING, FIRE HYDRANT, BLOW-OFF AND VALVE WITH THEIR SIZE, TYPE, AND STATION NUMBER				
THE BASE FLANGE ELEVATION OF ALL PROPOSED FIRE HYDRANTS MUST BE LABELED				
LABEL ALL RESTRAINED JOINT DI PIPES OR STANDARD JOINT DI PIPES WITH BEGINNING & ENDING STATIONS.				
TWO (2) GATE VALVES ARE REQUIRED AT TEE INTERSECTIONS, AND THREE (3) GATE VALVES ARE REQUIRED AT CROSS INTERSECTIONS				
VALVES MUST BE PLACED SO THAT IF MAIN BREAK OCCURS, NO MORE THAN 20-25 CUSTOMERS WILL BE WITHOUT WATER				
VALVES SHOULD BE PLACED NEAR THE MAIN ON ALL 2" OR LARGER TAPS				
NO 90° BENDS ALLOWED ON WATER MAINS UNLESS OTHERWISE APPROVED BY PWC				
A TAPPING SADDLE SHOULD BE USED FOR ALL WATER LINES 2" AND SMALLER. A TAPPING SLEEVE SHOULD BE USED FOR ALL WATER LINES GREATER THAN 2". SEE W.8, W.10 AND W.11 FOR DETAILS				
A 1" BLOW OFF OR IRRIGATION METER SHALL BE USED AT THE END OF ALL METER BANKS, UNLESS LOOPED				
A JUMBO BOX MUST BE USED FOR 1.5" AND 2" IRRIGATION METERS				
ALL WATER LATERALS MUST SHOWN, AND LABELED BY STATION NUMBER, FINISHED CURB GRADE, TAP SIZE AND TYPE AND/OR FITTING				
PLUG AND BLOW-OFFS FOR DEAD-END WATER MAINS SHOULD BE INSTALLED AT LEAST 5 FT BEYOND EDGE OF PAVEMENT				
FOR A DEAD-END WATER MAIN, THERE MUST BE A MINIMUM OF 60 LF OF PIPE PAST THE LAST GATE VALVE TO THE PLUG IF USING C-900. OTHERWISE, THE LAST 72 LF OF PIPE MUST BE RJDI				
FIRE HYDRANTS AND BLOW-OFFS SHALL BE LOCATED ON PROPERTY LINES WHERE POSSIBLE				
THE PURPOSE OF EACH PROPOSED SERVICE SHOULD BE SPECIFIED (i.e. FIRE LINE, DOMESTIC, IRRIGATION)				
THE BFP MUST BE WITHIN 100' OF THE TAP ON THE MAIN LINES FOR ALL FIRE AND IRRIGATION LINES. THE BFP MUST BE LABELED WITH SIZE AND TYPE.				
FIRE LINES SHOULD BE RJDI TO THE END OF PWC'S O&M (ROW OR EASEMENT LINE). ADD A NOTE THAT THE PWC O&M ENDS AT THE R.O.W. OR EASEMENT LINE, WHICHEVER IS APPLICABLE.				
THE MINIMUM EASEMENT WIDTH FOR WATER MAINS IS 20 FEET				
<i>SEWER PLAN/PROFILE</i>	YES	NO	N/A	<i>SEE COMMENTS</i>
PIPE MUST BE A CONSISTENT MATERIAL BETWEEN MANHOLES LESS THAN 250 LF APART. FOR DISTANCES GREATER THAN 250 LF ONE MATERIAL TRANSITION IS ALLOWED				
425 LINEAR FEET IS THE MAXIMUM ALLOWABLE DISTANCE BETWEEN MANHOLES (MEASURED CENTER TO CENTER)				
LABEL PROPOSED MANHOLES & STRUCTURES WITH STATION #, SIZE OR DIAMETER, RIM ELEVATION, INVERT ELEVATION OF ALL CONNECTING PIPES, COATINGS, PIPE SLIDES & TYPE OF RING & COVER.				
LOCKING RING AND COVER (CAMLOCK) REQUIRED ON ALL MANHOLES OUTSIDE OF PAVEMENT				
MINIMUM COVER FOR SEWER MAINS IS 3'				
LENGTH, SIZE, MATERIAL AND SLOPE OF ALL SEWER MAINS & LATERALS SHOULD BE CLEARLY IDENTIFIED/LABELED				
CLEARLY SHOW ARROWS THAT INDICATE FLOW DIRECTION ON ALL EXISTING AND PROPOSED SEWER MAINS.				
THE MINIMUM EASEMENT WIDTH FOR SEWEN MAINS LESS THAN 10 FEET IN DEPTH IS 20 FEET.				
REFER TO CHAPTER 7 OF THE PWC DESIGN MANUAL FOR GUIDANCE ON SEWER MAINS DEEPER THAN 10 FT				
SEWER MAINS LOCATED BETWEEN STRUCTURES SHALL BE DUCTILE IRON				
PWC SANITARY SEWER CLEANOUTS SHOULD BE PLACED 18" INSIDE THE EASEMENT OR RIGHT-OF-WAY LINE				
MH RIMS MUST BE 24" ABOVE THE 100-YR FLOOD LINE ELEVATION, OR 18" ABOVE GRADE IN OUTFALL AREAS, WHICHEVER IS GREATER				
MH RIMS MUST BE SET FLUSH WITH GRADE IN YARD/LANDSCAPE AREAS.				
NO 90° BENDS ALLOWED ON SEWER FORCE MAINS				
NO SEWER LATERALS MAY BE TAPPED DIRECTLY TO ANY MAIN LARGER THAN 15"				
BOTH THE EXISTING AND PROPOSED GRADE MUST BE CLEARLY SHOWN AND LABELED IN THE PROFILE VIEW.				
MINIMUM SEPARATION BETWEEN UTILITIES SHOULD BE LABELED WITH VERTICAL SEPARATION DISTANCE FOR EACH CROSSING. CALL OUT SPECIAL CONDITIONS WHEN MINIMUM SEPARATIONS ARE NOT MET (i.e., DI PIPE USED)				
AN INTERIOR DROP STRUCTURE IS REQUIRED WHERE THE VERTICAL SEPARATION BETWEEN INVERTS EQUALS OR EXCEEDS 2.50'. REFER TO PWC DETAIL S.4 AND S.5, AND NOTATE ON EACH SSMH WHERE REQUIRED				
ALL PWC SEWER CLEANOUTS SHOULD BE 4 TO 6 FT IN DEPTH, LABEL RIM AND INVERT ELEVATIONS				
PLANS MUST SHOW 100 YR FLOOD ELEVATION & BOUNDARIES, IF APPLICABLE				
<i>DRAFT DOCUMENTATION - SIGNATURES AND DESIGN ENGINEER'S SIGN AND SEAL NOT REQUIRED EXCEPT ON FIREFLOW CALCULATIONS</i>	YES	NO	N/A	<i>SEE COMMENTS</i>
DISPLAYED PROJECT NAME SHOULD BE CONSISTENT ON ALL PLANS & ALL DOCUMENTS INCLUDED WITH EACH SUBMITTAL, AND SHOULD BE UNIQUE TO EACH PROJECT				
PERMIT APPLICATIONS AND SPECIFICATION CHECKLIST SHOULD BE FULLY COMPLETED BY THE DESIGN TEAM BEFORE SUBMISSION TO PWC - DRAFTS OF THESE DOCUMENTS DO NOT HAVE TO BE SIGNED AT THE 60% STAGE				

HYDRAULIC CALCULATIONS MUST BE SEALED BY A P.E.				
ADDITIONAL APPROVAL REQUIREMENTS (ONLY WHEN APPLICABLE)	YES	NO	N/A	SEE COMMENTS
IS AN OFF-SITE EASEMENT REQUIRED? IF SO, PROVIDE EASEMENT MAP AND LEGAL DESCRIPTION. THE LEGAL DESCRIPTION MUST BE SUBMITTED IN WORD FORMAT. OFF-SITE EASEMENTS MUST BE RECORDED PRIOR TO PWC PERMIT ISSUANCE.				
IS AN NCDOT ENCROACHMENT REQUIRED? IF SO, PROVIDE NCDOT ENCROACHMENT MAPS AND DOCUMENTATION TO PWC. THE DESIGN ENGINEER IS RESPONSIBLE FOR ENSURING DESIGN MEETS NCDOT REQUIREMENTS. PWC WILL REVIEW AND SUBMIT TO NCDOT.				
IS A RAILROAD ENCROACHMENT REQUIRED? IF SO, HAVE THE APPROPRIATE MAPS AND DOCUMENTATION BEEN SUBMITTED?				
INCLUDE A LANDSCAPE PLAN WITHIN PLAN SET IF LANDSCAPING IS PROPOSED/REQUIRED. SHOW EXISTING AND PROPOSED UTILITY EASEMENTS ON THIS LANDSCAPE PLAN.				
DETAILS	YES	NO	N/A	SEE COMMENTS
PWC DETAILS APPLICABLE TO THE PROJECT SHOULD BE INCLUDED IN THE PLAN SET AND SHALL BE THE MOST UP-TO-DATE VERSIONS. DETAILS ARE UPDATED IN JANUARY AND JULY ANUALLY.				
PWC DETAILS SHALL NOT BE ALTERED IN ANY WAY				
PERMIT REVIEW - 100% REVIEW (REQUIRED)				
FINAL DOCUMENTATION	YES	NO	N/A	SEE COMMENTS
THE OWNER'S SIGNATURE MUST BE ON PERMIT APPLICATION(S)				
ALL OF THE ACCOMPANYING DOCUMENTS SHALL BE SIGNED AND SEALED BY DESIGN ENGINEER WHERE REQUIRED				
ALL PLAN SHEETS MUST BE SIGNED AND SEALED BY DESIGN ENGINEER				
ALL "NOT FOR CONSTRUCTION", "PRELIMINARY", OR SIMILAR NOTES SHOULD BE REMOVED FROM THE PLAN SET BEFORE SUBMISSION. PLANS WILL NOT BE PERMITTED IF THEY BEAR THESE NOTES.				
COMMENTS:				