FORM D

SUBMISSIONS CHECKLIST

If a provision is not applicable, put "NA"

Section 1. Development description

A. Narrative

X 1. Objectives and details
X 2. Existing facilities (with dates of construction)

B. Topographic map

X 1. Location of development boundaries
____ 2. Quadrangle name

C. Construction plan

X 1. Outline of construction sequence (major aspects)
2. Dates

D. Drawings

X 1. Development facilities
X a. Location, function and ground area
NA b. Length/cross-sections for roads
X 2. Site work (nature and extent)
X 3. Existing facilities (location, function ground area and floor area)
4. Topography
X a. Pre- and post-development (contours 2 ft or less)
X b. Previous construction, facilities and lot lines

X **Section 2. Title, right or interest** (copy of document)

Section 3. Financial capacity

X A. Estimated costs
B. Financing
____ 1. Letter of commitment to fund
2. Self-financing
____ a. Annual report
X b. Bank statement
3. Other
____ a. Cash equity commitment
____ b. Financial plan
____ c. Letter
____ 4. Affordable housing information

Section 4. Technical ability (description)

____ A. Prior experience (statement)
X B. Personnel (documents)

Section 5. Noise

NA A. Developments producing a minor noise impact (statement)
____ 1. Residential developments
____ 2. Certain non-residential subdivisions
____ 3. Schools and hospitals
____ 4. Other developments
____ a. Type, source and location of noise
____ b. Uses, zoning and plans
____ c. Protected locations
____ d. Minor nature of impact

___ e. Demonstration
___ B. Developments producing a major noise impact (full noise study)
___ 1. Baseline
___ a. Uses, zoning and plans
___ b. Protected locations
___ c. Quiet area
___ 2. Noise generated by the development
___ a. Type, source and location of noise
___ b. Sound levels
___ c. Control measures
___ d. Comparison with regulatory limits
___ e. Comparison with local limits

NA **Section 6. Visual quality and scenic character**(narrative, description, visual impact analysis)

NA **Section 7. Wildlife and fisheries** (narrative)

NA **Section 8. Historic sites** (narrative)

NA **Section 9. Unusual natural areas** (narrative)

Section 10. Buffers

X A. Site plan and narrative

Section 11. Soils

NA A. Soil survey map and report
___ 1. Soil investigation narrative
___ 2. Soil survey map
___ B. Soil survey intensity level by development type
1. Class A (High Intensity) Soil Survey
2. Class B (High Intensity) Soil Survey
3. Class C (Medium High-Intensity) Soil Survey
4. Class D (Medium Intensity) Soil Survey
C. Geotechnical Investigation
___ D. Hydric soils mapping

Section 12. Stormwater management

___ A. Narrative
X 1. Development location
___ 2. Surface water on or abutting the site
___ 3. Downstream ponds and lakes
___ 4. General topography
___ 5. Flooding
___ 6. Alterations to natural drainage ways
___ 7. Alterations to land cover
___ 8. Modeling assumptions
9. Basic standard
___ 10. Flooding standard
___ 11. General standard
___ 12. Parcel size
13. Developed area
14. Disturbed area
15. Impervious area
___ B. Maps
X 1. U.S.G.S. map with site boundaries
___ 2. S.C.S. soils map with site boundaries
___ C. Drainage Plans (a pre-development plan and a post-development plan)

1. Contours
2. Plan elements
3. Land cover types and boundaries
4. Soil group boundaries
5. Stormwater quantity subwatershed boundaries
6. Stormwater quality subwatershed boundaries
7. Watershed analysis points
8. Hydrologic flow lines (w/flow types and flow lengths labeled)
9. Runoff storage areas
10. Roads and drives
11. Buildings, parking lots, and other facilities
12. Drainage system layout for storm drains, catch basins, and culverts
13. Natural and man-made open drainage channels
14. Wetlands
15. Flooded areas
16. Benchmark
17. Stormwater detention, retention, and infiltration facilities
18. Stormwater treatment facilities
19. Drainage easements
20. Identify reaches, ponds, and subwatersheds matching stormwater model
21. Buffers

NA D. Runoff analysis (pre-development and post development)
1. Curve number computations
2. Time of concentration calculations
3. Travel time calculations
4. Peak discharge calculations
5. Reservoir routing calculations

NA E. Flooding Standard
1. Variance submissions (if applicable)
   a. Submissions for discharge to the ocean, great pond, or major river
      i. Map
      ii. Drainage plan
      iii. Drainage system design
      iv. Outfall design
      v. Easements
   b. Insignificant increase
      i. Downstream impacts

   c. Submissions for discharge to a public stormwater system
      i. Letter of permission
      ii. Proof of capacity
      ii. Outfall analysis and design (pictures)

NA 2. Sizing of storm drains and culverts

X 3. Stormwater ponds and basins
   a. Impoundment sizing calculations
   b. Inlet calculations
   c. Outlet calculations
   d. Emergency spillway calculations
   e. Subsurface investigation report
   f. Embankment specifications
   g. Embankment seepage controls
   h. Outlet seepage controls
   i. Detail sheet
   j. Basin cross sections
   k. Basin plan sheet

NA 4. Infiltration systems
   a. Well locations map
   b. Sand and gravel aquifer map
   c. Subsurface investigation report with test pit or boring logs

d. Permeability analysis
e. Infiltration structure design
f. Pollutant generation and transport analysis
g. Monitoring and operations plan
i. Locations of storage points of potential contaminants
ii. Locations of observation wells and infiltration monitoring plan
iii. Groundwater quality monitoring plan

NA 5. Drainage easement declarations.

X F. Stormwater quality treatment plan peak discharge calculations

1. Basic stabilization plan
a. Ditches, swales, and other open channel stabilization
b. Culvert and storm-drain outfall stabilization
c. Earthen slope and embankment stabilization
d. Disturbed area stabilization
e. Gravel roads and drives stabilization

NA 2. General Standard
a. Calculations for sizing BMP
b. Impervious area calculation
c. Developed area calculation
d. Summary spreadsheet of calculations

NA 3. Phosphorus control plan
a. Calculations for the site's allowable phosphorus export
b. Calculations for determining the developed site's phosphorus export
c. Calculations for determining any phosphorus compensation fees

NA 4. Offset Credits
a. Urban impaired stream
Offset credit calculation
b. Phosphorus credit determination
i. Location map
ii. Scaled plan
iii. Title and right
iv. Demolition plan
v. Vegetation plan
vi. Offset credit calculation
vii. Calculation for the new allowable export

X 5. Runoff treatment measures
a. structural measures
i. Design drawings and specifications
ii. Design calculations
iii. Maintenance plan
iv. TSS removal or phosphorus treatment factor determinations
v. Stabilization plan
b. Vegetated buffers
i. Soil survey
ii. Buffer plan
iii. Turnout and level spreader designs
iv. Deed restrictions

NA 6. Control plan for thermal impacts to coldwater fisheries

NA 7. Control plan for other pollutants

NA 8. Engineering inspection of stormwater management facilities

TBD G. Maintenance of common facilities or property

1. Components of the maintenance plan
A. Maintenance of facilities by owner or operator
1. Site owner or operator (name legally responsible party)
2. Contact person responsible for maintenance
3. Transfer mechanism

4. List of facilities to be maintained
5. List of inspection and maintenance tasks for each facility
6. Identifications of any deed covenants, easements, or restrictions
7. Sample maintenance log
8. Copies of any third-party maintenance contracts

NA B. Maintenance of facilities by homeowner's association
1. Incorporation documents for the association
2. Membership criteria
3. Association officer responsible for maintenance
4. Establishment of fee assessment for maintenance work
5. Establishment of lien system
6. Reference to department order(s) in association charter
7. Transfer mechanism from developer to association
8. List of facilities to be maintained
9. Identification of any deed covenants, easements, or restrictions
10. Renewal of covenants and leases
11. List of inspection and maintenance tasks for each facility
12. Sample maintenance log
13. Copies of any third-party maintenance contracts

NA C. Maintenance of facilities by municipality or municipal district
1. Identification of the municipal department or utility district
2. Contact person responsible for maintenance
3. Evidence of acceptance of maintenance responsibility
4. Transfer mechanism from developer
5. List of facilities to be maintained
6. List of inspection and maintenance tasks for each facility
7. Identifications of any deed covenants, easements, or restrictions
8. Sample maintenance log

TBD 2. General inspection and maintenance requirements
a. Drainage easements
b. Ditches, culverts, and catch-basin systems
c. Roadways and parking surfaces
d. Stormwater detention and retention facilities
1. Embankment inspection and maintenance
2. Outlet inspection and clean-out
3. Spillway maintenance
4. Sediment removal and disposal
e. Stormwater infiltration facilities
1. Sediment protection plan
2. Infiltration rehabilitation plan
3. Sediment removal and disposal
4. Groundwater monitoring plan
f. Proprietary treatment devices
g. Buffers
h. Other practices and measures

Section 13. Urban Impaired Stream Submissions

NA 1. Off-site credits
2. Compensation fees (Urban Impaired Stream/Phosphorus)
3. Development impacts

Section 14. Basic Standards

X A. Narrative
1. Soil types
2. Existing erosion problems
3. Critical areas
4. Protected natural resources

X 5. Erosion control measures

X 6. Site stabilization
X B. Implementation schedule
X C. Erosion and sediment control plan
X 1. Pre-development and post-development contours
X 2. Plan scale and elements
X 3. Land cover types and boundaries
NA 4. Existing erosion problems
NA 5. Critical areas
NA 6. Protected natural resources
X 7. Locations (general)
X 8. Locations of controls
X 9. Disturbed areas
10. Stabilized construction entrance
X D. Details and specifications (for both temporary and permanent measures)
E. Design calculations
X F. Stabilization plan
1. Temporary seeding
2. Permanent seeding
3. Sodding
4. Temporary mulching
5. Permanent mulching
X G. Winter construction plan
1. Dormant seeding
2. Winter mulching
NA H. Third-party inspections
1. Inspector's name, address, and telephone number
2. Inspector's qualifications
3. Inspection schedule
4. Contractor contact
5. Reporting protocol

Section 15. Groundwater

NA A. Narrative
1. Location and maps
2. Quantity
3. Sources
4. Measures to prevent degradation
B. Groundwater protection plan
C. Monitoring plan
1. Monitoring points
2. Monitoring frequency
3. Background conditions
4. Monitoring parameters
5. Personnel qualifications
6. Proof of training
7. Equipment and methods
8. Quality assurance/quality control
9. Reporting requirements
10. Remedial action plan
D. Monitoring well installation report
1. Well location map
2. Elevation data
3. Well installation data
4. Well construction details
5. Borehole logs
6. Summary of depth measurements
7. Characteristics of subsurface strata
8. Well installation contract

___ 9. Schematic cross-sections
___ 10. Monitoring point summary table
___ 11. Protective casing
___ 12. On-site well identification

Section 16. Water supply

X A. Water supply method
___ 1. Individual wells (evidence of sufficient/healthful supply)
___ a. Support of findings by well drillers
___ b. Support of findings by geologist
___ 2. Common well(s) (reports)
___ a. Hydrogeology report
___ b. Engineering report
___ c. Well installation report
___ d. Long-term safe yield and zone of influence determination
___ e. Public water supply
___ i. Proposed well or wells
___ ii. Existing well or wells
___ iii. Water quality analysis
___ 3. Well construction in shallow-to-bedrock areas
___ 4. Additional information
X 5. Off-site utility company or public agency
___ 6. Other sources
___ B. Subsurface wastewater disposal systems (locations of systems and wells)
___ C. Total usage (statement re: total anticipated water usage)

Section 17. Wastewater disposal

NA A. On-site subsurface wastewater disposal systems (investigation results)
___ 1. Site plan
___ 2. Soil conditions summary table
___ 3. Logs of subsurface explorations
___ 4. Additional test pits, borings or probes
___ a. Soil conditions A
___ b. Soils with Profiles 8 and 9 parent material
___ c. Soil conditions D
___ d. Disposal field length 60 feet or greater
___ 5. 3-bedroom design
___ 6. Larger disposal systems
___ a. System design details
___ b. Plan view
___ c. Cross sections
___ d. Test pit data
___ e. Mounding analysis
___ B. Nitrate-nitrogen impact assessment
___ 1. When required
___ a. Exempted____
___ i. Conventional systems meeting certain setbacks
___ ii. Denitrification systems
___ b. Special conditions and other exemptions
___ 2. Assumptions
___ a. Initial concentration
___ b. Background concentration
___ c. Contribution from development
___ d. Mixing and dilution
___ e. Severe-drought scenario
___ f. Wastewater flow to subsurface wastewater disposal fields

3. Assessment report minimum requirements
    a. Narrative and calculations
    b. Site plan
        i. Well locations
        ii. 10 mg/l and 8 mg/l isocons
        iii. Groundwater contours and groundwater flow divides
    c. References
4. Denitrification systems
    a. Design plans and specifications
    b. Installation information
    c. Monitoring plan
    d. Maintenance
    e. Backup system

X D. Municipal facility or utility company letter

E. Storage or treatment lagoons

X **Section 18. Solid waste** (list: type, quantity, method of collection and location)

A. Commercial solid waste facility (final disposal location)

B. Off-site disposal of construction/demolition debris (final disposal location)

C. On-site disposal of woodwaste/land clearing debris

1. Applicability of rules (evidence re: applicability of rules)
2. Burning of wood wastes
    a. Delineation on site plan
    b. Plans for handling unburned woodwaste and woodash
    c. Evidence of capacity to accept waste (approved facility)
    d. Usage of materials
    e. Data on mixing ratios and application rates

D. Special or Hazardous Waste

Section 19. Flooding

NA A. Explanation of flooding impact

B. Site plan showing 100-year flood elevation

C. Hydrology analysis

D. FEMA flood zone map with site boundaries

Section 20. Blasting

NA A. Site Plan or map

B. Report
    1. Assessment
    2. Blasting plan

Section 21. Air emissions (narrative and summary)

TBD A. Point and non-point sources identified

B. Emission components (point sources)

Section 22. Odors

TBD A. Identification of nature/source

B. Estimate of areas affected

C. Methods of control)

NA **Section 23. Water vapor** (narrative)

X **Section 24. Sunlight** (statement and drawing, if required)

Section 25. Notices

TBD A. Evidence that notice sent

X B. List of abutters for purposes of notice