STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION

(See Issuing Division below)

PERMIT*

The New Jersey Department of Environmental Protection grants this permit in accordance with your application, attachments accompanying same application, and applicable laws and regulations. This permit is also subject to the further conditions and stipulations enumerated in the supporting documents which are agreed to by the Permittee upon acceptance of the permit.

Permit No. 1614-02-0007.1 – 020002 FWIP	Application No.	
Issuance Date JUN 17 2003	Effective Date Same as issuance date	Expiration Date JUN 17 2008

Name and Address of Applicant	**Name and Address of Owner**	**Name and Address of Operator**
New Jersey Department of Transportation Attn: Mr. Andrew Maevsky 1035 Parkway Avenue Trenton, NJ 08625	Same as applicant	Same as applicant
Location of Activity/Facility ***(Street Address)*** I-80 / U.S. 46 / NJ Rt. 23 Interchange Township of Wayne, Passaic County Passaic Watershed	**Issuing Division** Land Use Regulation Program	**Statute(s)** NJSA 13:9-1 NJSA 13:9B-1 NJSA 12:5-3 NJSA 13:9A-1

Type of Permits: Freshwater Wetland Individual Permit	Maximum Approved Capacity, if applicable

This permit authorizes:

- Elimination of one of the Route 46 eastbound to Route 23 northbound ramps (G) and reconstruction of a portion of Route 23 northbound due to the ramp elimination,
- Direct Ramp G traffic to Ramp O with a modification of geometry of Ramp O, Ramp F and the Route 23 northbound merge to provide an exclusive lane to each movement.
- Widen Route 46 westbound at the Galesi Drive intersection to provide acceleration and deceleration lanes.
- Widen Route 23 northbound between Structure No. 1604-195 (NJ Transit Boonton Line over Route 23 northbound) and Ramp H to provide a 12-foot right shoulder.
- Modify driveway access to existing uses fronting Route 46 westbound at Galesi Drive where acceleration and deceleration lane construction is planned and on Route 23 northbound to meet current NJDOT State Highway Access management Code requirements.
- Widen Route 46 eastbound between the Willowbrook Mall exit drive and Ramp O. The widening is necessary to provide an auxiliary lane for vehicle weaving movements.
- Profile increases to provide a 15.4-foot minimum vertical clearance is authorized at the three structures of Route 23 Northbound over I-80 Ramps C & I and Route 23 Southbound over I-80 Ramp I.
- Relocate Fairfield Road at grade between Singac Brook and the West Belt Ramps.
- Extend an existing 8'x6' box culvert along an unnamed tributary to the Passaic River and modify the existing 66" pipe culvert headwall along an unnamed tributary to the Passaic River.
- Construction of a new retaining wall between the West Belt entrance ramp to Route 46 westbound and Singac Brook.

This Freshwater Wetland Individual Permit authorization is for the permanent disturbance of 0.195 acres and temporary disturbance of 0.224 acres of wetlands and their associated transition area impacts as shown on the plans referenced below. **A Water Quality Certification is provided as part of this authorization.**

Previous authorizations for the subject project included:

Stream Encroachment	No. 1614-02-0007.1 and 0000-93-0030.5
Statewide General Freshwater Wetlands	No. 0000-93-0030.5 and 0000-93-0030.7

This permit is authorized under and in compliance with the applicable Freshwater Wetlands Rules (N.J.A.C. 7:7A-1.1 et seq.), provided permit conditions contained herein are met.

The Permittee shall allow an authorized representative of the Department of Environmental Protection the right to inspect construction pursuant to N.J.A.C. 7:7-1.5(b) 4.

The plans hereby approved shall consist of the set of fifty-one (51) sheets of drawings entitled "STATE OF NEW JERSEY DEPARTMENT OF TRANSPORTATION PLANS OF US Rte 46 / NJ Rte 23 / I-80 Interchange Improvements Fairfield Road Relocation and Service Road Elimination," approved by Dennis J. O'Brien and variously dated with amendments as follows:

The plans are further described as follows:

Sheets 3, 4, 5, and 7 entitled "Environmental Permit Plans," dated 11/01/03,
Sheets 6, 8, and 9, entitled "Environmental Permit Plans," last amended 3/14/03,
Sheets 10, 11, and 12, entitled "Environmental Permit Plans," last amended 5/12/03,
Sheets 13 to 18, entitled "Grading Plans," dated 10/28/02,
Sheet 19, entitled "Details," dated 10/28/02.

Prepared by: William Mc Laughlin
William Mc Laughlin, Project Manager

Revised Date	Approved by the Department of Environmental Protection Name (Print or Type) Robert N. Cubberley Title Environmental Scientist 2 Signature **SEE FINAL PAGE** Date

**The word permit means "approval, certification, registration, etc."*

(General Conditions are on Page three)

Permit Authorization General Conditions

1. This permit is revocable, or subject to modification or change at any time, pursuant to the applicable regulations, when in the judgment of the Department of Environmental Protection of the State of New Jersey such revocation, modification or change shall be necessary.

2. The issuance of the permit shall not be deemed to affect in any way action by the Department of Environmental Protection of the State of New Jersey on any future application.

3. The works, facilities, and/or activities shown by plans and/or other engineering data, which are this day approved, subject to the conditions herewith established, shall be constructed and/or executed in conformity with such plans and/or engineering data and the said conditions.

4. No change in plans or specifications shall be made except with the prior written permission of the Department of Environmental Protection of the State of New Jersey.

5. The granting of this permit shall not be construed to, in any way, affect the title or ownership of property, and shall not make the Department of Environmental Protection or the State a party in any suit or question of ownership.

6. This permit does not waive the obtaining of Federal or other State or local government consent when necessary. This permit is not valid and no work shall be undertaken until such time as all other required approvals and permits have been obtained.

7. A copy of this permit shall be kept at the work site, and shall be exhibited upon request of any person.

8. In cases of conflict, the conditions of this permit shall supersede the plans and/or engineering data.

ADMINISTRATIVE CONDITIONS

Prior to initiation of site preparation for the following conditions:

1. This permit shall be RECORDED in the office of the County Clerk (the REGISTRAR OF DEEDS AND MORTGAGES in the applicable counties) in the county wherein the lands included in the permit are located within (10) days after receipt of the permit by the applicant and verified notice shall be forwarded to the Land use Regulation program immediately thereafter.

2. This permit is NOT VALID until the permit acceptance form has been signed by the applicant, accepting and agreeing to adhere to all permit conditions, and returned to the Land Use Regulation Program at P.O. Box 439, Trenton, NJ 08625.

3. This permit does not authorize the temporary use of any wetlands or transition areas beyond the limits of the proposed work other than specifically approved by this permit or as detailed by approved drawings, including uses for temporary construction staging. Such use of regulated areas applies to the storage or staging of construction materials (including debris/spoil piles), equipment, and workers' vehicles. The applicant shall direct the contractors to locate all staging and storage areas outside of wetlands and wetland buffers not approved for use by this permit.

4. In order to avoid degradation of the water quality in the streams receiving stormwater runoff from the project roadways, the stormwater management system shall require periodic inspections and maintenance. The Permittee is advised to conduct additional inspections, and maintenance of inlets as necessary following major storm events.

5. The project must meet the NJ Soil Erosion and Sediment Control Standards. The applicant shall be responsible for daily inspections of the project area to determine if the erosion control measures are functioning as intended.

6. Construction vehicle traffic shall be minimized in wetlands and wetlands transition areas to be temporarily disturbed. No storage of chemicals, oil, fuel or refueling of equipment shall occur within 100 feet of the wetlands along the project route.

SPECIFIC CONDITIONS:

TURBIDITY AND SEDIMENTATION CONTROL

1. Turbidity barrier and silt fence will be placed around all work areas, however the turbidity barriers shall not restrict the channel of Signac Brook by more than 50% of its cross-sectional area.

2. Dewatering of areas for construction must adhere to the following conditions:

   a) Turbid water from cofferdam and/or trench construction area dewatering will be routed to temporary sediment basins.

   b) The temporary dewatering basins will be sized appropriately to provide retention of water sufficient to ensure settling of suspended particulates prior to return discharge.

   c) The return water from the dewatering basins will be discharged to an area that is encompassed by turbidity barrier or silt fence to prevent migration of turbidity or soil erosion.

   d) Connection between regraded sites and wetlands and State open water areas will be made last after grading work is completed and soils are stabilized so that the direct discharge of turbid water is minimized.

PHYSICAL CONDITIONS

3. The cartway, shoulder, and side slopes of the roadway shall be the minimum necessary for meeting safety standards.

4. The amount of riprap or other energy dissipating material used shall be the minimum necessary to prevent erosion, and shall not exceed 200 cubic yards of fill below the top of bank or high water mark, unless a larger amount is required in order to comply with the Standards for Soil Erosion and Sediment Control in New Jersey at N.J.A.C. 2:90.

5. Any discharge of dredged or fill material shall consist of clean, suitable material free from toxic pollutants (see 40 CFR 401) in toxic amounts, and shall comply with all applicable Department rules and specifications regarding use of dredged or fill material.

6. All temporarily disturbed areas shall be planted to permanently stabilize the soil and enhance the environment. The Mitigation Unit, LURP, can provide information on the appropriate mixture based on the planting date and drainage.

7. In order to protect the warmwater fisheries of the streams within the project area, any turbidity generating activities within regulated areas is prohibited from **May 1 thru June 30 of each year**. Work within properly constructed cofferdams may be conducted during this time restriction provided dewatering and other activities do not result in increases in turbidity beyond background levels of the streams. The Department reserves the right to suspend all regulated activities on site if it is determined that the applicant has not taken proper precautions to ensure continuous compliance with this condition.

8. All excavated materials must be disposed of at an approved site. Under no circumstances is excess material to be disposed of in wetlands, transition areas to wetlands, stream corridors, or other environmentally sensitive areas. Any material considered by the Department to be a toxic or hazardous material must be disposed of at a NJDEP approved facility.

9. Silt fence with wire backing shall be placed at the limits of land disturbances in the vicinity of Signac Brook. The permittee shall maintain all soil erosion and turbidity controls for the life of the project. All controls must be in place prior to any construction activities.

10. The Permittee shall monitor for suspended sediments in the water column on a daily basis when construction/demolition and dewatering is taking place. If a sediment plume is detected, then the project must cease until more appropriate preventative measures are put in place.

11. Raw uncured concrete is toxic to fish and other aquatic organisms, therefore raw uncured concrete, must not come in contact with the waters of the State open waters and wetlands.

Transition Area

The wetlands in the area of the project subject to this permit authorization are of ordinary, intermediate, and exceptional resource values and the standard transition area or buffer required adjacent to intermediate wetlands is 50 feet as shown on plans identified below. This Individual Permit includes a transition area waiver that allows encroachment only in that portion of the transition area that has been determined by the Department to be necessary to accomplish the regulated activities. Any additional regulated activities conducted within standard transition areas shall require a separate transition area waiver from the Program. Regulated activities within a transition area are defined at N.J.A.C. 7:7A-2.6.

Sheet	Wetlands & Classification
Sheet EP-1	Wetlands NH & ND are ordinary resource value, NE is of intermediate resource value
Sheet EP-2	Wetlands NC, XX are of ordinary resource value
Sheet EP-3	Wetlands N, NA are ordinary resource value
Sheet EP-4	Wetlands WA is ordinary resource value
Sheet EP-5	Wetlands BB, AA, EE, CC are ordinary resource value
Sheet EP-6	Wetlands GG, WC, WD are ordinary resource value
Sheet EP-7	Wetlands WD, WE, ZZ are intermediate resource value
Sheet EP-8	Wetlands MM, PP, KK, HH, LL, QQ, are ordinary resource value; wetlands A, H, and WF are intermediate resource value; and two unnamed areas of Tributary 1 depicted along ramp J and area north of Sta. 86+650 are intermediate resource value
Sheet EP-9	Wetlands CC, DD, NN, JJ, and wetland depicted by markers 111, 112 & 113 are ordinary resource value; and wetland SS is intermediate resource value
Sheet EP-10	Wetlands TT and unnamed wetlands along ramp B are intermediate resource value; and WB, WA, WH, WJ, are intermediate resource value

MITIGATION CONDITIONS:

Prior to the start of construction, the following special conditions must be met for the activity to be authorized under these permits:

1. Mitigate for the loss of 0.195 acres of scrub/shrub and emergent wetlands through either on-site or off-site creation, restoration or enhancement project as detailed in condition number 3 below or through the purchase of mitigation credits as detailed in condition 2 below.

1a. Mitigate for the temporary disturbance 0.224 acres of mostly emergent wetlands and the 0.427 acres of Transition area through on-site restoration of mostly mowed lawn areas and the loss of 0.941 acres of Transition area. In the event there is a conflict between the permit conditions and the approved mitigation plans and proposal the permit conditions take precedent.

2. For the purchase of credits from the Mitigation Bank, the following shall apply as detailed below.

a) The permittee must submit proof of the purchase of mitigation credit to the Land Use Regulation Program's Mitigation Unit, before the authorized construction may begin. To purchase credits from the mitigation bank the permittee must get approval from the Program. If the permittee waits more than sixty days to make that purchase she/he must first contact the Mitigation Unit at (609) 777-0454 to determine if the mitigation credits are still available for sale.

3. For an on-site or off-site individual mitigation project, the permittee must submit a mitigation proposal to the Land Use Regulation Program, to create, enhance or restore an area of freshwater wetlands of equal ecological value to those, which will be lost by the authorized activity for review and approval. Attached to this permit is a list of the necessary information that must be included in that on-site or off-site mitigation proposal. If the permittee is proposing to construct a wetland creation or restoration project, two acres of creation or restoration must be performed for each acre disturbed and the mitigation area must, in addition to this, include a transition area. The slope of the created transition area must be fairly flat and therefore have a slope no greater than 10:1. If the permittee is proposing to construct a wetland enhancement project, the ratio of wetlands enhanced to wetlands disturbed shall be sufficient to replace loss of ecological value from the permitted project and shall be approved by the Program. The following conditions and information must be adhered to when performing mitigation.

   a) Submit for review and approval a conceptual plan showing the location and proposed hydrology of the mitigation site.

   b) Once the Program has approved the conceptual plan of the mitigation project the permittee must submit a final design of the mitigation project and include all the items listed on the attached on-site/off-site mitigation proposal checklist.

   c) The mitigation project must be conducted prior to or concurrent with the construction of the approved project.

   d) In accordance N.J.A.C. 7:7A-15.13, obtain a secured bond, or other financial surety acceptable to the Department including an irrevocable letter of credit or money in escrow, that shall be sufficient to hire an independent contractor to complete and maintain the proposed mitigation should the permittee default. The financial surety for the construction of the mitigation project shall be posted in an amount equal to 115 percent of the estimated cost of the construction. In addition, financial surety to assure the success and maintenance of the mitigation project shall be posted in an amount equal to 30 percent of the estimated cost of construction. The Department will review the financial surety annually and the permittee shall adjust the surety to reflect current economic factors. Please be advised if a governmental body is performing the mitigation the need for financial assurance is waived.

   e) The permittee shall complete and sign the Department approved conservation restriction for the mitigation site (copy attached). The restriction shall be included on the deed, and recorded in the office of the County Clerk (the Registrar of Deeds and Mortgages in some counties), in the county wherein the lands of the mitigation project are located, within 10 days of approval of the wetland mitigation proposal.

   f) The permittee shall notify the Land Use Regulation Program, in writing, at least 30 days in advance of the start of construction of the wetland mitigation project for an on-site pre-construction meeting between the permittee, the contractor, the consultant and the Program.

g) The mitigation designer must be present during critical stages of construction of the mitigation project this includes but is not limited to herbicide applications, sub-grade inspection, final grade inspection, and planting inspection to ensure the intent of the mitigation design and their predicted wetland hydrology is realized in the landscape. Mitigation designs are not static documents and changes may be necessary to ensure success of the project.

h) Immediately following final grading of the site, a disc must be run over the site to eliminate compaction. The mitigation designer must be present to oversee this phase of the project and confirm with the Department this activity has occurred prior to planting of the site.

i) Immediately following the final grading of the mitigation site and prior to planting, the permittee shall notify the Program for a post-grading construction meeting between the permittee, contractor, consultant and the Program.

j) Immediately following final grading and planting of the wetland mitigation project, the permittee shall notify the Land Use Regulation Program, in writing that the construction of the mitigation project has been completed in accordance with the approved plan. Any deviations from the approved plan must be identified and explained to the Program for our review and approval. In addition to the notice, the permittee shall submit as built plans of the site and photos with a photo location map of the completed project.

k) The permittee shall post the mitigation area with several permanent signs, which identify the site as a wetland mitigation project and that mowing, cutting, dumping and draining of the property is prohibited. The sign must also state the name of the engineering/environmental firm that designed and constructed the mitigation site with a phone number. In addition, the permittee shall visibly mark/staked (oak stakes) the extent of the wetland mitigation area and ensure the stakes remain that way for the entire monitoring period with the location of those stakes shown on the as built plan.

l) If the Program determines that the mitigation project is not constructed in conformance with the approved plan, the permittee will be notified in writing and will have 60 days to submit a proposal to indicate how the project will be corrected. No financial surety will be released by the Program until the permittee demonstrates that the mitigation project is constructed in conformance with the approved plan and all soil has been stabilized and there is no active erosion.

m) The permittee shall monitor the wetland mitigation project for 5 full growing seasons if it is a proposed forested wetland and for 3 full growing seasons for a scrub/shrub or emergent wetland after the mitigation project has been constructed. The permittee shall submit monitoring reports to the Land Use Regulation Program no later than November 15th of each monitoring year (All monitoring report must include the standard items identified in the attachment and the information requested below).

n) Throughout the monitoring period, the permittee must eliminate either through hand-pulling, application of a pesticide or other Department approved method any occurrence of an invasive/noxious species on the mitigation site.

o) All monitoring report will include all the following information (see attached monitoring report checklist):

i. The monitoring reports submitted prior to the final one must include documentation that it is anticipated, based on field data, that the goals of the wetland mitigation project including the transition area, as stated in the approved wetland mitigation proposal and the permit will be satisfied. If the permittee is finding problems with the mitigation project and does not anticipate the site will be a full success then recommendations on how to rectify the problems must be included in the report with a time frame in which they will be completed. The final monitoring report must include documentation to demonstrate that the goals of the wetland mitigation project including the required transition area, as stated in the approved wetland mitigation proposal and the permit, has been satisfied. Documentation for this report will also include a field wetland delineation of the wetland mitigation project based on techniques as specified in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989);

ii. The monitoring reports submitted prior to the final one must include documentation that the site is progressing towards the 85 percent survival and percent areal coverage of mitigation plantings or target hydrophytes which are species native to the area and similar to ones identified on the mitigation planting plan. If the permittee is finding problems with the mitigation project and does not anticipate the site will or has achieved the 85 percent survival and 85 percent areal coverage criteria then recommendations on how to rectify the problems must be included in the report with a time frame in which they will be completed. The final monitoring report must include documentation the site has an 85 percent survival and 85 percent areal coverage of the mitigation plantings or target hydrophytes which are species native to the area and similar to ones identified on the mitigation planting plan;

iii. Documentation to demonstrate the site is less than 10 percent occupied by invasive or noxious species such as but not limited to *Phalaris arundinacea* (Reed canary grass), *Phragmities australis* (Common reed grass), *Pueraria lobata* (Kudzu), *Typha latifloia* (Broad-leaved cattail), *Typha angustifolia* (Narrowed leaved cattail), *Lythrum salicaria* (Purple loosestrife), *Ailanthus altissima* (Tree-of-heaven), *Berberis thunbergi* (Japanese barberry), *Berberis vulgaris* (Common barberry), *Elaeagnus angustifloia* (Russian olive), *Elaeagnus umbellata* (Autumn olive), *Ligustrum obtusifolium* (Japanese privet), *Ligustrum vulgare* (Common privet) and *Rosa multiforia* (Multiflora rose). If the site is more than 10 percent occupied by invasive or noxious species then the monitoring report must include a proposed remediation plan and a time frame in which it will be completed.

iv. Demonstrate through soil borings and a soil test that a minimum six inch layer of top-soil or A-Horizon was used/retained on the mitigation site and if the natural top-soil was used at least 8% organic carbon content (by weight) was incorporated into the A-horizon for sandy soil and for all other soil types 12% organic content or if manmade top soil was used it consisted of equal volumes of organic and mineral materials. If the site fails to meet this standard the monitoring report must include a proposed remediation plan and a time frame in which it will be completed. The final monitoring report must include documentation that the site contains hydric soils or there is evidence of reduction occurring in the soil; and

v. The monitoring reports submitted prior to the final report must include documentation that demonstrates the proposed hydrologic regime as specified in the mitigation proposal appears to be met. If the permittee is finding problems with the mitigation project and does not anticipate the proposed hydrologic regime will be or has not been met then recommendations on how to rectify the problem must be included in the report along with a time frame within which it will be completed. The final monitoring report must include documentation that demonstrates that the proposed hydrologic regime as specified in the mitigation proposal, which proves the mitigation site is a wetland has been satisfied. The documentation shall include when appropriate monitoring well data, stream gauge data, photographs and field observation notes collected throughout the monitoring period.

p) Once the required monitoring period has expired and the permittee has submitted the final monitoring report, the Program will make the finding that the mitigation project is either a success or a failure. This mitigation project will be considered successful if the permittee demonstrates all of the following:

i. That the goals of the wetland mitigation project including the required transition area, as stated in the approved wetland mitigation proposal and the permit, has been satisfied. The permittee must submit a field wetland delineation of the wetland mitigation project based on the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989) which shows acres of emergent/scrub shrub/forested wetlands have been created/restored/enhanced;

ii. The site has an 85 percent survival and 85 percent areal coverage of the mitigation plantings or target hydrophytes which are species native to the area and similar to ones identified on the mitigation planting plan;

iii. The site is less than 10 percent occupied by invasive or noxious species such as but not limited to *Phalaris arundinacea* (Reed canary grass), *Phragmities australis* (Common reed grass), *Pueraria montana* (Kudzu), *Typha latifloia* (Broad-leaved cattail), *Typha angustifolia* (Narrowed leaved cattail), *Lythrum salicaria* (Purple loosestrife), *Ailanthus altissima* (Tree-of-heaven), *Berberis thunbergi* (Japanese barberry), *Berberis vulgaris* (Common barberry), *Elaeagnus angustifloia* (Russian olive), *Elaeagnus umbellata* (Autumn olive), *Ligustrum obtusifolium* (Japanese privet), *Ligustrum vulgare* (Common privet) and *Rosa multiforia* (Multiflora rose);

iv. The site contains hydric soils or there is evidence of reduction occurring in the soil; and,

v. That the proposed hydrologic regime as specified in the mitigation proposal, which proves the mitigation site is a wetland has been satisfied. The documentation shall include when appropriate monitoring well data, stream gauge data, photographs and field observation notes collected throughout the monitoring period.

q) All remaining financial surety, if required, will be released concurrent with the Program notifying the permittee that the mitigation project is a success.

r) If the mitigation project is considered a failure, the permittee is required to submit a revised mitigation plan to rectify the wetland mitigation site. The plan shall be submitted within 60 days of receipt of the letter from the Program indicating the wetland mitigation project was a failure. The financial surety, if required, will not be released by the Program until such time that the permittee satisfies the success criteria as stipulated in item (p).

s) The permittee shall assume all liability for accomplishing corrective work should the Program determine that the compensatory mitigation has not been 100% satisfactory. Remedial work may include re-grading and/or replanting the mitigation site. This responsibility is incumbent upon the permittee until such time that the Department makes the finding that the mitigation project is successful.

With adherence to the above permit conditions, this project is considered to be consistent with the Coastal Zone Management Rules (N.J.A.C. 7:7E 1.1 et seq.).

Robert N. Cubberley, Environmental Scientist 2
Land Use Regulation Program

June 17, 2003
Date

WMcL

C: Bureau of Enforcement
Section Chief, Passaic County
Township of Wayne Municipal Clerk
Township of Wayne Planning Board
Passaic County Planning Board