ATHENS-CLARKE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS

DEVELOPER'S GUIDE

February, 2002

TABLE OF CONTENTS

SECTION I
INTRODUCTION

INTRODUCTION

The purpose of this guide is to provide developers, builders, contractors, realtors, engineers, landscape architects and surveyors with a single source of information that highlights the development process as it relates to the Athens-Clarke County Department of Transportation and Public Works. In no way does this guide take precedence over any ordinance or policy adopted by the Unified Government of Athens-Clarke County.

In preparing this guide, we reviewed our current policies and procedures and, as a result, have attempted to better define the process, eliminate unnecessary steps and reduce the turnaround time for the review and approval of plans. As a service provider, we are committed to continuous improvement of our programs and would like to hear your comments and suggestions.

We hope that this guide will be helpful as you build and develop in the Athens-Clarke County community. Please let us know if we can assist you in any way.

SECTION II
ROLES & RESPONSIBILITIES

- Key Staff
- Development Responsibilities & Related Ordinances

ATHENS-CLARKE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS - ENGINEERING DIVISION

Address:	120 Dougherty Street, P.O. Box 1868, Athens, GA 30603
Department Director:	David Clark
Contact Person(s):	Bob Faucett, Land Development Engineer/Coordinator
	Brad McCook, Permit Supervisor
Phone Number:	(706) 613-3440

Area of Review:
Soil Erosion and Sediment Control
Streets and Drainage
Stormwater Management/Grading & Drainage
Public Right of Way Permits
Flood Protection

TRAFFIC ENGINEERING DIVISION

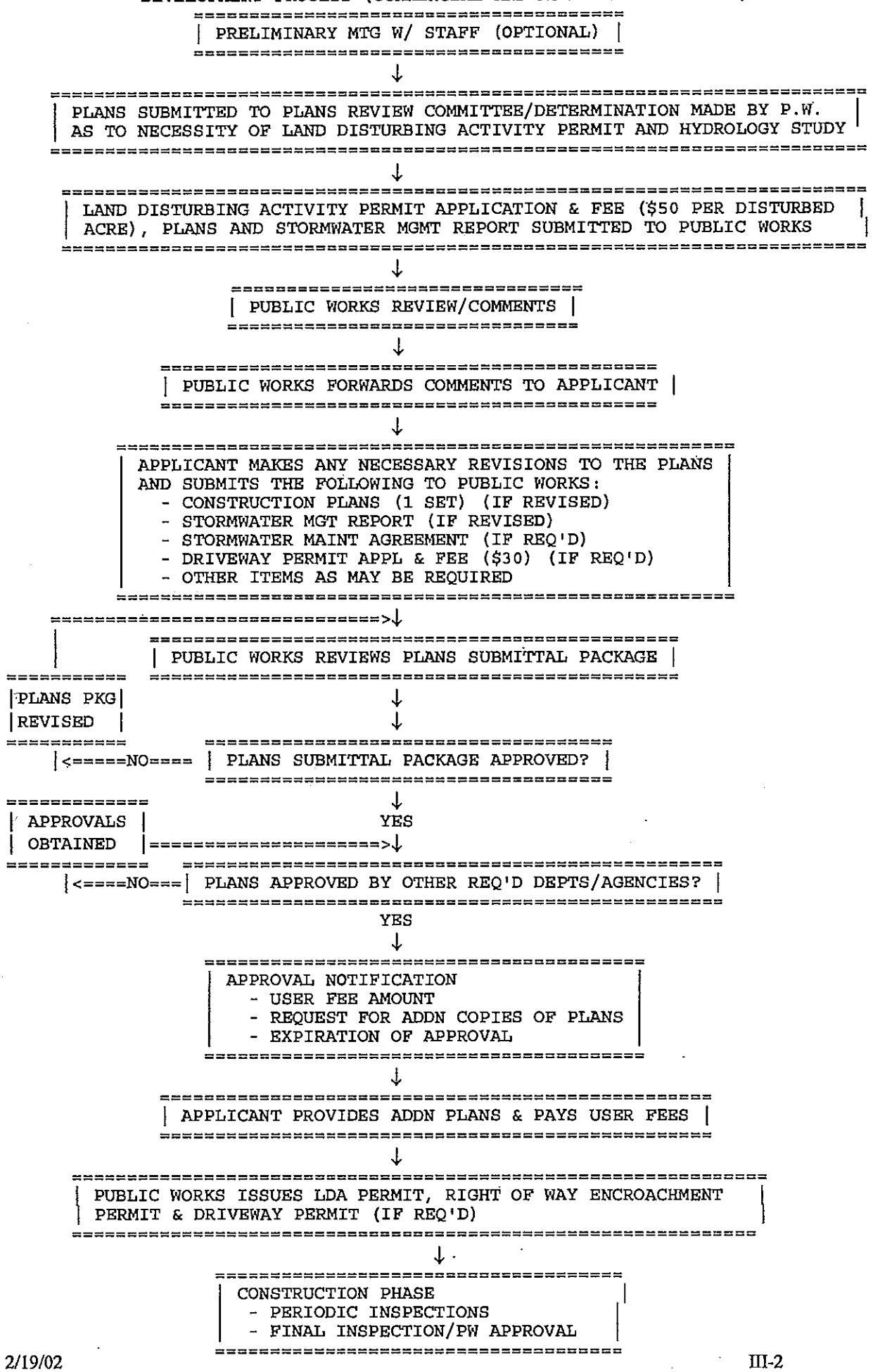
Address:	2915 Lexington Road, Athens, GA 30605
Department Director:	David Clark
Contact Person(s):	Akhilesh Pal
Phone Number:	(706) 613-3460

Area of Review:
Driveway Ordinance
Traffic Control Devices

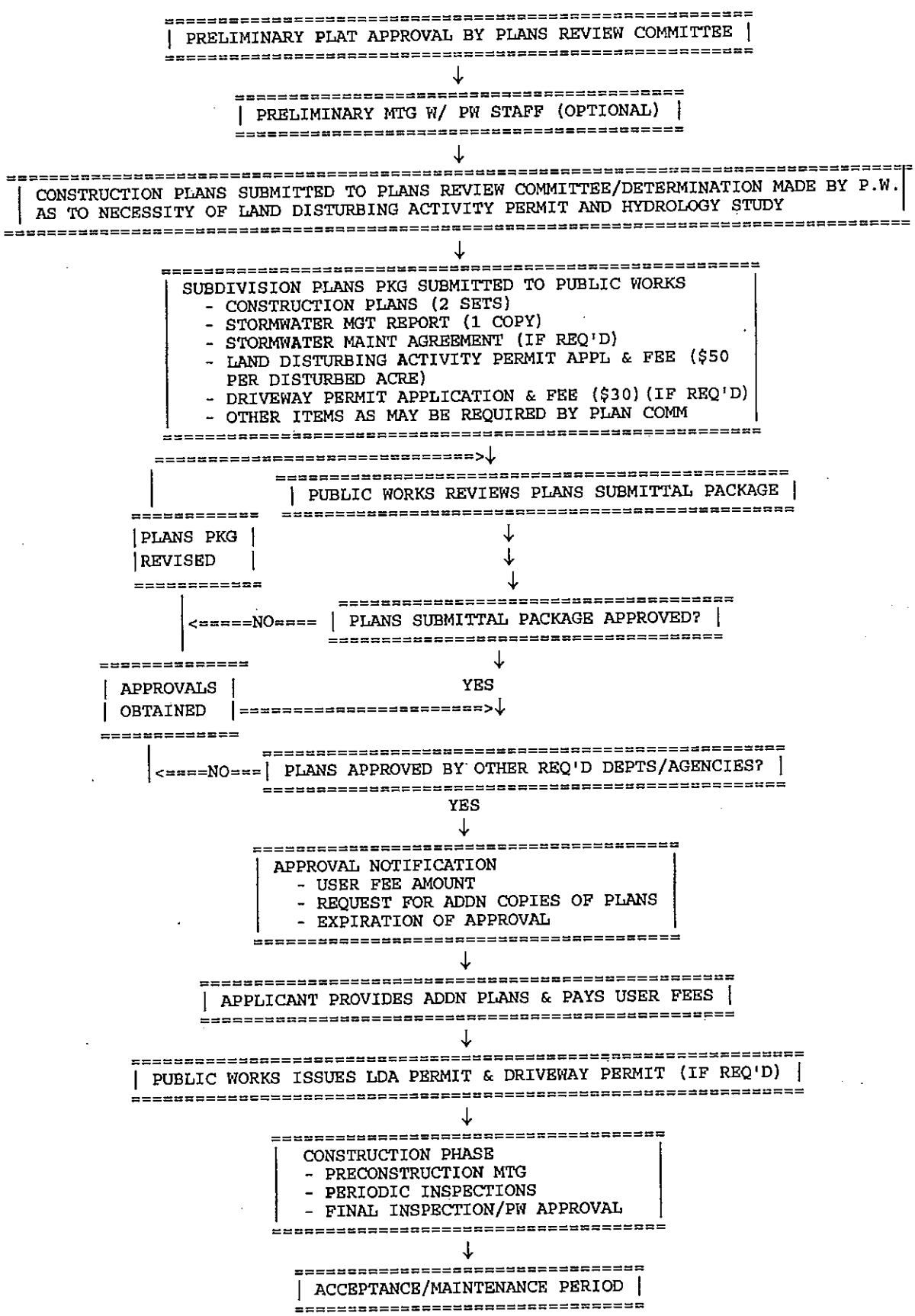
SECTION III
DEVELOPMENT PROCESS

- Commercial & Multi-Family Process Flow Chart
- Subdivision Project Process Flow Chart
- Land Disturbing Activity Only Process Flow Chart

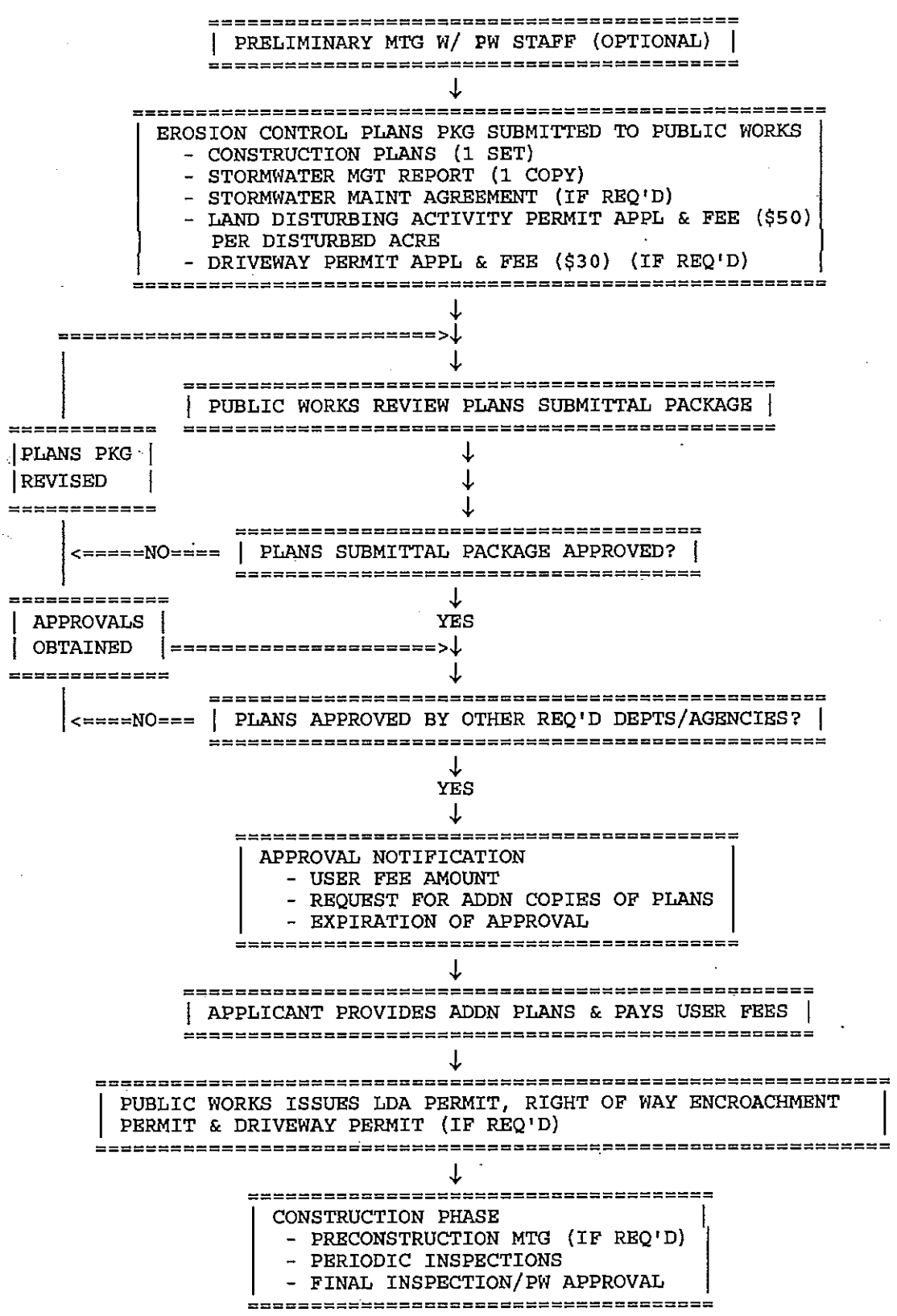
ATHENS-CLARKE COUNTY DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS
DEVELOPMENT PROCESS (COMMERCIAL AND MULTI FAMILY SITES)



ATHENS-CLARKE COUNTY DEPT OF TRANSPORTATION & PUBLIC WORKS
DEVELOPMENT PROCESS (SUBDIVISION PROJECTS)



ATHENS-CLARKE COUNTY DEPT OF TRANSPORTATION & PUBLIC WORKS
DEVELOPMENT PROCESS (LAND DISTURBING ACTIVITY ONLY)



SECTION IV
PLAN REQUIREMENTS & PERMIT INFORMATION

- Construction Plan Checklist
  - Supplement I: Erosion & Sedimentation Control Plan Review Checklist
  - Supplement II: Stormwater Management Report Checklist
  - Supplement III: Drainage and Grading Plan Checklist
  - Supplement IV: Traffic Impact Analysis Checklist

- Permit Information
  - Land Disturbing Activity Permit Procedures/Requirements & Example
  - Driveway Permit Application Example
  - Right-of-Way Encroachment Permit Application Example

CONSTRUCTION PLAN CHECKLIST

PROJECT _____ **DATE** _____

PROJECT LOCATION/ADDRESS _____

ATHENS-CLARKE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS

ENGINEERING DIVISION
120 Dougherty Street, Athens, GA 30601
Contact Person: _____
Phone Number: (706) 613-3440

TRAFFIC ENGINEERING
2795 Lexington Road, Athens, GA 30605
Contact Person: _____
Phone Number: (706) 613-3460

Civil Engineering - Site Development Plan Requirements:

[ ] 1. General Submittal Requirements

[ ] a. All construction plans and required reports shall be prepared by or under the direct supervision of a Professional Engineer or Landscape Architect or Registered Land Surveyor currently registered in Georgia in accordance with provisions of the Georgia laws. All construction plans for the respective disciplines shall be certified with seal and signature.

[ ] b. Minimum plan size shall be 24" x 36", maximum size shall be 34" x 44".

[ ] c. North arrow, scale and bench mark shall be shown on all plans.

[ ] d. In the absence of specific design requirements referenced herein, sound engineering judgement shall be used in preparation of construction documents and plans.

[ ] e. Provide a copy of the stormwater management report, erosion control calculations, and any other technical reports, such as wall design, geo-technical investigations, bridge design, or other features not listed herein.

2. Required Plans (Some of the drawings listed below may be combined if the required information can be clearly shown.)

[ ] a. Cover Sheet shall include:

[ ] 1. Project Title.

[ ] 2. Vicinity map drawn to a scale no smaller than 1"=2000'.

[ ] 3. Owner's name, address and phone.

[ ] 4. Engineer's name, address and phone.

[ ] 5. Index to sheets.

[ ] 6. General notes.

[ ] 7. Date of plans/revision date.

[ ] 8. NPDES certification signed by owner (if required).

[ ] 9. Total disturbed acreage to be covered by this permit.

[ ] 10. 24-hour contact must be certified by Athens-Clarke County or by another Regulatory Agency, for which proof of certification must

be provided to the Department of Transportation & Public Works.

a. Include a signed copy of the statement in Appendix A on the cover sheet.

[ ] b. Site Plan

[ ] 1. Shall be at a scale no smaller than 1" = 100'.

[ ] 2. Shall include all information listed on the Athens-Clarke County Planning Department's Site Plan Requirements where applicable or when not provided elsewhere in the construction documents.

[ ] 3. Driveway Ordinance requirements:

[ ] a. All access points shown;

[ ] b. Driveway widths;

[ ] c. Driveway radii;

[ ] d. Driveway apron design and material;

[ ] e. Property lines;

[ ] f. State of Georgia Department of Transportation permit as determined by Traffic Engineering.

[ ] 4. Delineate wetlands on site and state total acreage. Provide documentation to verify that wetlands permits (if applicable) have been obtained from the U.S. Army Corps of Engineers.

[ ] 5. Include a statement regarding the existence of any trees located in the right-of-way with a DBH greater than or equal to 2 inches.

[ ] 6. Indicate the location of a 2'x 2' covered placard to be located within 50' feet of the construction exit. This placard will be used as a posting board for written communication between the county inspector and the developer/owner/24-hour contact. It will be the responsibility of the 24-hour contact to check the placard board once daily.

[ ] c. Erosion and Sediment Control Plan (as applicable)

[ ] 1. Shall be prepared in accordance with the "Manual for Erosion and Sediment Control in Georgia" and the Athens-Clarke County Soil Erosion and Sediment Control Ordinance.

[ ] 2. Shall be prepared at a scale no smaller than 1" = 100'.

[ ] 3. See "Erosion and Sediment Control Plan Review Check List" (Supplement I) for addition requirements.

[ ] d. Drainage - Grading Plan

[ ] 1. Shall be prepared pursuant to requirements of the Athens-Clarke County Stormwater Management Ordinance, the Athens-Clarke County Flood Protection Ordinance, and the "Manual for Erosion and Sediment Control in Georgia".

[ ] 2. Shall be at a scale no smaller than 1" = 50'.

[ ] 3. A "Stormwater Management Report" shall be required for all projects. See "Stormwater Management Report Check List" (Supplement II) for requirements.

[ ] 4. See "Drainage and Grading Plan Check List" (Supplement III) for construction plan requirements.

[ ] e. Overall Utility Plan (as applicable)

[ ] Shall show the locations of all existing and proposed underground utilities on site and surrounding the site including: water, sanitary sewer, storm sewer, electric, gas, telephone, TV cable, fiber optics and other. Proposed locations shall be in accordance with the Department of Utilities Standards.

[ ] f. Roadway Plan Profile Sheets (as applicable)

[ ] 1. Shall be prepared pursuant to the Athens-Clarke County Design Standards and the Georgia Department of Transportation Standard Drawing and Specifications.

[ ] 2. Shall be at a horizontal scale no smaller than 1" = 50' and a vertical scale no smaller than 1" = 10'.

[ ] 3. Right-of-Way dedication and acceptance package is required for public roadway.

[ ] g. Storm Drainage Profile Sheets (as applicable)

[ ] 1. Shall be at a horizontal scale no smaller than 1" = 50' and a vertical scale no smaller than 1" = 10'.

[ ] 2. Hydraulic grade lines shall be normally shown for the 25-year storm. For all culvert crossings, the hydraulic grade line shall be shown for the 100-year storm. The 100-yr event may not overtop the road.

[ ] 3. Specify pipe type, length, and slope on profiles. Maximum pipe slope is 10%.

[ ] h. Detail Sheets

Shall be prepared showing details and sections for construction and installation of all facilities including:

[ ] 1. Erosion and Sediment Control.

[ ] 2. Storm Drainage System.

[ ] 3. Roadways, driveways and pavements, curb and gutter and walkways.

[ ] 4. Miscellaneous.

[ ] i. Traffic Impact Analysis (as applicable)

A "Traffic Impact Analysis" shall be required for projects expected to generate more than 1,000 vehicle trips per day. See "Traffic Impact Analysis" requirements for more information (Supplement IV).

SUPPLEMENT I

EROSION & SEDIMENTATION CONTROL PLAN REVIEW CHECKLIST

[ ] A. APPLICATION:

[ ] 1. Date

[ ] 2. Receipt No.

[ ] 3. Name and address of project

[ ] 4. Project Engineer

[ ] 5. Brief description of work to be done

[ ] 6. Starting and completion dates

[ ] B. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT.

[ ] 1. Projects with disturbed areas equal to or greater than 1 acres, including projects less than 1 acres that are part of a common development equal to or greater than 1 acres, must comply with the National Pollutant Discharge Elimination System (NPDES) Permit for construction activities (General Permit No. GAR 100001, GAR 100002, or GAR 100003). This permit regulates stormwater discharges associated with construction activity and will be enforced by Georgia Environmental Protection Division (EPD).

[ ] 2. For projects meeting the criteria described in item B.1 above, Applicant must: submit a copy of the signed NOI and include the following note (including signed acknowledgement) on the cover sheet of the construction plans:

- NPDES Certification:
  Construction of this project will involve Land Disturbance equal to or greater than 1 acre(s), or is a part of a common development requiring an NPDES Permit, and must comply with the National Pollutant Discharge Elimination System (NPDES) Permit for construction activities (General Permit No. GAR 100001, GAR 100002, or GAR 100003). The owner/contractor or authorized representative shall be responsible for preparation of the necessary Notice of Intent (NOI) and appropriate erosion, sediment and pollution control plan requirements that comply with all aspects of the NPDES permit for construction activities.

  ACKNOWLEDGEMENT

  _____
  Owner/Contractor or Authorized Representative

3. Project Plans must include the following statement on the Erosion and Sedimentation Control Plans with the appropriate information including signature:

I *Insert Name of Plan Preparer*, hereby certify that I have visited the site prior to creation of the erosion and sedimentation control plan and have verified the presence or lack thereof of all state waters on or adjacent to the site.

Signature of Plan Preparer & Date

[ ] C. EROSION AND SEDIMENT CONTROL NARRATIVE (may be included with Storm Water Management Report):

[ ] 1. Project description - Briefly describe the nature and purpose of the land-disturbing activity, the zoning classification, and the amount of grading involved in both area and volume.

[ ] 2. Existing site conditions - A description of the existing topography, vegetation, and drainage.

[ ] 3. Adjacent sites - A description of neighboring areas which might be affected by the land disturbance (roads, lakes, streams, residential areas, etc.).

[ ] 4. Soils - A brief description of the soils onsite that includes the following: soil names, mapping unit, depth, erodibility, permeability, texture, and soil structure.

[ ] 5. Critical areas - A description of areas onsite which have potentially serious erosion problems.

[ ] 6. Construction schedule - A graphical or narrative description of how construction phases will be timed.

[ ] 7. Erosion and sediment control measures - A description of the methods used to control erosion and sedimentation onsite.

[ ] 8. Permanent stabilization - A brief description of how the site will be stabilized after construction is completed.

[ ] 9. Stormwater management consideration - Address the following: will site development result in increased peak rates of runoff and/or will this result in either flooding or channel degradation downstream?

[ ] 10. Maintenance - A schedule of regular inspections and repair of erosion and sediment control structures should be set forth.

[ ] 11. Calculations - Any calculations made for the design of such items as sediment basins, diversions, and waterways, as well as for runoff and stormwater detention basin designs (if applicable). Include all calculation sheets for BMPS as specified in the Georgia Manual for Erosion and Sediment Control, latest edition. Please note design of sediment basins requires specific calculations in addition to those specified for stormwater management facilities.

[ ] D. EROSION AND SEDIMENT CONTROL PLAN

[ ] 1. Vicinity map - A small map locating the site in relation to the surrounding area.

[ ] 2. Applicant information - Name, address, and telephone number of the owner and contractor (if known at time of plan review).

[ ] 3. Survey information - Boundary survey, including all easements.

[ ] 4. Existing contours - The existing contours onsite should be shown on the plan map. (ACC topo maps are not acceptable.)

[ ] 5. Existing vegetation - Existing tree lines, grassy areas, and/or unique vegetation should be shown on the plan map.

[ ] 6. Soils - The boundaries of the different soil types should be shown.

[ ] 7. North indicator - The direction of north, in relation to the site, should be shown on the plan map.

[ ] 8. Critical erosion areas - Areas with potentially serious erosion problems should be clearly marked on the plan.

[ ] 9. Existing drainage patterns - The dividing lines and direction of flow for the different drainage areas should be shown on the plan map.

[ ] 10. Final contours - Changes to existing contours should be shown.

[ ] 11. Limits of clearing and grading - Areas to be cleared and graded should be outlined on the plan map, including amount of acres to be disturbed. Also include the total acerage to be disturbed for each phase of the project.

[ ] 12. Location of practices - Location of erosion and sediment control and stormwater management practices used onsite should be shown on the plan map using uniform coding symbols.

[ ] 13. Detail drawings - Details of all erosion and sediment control devices used should be on the plan as specified in the Manual for Erosion and Sediment Control. This includes any structural practices used that are not referenced to the Manual for Erosion and Sediment Control in Georgia or other local handbooks. These practices should be explained and illustrated.

[ ] 14. Include following STATEMENT on all Erosion and Sediment Control Plans – **"STANDARDS AND SPECIFICATIONS: "All designs will conform to and all work will be performed in accordance with the standards and specifications of the publication entitled Manual for Erosion and Sediment Control in Georgia, latest edition."**

[ ] 15. Include following STATEMENT on all Erosion and Sediment Control Plans – **"Erosion and sedimentation control measures must be maintained at all times. If full implementation of the approved plan does not provide for effective erosion and sediment control, additional erosion and sediment control measures must be implemented to control or treat the sediment source."**

[ ] 16. Need name, address, fax number and telephone number of the 24 -HR contact person responsible for erosion and sediment control throughout the life of the project (contact person must live locally and possess the appropriate certification).

[ ] 17. Need vegetative plan with appropriate dates and rates of planting.

[ ] 18. Provide construction activity schedule and dates on the erosion and sediment control plans. The activity schedule must list and define the sequence of the construction phases for the site: including at a minimum clearing, grading, rough grade, construction of utilities, roadway improvements, final grading and landscaping.

[ ] 19. Include following STATEMENT on all Erosion and Sediment Control Plans. – " The installation of erosion and sedimentation control measures and practices shall occur prior to each construction phase of land-disturbing activity."

[ ] 20. A 75-ft undisturbed buffer zone along streams must be delineated. The required buffer is 75' on either side of the stream, measured from the top of the bank. Where encroachment into buffer is proposed, provide documentation that appropriate variances have been obtained from the Planning Department. Any encroachment into the 25' state waters buffer will require variance approval from Georgia EPD.

[ ] 21. Maps, drawings, and supportive computations shall bear the signature/seal of a registered or certified professional in engineering, architecture, landscape architecture, land surveying, or erosion and sedimentation control licensed to practice in Georgia.

[ ] 22. A three phase sediment and erosion control plan is required on all construction sites. The Phase I plan shall clearly show all cut and fill areas and the appropriate control measures that will be required for clearing and initial grading. Phase II shall show the final grade contours and all control measures required prior to the installation of any structures. Phase III shall show the location of all BMP's during the construction phase after grading is complete.

SUPPLEMENT II

STORMWATER MANAGEMENT REPORT CHECKLIST

[ ] A. General Requirements

[ ] 1. A Stormwater Management Report shall be prepared for all development projects clearly showing the anticipated impacts from stormwater runoff on existing and proposed developments and facilities.

[ ] 2. The report shall be prepared by a professional engineer or registered landscape architect licensed to practice in Georgia and trained and experienced in the application of hydrology and hydraulics. The report shall bear the seal and signature of the registrant.

[ ] 3. In addition to requirements contained herein, the report shall also be prepared pursuant to requirements of the Athens-Clarke County Stormwater Management, Flood Protection, and Erosion and Sediment Control Ordinances, the Athens-Clarke County Design Standards, and the Georgia Stormwater Management Manual, latest edition.

[ ] 4. If detention for this site will be provided by an existing stormwater detention pond, provide a copy of the previously approved hydrology study. Demonstrate how this site complies with the original hydrology study.

[ ] B. Report Contents

[ ] 1. A copy of the Stormwater Concept Plan:

a. Existing Site Conditions/Proposed Site Plans: Including
- Existing Topography
- Drainage Channels, Intermittent and Perennial streams
- Predominant Soils from Soil survey or geo-technical investigations.
- Extent of vegetation
- Proposed clearing and grading limits
- Location of proposed improvements such as roads, buildings, and other impervious areas.

b. Natural Resource Inventory: A written or graphic inventory of the existing natural resources at the site and surrounding area of properties adjacent to the site. This description of soil conditions, forest cover, topography, native vegetation, wetlands, streams and other natural features.

c. Stormwater Management System Concept Plan: A written or graphic concept plan of the proposed post-development stormwater management system. This description should include location of proposed structural controls, conveyance systems, flow paths, relationship of site to offsite flow(upstream & downstream properties).

[ ] 2. A narrative shall be included containing the following information:

[ ] a. Description of the proposed development and statement of impact of post developed condition for stormwater runoff. Provide summary calculations for pre-development and post development flow (Q) in cubic feet per second for all existing and proposed drainage basins.

[ ] b. Existing Conditions Hydrological Analysis (5-4-6 c-3)

[ ] c. Post Development Hydrological Analysis. (5-4-6-c-4)

[ ] d. Description of methods, procedures, and assumptions used in the analysis. All methods selected shall be in accordance with the Georgia Stormwater Management Manual, latest edition.

[ ] e. Description of how the site will meet the following performance criteria as describe in section 5-4-7 of the Stormwater Management Ordinance:

- Water Quality
- Groundwater Recharge
- Stream Channel Protection
- Overbank Flood Protection
- Extreme Flood Protection

[ ] f. Stormwater Management System (See Ordinance 5-4-6-c-5)

- Hydrological and Hydraulic Calculations for all components including temporary sediment basins

[ ] g. Post Development Downstream Flow Analysis (See Ordinance 5-4-6-c-6)

[ ] h. A description of Landscaping and Open Space Plan

[ ] i. Operation and Maintenance Plan (See Ordinance 5-4-6-c-9)

[ ] j. Evidence of Acquisition of applicable local and non-local permits Environmental Areas Permit, USACE Section 404, Etc.

[ ] 2. A Storm Water Management Plan shall be included containing the following information:

[ ] a. Vicinity Map (reproduced to scale of 1" = 2000' or larger)

[ ] b. Existing and proposed topography [2 foot maximum contour interval or in accordance with Athens-Clarke County Soil Erosion and Sediment Control Ordinance (typically 1" = 50' or larger)]

[ ] c. Existing and proposed boundary and lot lines

[ ] d. Locations or boundaries of existing vegetation

[ ] e. Perennial and intermittent streams, lakes, springs, marshes/ wetlands

[ ] f. Environmental and/or State Water Buffer zone

[ ] g. Existing and proposed structures, roadways and pavements

[ ] h. Existing and proposed utilities (e.g. water, sewer, gas, electric, etc.)

[ ] i. Existing and proposed floodplain and floodway limits

[ ] j. Existing and proposed drainage facilities (e.g. open channels, ditches, swales, pipes, culverts, catch basins, inlets and detention

and retention facilities)

[ ] k. Existing and proposed drainage basin boundaries used in the hydrologic analysis (indicate drainage basin, sub-basin acreage)

[ ] l. Existing and proposed runoff flow path(s) used in the hydrologic analysis for determination of the time of concentration

[ ] m. Existing and proposed design locations/points with designations used in the hydrologic analysis

[ ] C. Calculations

[ ] 1. Hydrology

[ ] a. General Requirements

[ ] 1. Applicant should follow methods listed in Georgia Stormwater Management Manual.

2. Provide all assumptions and rationale for methods chosen.

[ ] 3. Provide copies of all calculations.

[ ] 2. Hydraulics

[ ] a. Provide pipe flow calculations and charts.

[ ] b. Provide open channel calculations. Open channel design must also provide a non-erodible velocity. Show typical ditch section and specify type of channel lining.

[ ] c. Provide street flow/gutter spread calculations.

[ ] d. Provide inlet control and outlet control calculations and charts.

[ ] e. Provide inlet collection/catch basin calculations and charts.

[ ] f. Provide 25-year hydraulic grade line calculations (show on profile) 100-yr hgl for all road culverts

[ ] g. Provide details for construction of all stormwater drainage/management facilities.

[ ] h. Storm drainage system running along streets shall be sized for the 25-year storm.

[ ] i. Culvert crossings shall be sized for the 100 year storm.

[ ] j. Rip rap outlet protection shall be designed in accordance with the Manual for Erosion and Sediment Control in Georgia. Minimum length shall be six times the pipe diameter. Exit velocity greater than 8 fps at headwall will require energy dissipation devices beyond the normal 6x diameter length of riprap. Minimum stone size shall be GDOT Type 3 (minimum depth to be 18").

[ ] 3. Stormwater Management Systems

[ ] a. All structural and non-structural controls must be designed to the specifications listed in the Georgia Stormwater Management Manual

[ ] b. The 100 year water surface elevations and limits shall be shown on the plans for all ponding areas.

[ ] c. A Stormwater Management, Drainage and Maintenance Access

Easement shall be provided measured 10 feet horizontally from the 100 year water surface and from the base of the dam embankment.

[ ] d. A 20' maintenance access route and easement is required to the detention facility. Maximum slope shall be 10% along unimproved routes.

[ ] e. A "Stormwater Management Maintenance Agreement" is required for all stormwater facilities as specified in the stormwater Management Ordinance Sec. 5-4-6 (d)

SUPPLEMENT III

DRAINAGE AND GRADING PLAN CHECKLIST

[ ] 1. Shall be at a scale no smaller than 1" = 100'. Detention and/or retention facilities shall be at a scale no smaller than 1" = 50'.

[ ] 2. Existing and proposed contours shall be shown in accordance with the Athens-Clarke County Soil Erosion and Sedimentation Control Ordinance. For areas with slopes less than 2.0%, the maximum interval shall be 2 feet. For areas with slopes greater than 8%, the maximum interval shall be 2 feet. The Athens-Clarke County Topographic Maps Flown in 1990 may be used for preliminary planning, but due to noted inaccuracies are not adequate for the preparation of construction plans.

[ ] 3. Show all existing water features on site and within 200 feet of the site including rivers, streams, springs, ponds, lakes, and wetlands (smaller scaled drawing or vicinity map may be provided).

[ ] 4. Show Appropriate Undisturbed Natural Vegetative Buffer adjacent to all state waters.

[ ] 5. Show all existing and proposed drainage structures, open channels/ ditches, and piped systems.

[ ] 6. Maximum cut and fill slopes shall be 3:1, however, within and adjacent to all open drainage facilities and detention ponds, the maximum slope shall be 4:1. Slopes exceeding these slopes must be considered warranted by the Department of Transportation and Public Works.

[ ] 7. All retaining walls over 4 feet in height shall be designed by a Professional Engineer with details bearing the seal and signature provided in the plan set.

[ ] 8. A 4 foot chainlink fence is require surrounding detention facilities if slopes in excess of 4:1 are permitted by the Director of the Department of Transportation and Public Works.

[ ] 9. No development shall be permitted downstream of a lake, pond, or reservoir dam unless documented approval is provided from the Georgia Safe Dams Program and/or a dam break analysis is provided. The resulting water surface from the dam break analysis shall be shown on plan.

[ ] 10. No structure shall be located within 10 horizontal feet of the FEMA 100 year flood zone.

[ ] 11. The minimum finished floor elevation, including basements, shall be 2 feet above the FEMA identified 100 year water surface and the 100 year water surface for all other streams or man-made water courses. Proposed minimum flood elevations and existing floor elevation shall be shown for all structures and lots adjacent to 100-year flood zones.

[ ] 12. FEMA "Elevation Certificates" are required for all structures and lot developments adjacent to FEMA 100 year flood zones.

[ ] 13. Identify the 100-year floodplain (and floodway if applicable) limits and baseflood elevation on plans. Reference the most current Flood Insurance Rate Map (FIRM) and state the appropriate community panel number.

[ ] 14. If the site development encroaches into a FEMA regulated floodplain which has been studied by detailed methods and includes a regulatory floodway, it may be necessary to perform a hydraulic HEC-2 analysis which demonstrates either a "NO-RISE" condition or the need for a Conditional Letter of Map Revision (CLOMR) submittal to FEMA.

[ ] 15. A compensatory grading plan and calculation is required for any permitted grading activities within the 100 year flood zone.

[ ] 16. Pipe material shall be in accordance with the Athens-Clarke County Design Standards. Corrugated metal pipe, if used, shall be minimum 12 gauge BCCMP or minimum 16 gauge Type 2 aluminized CMP.

[ ] 17. Culverts across/through dams shall include anti-seepage collars and cutoff walls and/or concrete cradle to protect against piping failure. RCP must be used in all principal spillway pipes for all permanent stormwater ponds.

[ ] 18. Rip rap shall be sized and installed in accordance with the Manual for Erosion and Sediment Control in Georgia, details are required on plans. Minimum size shall be G.D.O.T. Type 3 at outlet or drop structures.

[ ] 19. Detention facilities shall be located on plans showing the 100 year water surface elevation and volume.

[ ] 20. Construction details shall be provided for drainage facilities including: pipe installation/bedding, catch basins/inlets, manholes, open channels, trickle channels, headwalls, flared-end sections, detention pond control structures, etc. Provide a raised cover for outlet control structures.

[ ] 21. Storm drainage systems and detention pond outlets shall discharge to an adequate, established, stable outfall system. Off-site improvements will be required if downstream facilities are inadequate or if existing drainage problems exist.

[ ] 22. Concentrated discharge into public streets from paved areas, driveways or detention ponds shall be limited to 1.0 cfs during a 25-year storm.

[ ] 23. Note on plan: **Detention facilities and erosion and sediment control measures shall be established prior to any other construction activities on site. All erosion and sediment control facilities shall be maintained until permanent ground cover is established.**

[ ] 24. Storm water detention plan "As Builts" shall be required to be submitted and certified to by the design engineer prior to the approval of a final plat on subdivision and prior to issuance of a C.O. for all other projects.

SUPPLEMENT IV

TRAFFIC IMPACT ANALYSIS CHECKLIST

[ ] A. General Requirements

[ ] 1. A Traffic Impact Analysis shall be prepared for all developments where:

[ ] a. The proposed site development can reasonably be expected to generate more than 1,000 vehicle trip ends during a single day and/or more than 100 vehicle trip ends during a single hour, or

[ ] b. A proposed zone change is being requested that, in a typical build-out scenario, can reasonably be expected to generate more vehicle trip ends than the current zoning for the site during a single day.

[ ] 2. A Traffic Impact Analysis may be required for any development which generates less than 1,000 daily trip ends, and in the opinion of the Athens-Clarke County Traffic Engineer, the development adversely impacts an existing roadway capacity problem and/or safety deficiency.

[ ] 3. The report shall be prepared by a professional engineer licensed to practice in Georgia and trained and experienced in the application of traffic engineering.

[ ] B. Report Contents

[ ] 1. An executive summary covering:

[ ] a. The proposed site development

[ ] b. Major findings of the analysis

[ ] c. Mitigation measures proposed, if necessary.

[ ] 2. A vicinity map showing the location of the proposed development in relation to the transportation system of the area.

[ ] 3. A complete description of the proposed development, including

[ ] a. A site plan

[ ] b. The total size and nature of the entire proposed development

[ ] c. The proposed location and traffic control of all proposed access points

[ ] 4. A brief description of the current (and proposed, if applicable) land uses adjacent to the site.

[ ] 5. A description of the study area for the Traffic Impact Analysis as defined by:

[ ] a. All proposed site access points

[ ] b. All intersections bordering or adjacent to the site frontage including the closest intersecting collector or arterial street.

[ ] c. Any road segment or intersection where the proposed development can be expected to generate more than 25 additional vehicle trips during a single hour.

[ ] d. Any other neighboring intersections identified by Athens-Clarke County Traffic Engineering as having capacity, safety, neighborhood, and/or geometric concerns that will be adversely impacted by the proposed development.

[ ] The description of the study area shall include:

[ ] a. Roadway names, locations and functional classifications

[ ] b. Intersection lane configurations and traffic control

[ ] c. Existing and future right-of-way

[ ] d. Pedestrian, bicycle, and transit facilities

[ ] e. Planned transportation system improvements

[ ] 6. Existing traffic volumes (measured within the previous six months and adjusted to reflect current conditions) and operational analysis for all study intersections including:

[ ] a. Average intersection delay

[ ] b. Level of Service

[ ] c. Volume/capacity ratios

[ ] d. Queue length analysis

[ ] 7. Accident data summary and analysis within the study area for the most recent available three year period. Accident data can be obtained through the Athens-Clarke County Traffic Engineering division.

[ ] 8. Complete trip generation estimates for all phases and land uses of the proposed development should be calculated with the following requirements:

[ ] a. The most recent edition of the ITE publication *Trip Generation Manual* should be used.

[ ] b. If the ITE manual does not contain adequate data or the proposed land use is unique, a trip generation study can be conducted and its results used in place of the ITE manual.

[ ] c. Pass-by and/or internal trip estimates may be developed for land uses where these trip types are common. The ITE methods on handling these types of trips is required to be followed.

[ ] 9. Trip distribution of the trip generation information should be performed using directional trip distribution patterns based on historical data. A figure showing the trip distribution pattern will be submitted as part of the study.

[ ] 10. Trips associated with other proposed, approved developments in the area shall be included in the traffic operations analysis.

[ ] 11. Forecast traffic volumes and performance evaluation (including average delay, levels of service, and volume-to-capacity ratios) for the study intersections without development of the site.

[ ] 12. Forecast traffic volumes and performance evaluation, including the proposed development traffic, for all study intersections in the year that full buildout is expected to occur, as well as for the five-year future.

[ ] 13. Safety analysis of the proposed site accesses, including sight distance (both stopping sight distance and intersection sight triangle) and operational characteristics.

[ ] 14. Analysis of right-and left-turn lane warrants, queue lengths, acceleration lanes, throat lengths, channelization, and other characteristics of the site-access driveways as appropriate.

[ ] 15. Comparison of the location and spacing of the proposed site-access driveways with Athens-Clarke County standards and the standards of the Georgia Department of Transportation, if necessary.

[ ] 16. Analysis of the parking needs of the proposed development, the adequacy of the proposed facilities to meet those needs as appropriate, and the conformance of the proposed parking facilities to applicable standards.

[ ] 17. Analysis as necessary of the adequacy of the internal vehicle and pedestrian circulation systems to serve the proposed development.

[ ] 18. Description and analysis of mitigation measures necessary to bring the identified intersections and locations into compliance with the applicable standards. Include analysis showing that these measures will bring these locations into compliance and include signal, turn lane, or other warrant analyses as appropriate.

[ ] 19. An appendix which includes:
- Copies of raw traffic count data used in the analysis;
- Calculation sheets and/or computer software output for all levels of service, delay, and volume-to-capacity ratio calculations in the analysis;
- Warrant worksheets for signals, turn lanes, signal phasing, all-way-stops, and other proposed measures as appropriate.

[ ] C. Standards

[ ] 1. All signalized and all-way-stop controlled intersections shall operate at a Level of Service "D" or better with a Volume/Capacity ratio of 0.95 or less. Other unsignalized intersections (including unsignalized private accesses) shall operate at Level of Service "E" or better for major street left turns and side street approaches, although LOS "F" may be allowed if the movement has a relatively low volume-to-capacity ratio and there are no known safety problems at the intersection.

[ ] 2. Acceptable analysis methods include the most recent Highway Capacity Manual, PASSER, TRANSYT-7F, and Synchro.

[ ] 3. Signal timing used in capacity or progression analysis shall use the same cycle length as is currently in use at the intersection, unless specifically noted otherwise, and shall not exceed 120 seconds. Signal timing shall provide adequate green time for pedestrian crossings.

[ ] 4. Peak Hour Factors less than 0.75 or greater that 0.90 shall not be used unless justified by specific counts at that location.

[ ] 5. Provide four copies of the Traffic Impact Analysis report for Athens-Clarke County Staff review.

ATHENS-CLARKE COUNTY
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
PERMIT APPLICATION

NO._____

MAILING ADDRESS
P.O. BOX 1868
ATHENS, GA 30603

PHONE: (706) 613-3440

FAX: (706) 613-3444

STREET ADDRESS
120 DOUGHERTY ST.
ATHENS, GA 30601

PROJECT NAME:_____

PROJECT ADDRESS:_____ TAX MAP:_____ BLOCK_____ LOT_____

PROJECT TYPE: ( ) COMMERCIAL ( ) MULTIFAMILY ( ) S/D ( ) GOV'T/INSTITUTION ( ) ROW ONLY ( ) S/F ( ) OTHER

TOTAL PROJECT ACRES:_____ PROPOSED DATE OF CONSTRUCTION:_____

APPLICANT:_____ PHONE NUMBER:_____

MAILING ADDRESS:_____ ST/ZIP:_____

PAGER/CELL PHONE NUMBER:_____ EMERGENCY PHONE NUMBER:_____

ENGINEERING FIRM:_____ FIRM CONTACT PERSON:_____

24-HOUR CONTACT NAME:_____ PHONE NUMBER:_____

24-HOUR CONTACT CELL #:_____ FAX NUMBER:_____

APPLICATION IS HEREBY MADE FOR:

( ) LAND DEVELOPMENT/LAND-DISTURBING ACTIVITY
( ) DRIVEWAY
( ) ROW ENCROACHMENT PERMIT
( ) ACTIVITY WITHIN TREE PROTECTION ZONE OF ACC TREE(S)

GENERAL REQUIREMENTS:

- Applicant is responsible for submitting all applicable plans, reports, and/or drawings.
- Applicant is responsible for obtaining any additional permits required by the Georgia Department of Transportation and/or other government agencies.
- Applicant must maintain access to all sidewalks and driveways.
- Applicant must submit a Street/Lane Closure Permit Application to the A-CC Traffic Engineering Office (613-3460) a minimum of five (5) working days prior to closing any street or lane.
- Applicant must comply with work zone safety standards set forth in the current Manual on Uniform Traffic Control Devices (MUTCD) while performing work within public rights-of-way.
- Applicant must comply with Chapter 33 "Safeguards During Construction" of the 2000 International Building Code.
- The applicant for any Land-Disturbing Activity permit must be the property owner.
- Applicant must obtain Planning Department approval prior to development.
- Applicant must protect "protected" trees (as defined in Chapter 8-7), utilities, storm drains, streets, and other infrastructure from damage and shall be responsible for any repairs required as a result of any actions, omissions, or negligence.
- Applicant must comply with all applicable provisions of the Athens-Clarke County Community Tree Management Ordinance, Chapter 8-7.
- Applicant indemnifies and holds harmless the Unified Government of Athens-Clarke County and its officers, agents, and employees from all liability, loss cost and expenses, including attorney's fees, that may result from the applicant's failure to take all necessary precautions for preventing accidents, injuries and/or damage to property.
- Timber Harvesting Notification must be filed with the Planning Department.

THIS APPLICATION IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND THE PROPOSED WORK WILL MEET ALL CODES AND ORDINANCES OF ATHENS-CLARKE COUNTY, GEORGIA

APPLICANT'S SIGNATURE:_____ DATE:_____

FOR OFFICE USE ONLY:

APPLICATION FEE:_____ RECEIVED BY:_____ APPLICATION DATE:_____

APPLICATION: ( ) APPROVED ( ) APPROVED WITH CONDITIONS ( ) DISAPPROVED

CONDITIONS:

_____

_____ _____

DIRECTOR (OR DESIGNEE) DATE

REVIEW/INSPECTION FEE: RECEIVED BY: ISSUE DATE: INSPECTOR:

LAND DISTURBING ACTIVITY PERMIT PROCEDURES AND REQUIREMENTS

REVISED 2/02

NO LAND DISTURBING ACTIVITY SHALL BE DONE UNTIL AN APPROVED SOIL EROSION AND SEDIMENTATION CONTROL PLAN HAS BEEN SECURED AND A LAND DISTURBING ACTIVITY PERMIT ISSUED AND POSTED ON SITE. LAND DISTURBING ACTIVITY INCLUDES BUT IS NOT LIMITED TO CLEARING, GRADING, EXCAVATING, TRANSPORTING, AND FILLING OF LAND.

APPLICATION, PERMIT AND REVIEW FEES:

$50.00 (per disturbed acre) Land Disturbing Activity Permit Application Fee
$60.00 Stormwater Management Review Fee
$30.00 (per plan sheet) Plans Review Fee

APPLICATION PROCEDURES:

A. Owner obtains an application for a Land Disturbing Activity Permit from the Department of Transportation and Public Works.

B. Owner completes and submits:
   1. Application for Land Disturbing Activity Permit
   2. Erosion and Sediment Control Plans with Narrative (2 copies for subdivisions)
   3. Stormwater Management Report (1 copy)
   4. **$50.00** (per disturbed acre) Land Disturbing Activity Permit Application Fee

C. The Public Works Engineer receives and reviews the erosion control plan and other required construction plans and/or reports then notifies the owner upon approval.

D. The owner will then obtain the Land Disturbing Activity Permit from the Department of Transportation and Public Works and pay the appropriate fees. (Stormwater Management Report Review Fee $60, Plan Review Fee $30 per plan sheet)

SECTION V
USER FEE INFORMATION

ATHENS-CLARKE COUNTY
DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS
USER FEES

Consistent with the fees established in Sections 7-1-560 and 8-3-5 of the Code of Athens-Clarke County and with departmental policies and procedures, the administration of application and review/inspection fees shall be as follows:

A. Application Fees:

1. **Land Disturbing Activity Permit Application Fee:** $50 per disturbed acre payable when application and plans package are submitted for review
2. **Driveway Permit:** $30 payable when application is submitted for review.
3. **Right-of-Way Encroachment Permit:** $30 payable when application is submitted for review.

B. Review/Inspection Fees:

1. **Paving, Grading, Drainage Improvement Plans:** $30 per plan sheet, excluding erosion control plan sheets, payable prior to issuance of the Land Disturbing Activity Permit
2. **Stormwater Management Reports:** $60 per project payable prior to the issuance of the Land Disturbing Activity Permit.

C. Upon approval of construction plans, the Public Works Land Development Coordinator shall tabulate the user fee amount due for the project and forward the total to the Administrative Secretary.

D. A pre-construction meeting is required before the permit is issued. The Permit Supervisor will schedule the meeting once the construction plans are approved and the 7 sets are stamped and signed. The following participants shall be included in the pre-construction meeting: the project owner, the project engineer, the PW Inspector, the grading contractor, and the Erosion and Soil Contractor or 24-hour contact.

E. The Administrative Secretary will notify the requestor of all required fees and insure fees are collected prior to issuing permits.

APPENDIX A

24-hr. Soil Erosion Certification Statement

My signature hereto signifies that I am the person responsible for compliance with the Soil Erosion & Sediment Control Ordinance. I have provided a copy of my certification with regards to Athens-Clarke County requirements for 24-hour contact. I hereby acknowledge that Best Management Practices (BMP's) must be used to control soil erosion on my job site which includes at a minimum the following:

1. Installation and regular maintenance of silt barriers (i.e. silt fences, hay bales, etc.) in those areas where water exits the job site; and,

2. Installation and regular maintenance of a stone (1.5" – 3.5") geotextial underlined construction exit (20' wide x 50' deep x 6" thick) to minimize the tracking of mud into the street; and,

3. Removal of mud from the street or adjacent property immediately following any such occurrence; and

4. Maintenance and removal of mud from detention ponds and sediment basins; and,

5. Conduct no land disturbing activities within 25 feet of the banks of streams, lakes, wetlands, etc. (i.e. "state waters") except in locations as indicated on the approved Soil Erosion and Sediment Control Plan, as approved by variance from EPD; and,

6. Institute erosion control measures and practices as indicated on the approved Soil Erosion and Sediment Control Plan.

I hereby further acknowledge that County inspection staff may refuse to make inspections, may issue stop work orders, and may issue citations to appear in Environmental Court for failure to comply with erosion control requirements.

Signature: _____ Date Signed: _____

Printed Names: _____ Title: _____