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## TOWN OF WESTBOROUGH MASSACHUSETTS

### Conservation Commission

Town Hall, West Main St.  
Westborough, MA 01581

### MEMO

TO: Conservation Commission  
FROM: Derek Saari, Assistant Town Planner/ Assistant Conservation Officer  
DATE: November 30, 2010  
RE: Transflo Worksession Update  
CC: Town Departments

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I have posted a worksession for November 30<sup>th</sup>, at 7:00PM in Room 24 to give the Commission a general overview of the Notice of Intent (NOI). The NOI was filed on November 23<sup>rd</sup> and the first public hearing will be on December 14<sup>th</sup>. I have been meeting with Jacob Dunnell from AMEC approximately 2-3 times per week to review the components of the NOI. AMEC is responsible for the permitting and Beals & Thomas (BTI) will be responsible for the design portion of the project. Currently, the plans are at 30% and were developed by AECOM. BTI will now take these plans and develop them to 100%. I met with AMEC, BTI, and Transflo on November 23<sup>rd</sup> to address the future stormwater design. The stormwater component of this project will significantly change in the near future and please do not review any of the drainage calculations, drainage layout, and associated engineering. The Commission can review the 10 DEP Stormwater Standards in terms of narrative which will not change as the engineering progresses. I will be meeting with the Town Engineer soon to begin coordinating future drainage reviews. I mailed the cd's on November 24<sup>th</sup> for your review. A component of the stormwater narrative is omitted, although the Stormwater Standards are summarized within the NOI narrative. I will review each of the below components of the NOI filing at the meeting.

#### **Project Phasing**

The Westborough Terminal Redevelopment Project is comprised of three phases. Phase I contains approximately 16-acres and is located within the existing paved portion of the site. This phase comprises the actual area where transloading of the bulk commodities

will occur. Phase 2 involves the 1,500-foot long extension of the western lead track and is comprised of approximately 2 acres some of which is located within the existing right-of-way that is currently utilized for maintenance. Phase 3 contains approximately 6 acres and is reserved for future expansion. Like phase 1, phase 3 occurs within the existing paved portion of the facility. A total of approximately 24 acres is involved for the total phased redevelopment project.

### **Resource Areas and Buffer Zones**

Upon initial review of the draft NOI it became clear due to overlapping buffer zones to both Bordering Vegetated Wetlands (BVW) and the two Certified Vernal Pools (CVP),(there are three CVPs but only two have buffer zones extending into proposed work areas), that a table needed to be created. The table is now entitled "Table 6.2-1, Summary of Buffer Zone Activities". Each individually delineated resource area had its buffer zones separated and then added to give an aggregate of approximately 4.41 acres or 192,100 sq ft. Although, 4.28 acres of the total is already paved or used as the existing right-of-way. In accordance with the Bylaw setbacks of 125-feet to a CVP, approximately 1.66 acres or 72,310 sq ft is within this setback. The 100-buffer zone to the BVW is also within the 125-foot buffer zone to the CVP. Of the total setback disturbance to a CVP only 0.123 acres or 5,374 sq ft is newly altered.

In summary, 5,374 sq ft is the only new buffer zone alteration on the entire 24 acre redevelopment site. I felt the table would assist the Commission in understanding how small of an alteration this truly is.

In accordance with the Bylaw and at this point in the design, this would be the only waiver request is the 5,374 sq ft of buffer zone alteration to a CVP. In Appendix A, refer to Sheets 1 & 2 for a very descriptive set of colored plans. Also, there is 0.64 acres of non-jurisdictional upland that will be altered as part of the 1,500-foot western lead track extension. As is detailed in the report, the 5,374 sq ft area is not utilized by species habiting the CVP. I agree and find this small area does not meet the Wildlife Habitat Characteristics of Inland Resource Areas as cited in 310 CMR 10.60(2)(c).

No work is currently proposed within the mapped ACEC boundary in accordance with my email dated October 19, 2010 to Liz Sorenson, ACEC Director. I included this email in last month's update. No work is occurring directly within an Outstanding Resource Water designation (i.e. the ACEC). Lastly, no work is directly within an area mapped by Natural Heritage and Endangered Species Program (310 CMR 10.59) although a copy was sent and a response should be given within 30-days from this Program. Lastly, no work is occurring within Bordering or Isolated land Subject to Flooding, Bank, Riverfront, Land Under Water Bodies or Waterways, Bordering Vegetated Wetlands, or directly within Certified Vernal Pools.

### **Interests of the Wetlands Protection Act**

Below is a brief description of the seven applicable Interests of the Act. The eighth Interest, Protection of Shellfish is not applicable.

#### ***Protection of Public and Private Water Supply***

Cedar Swamp became the first ACEC designation in the Commonwealth on July 3, 1975. The Swamp provided three major values that warranted further environmental protection. The Swamp provided flood storage capacity, protection of public water supplies (specifically the surface drinking reservoirs in Framingham), and it provided passive and active recreation. With respect to the protection of public water supplies, this original major environmental value has changed significantly since 1975. According to the Sudbury and Foss Reservoirs Watershed 2010 Public Access Plan Update, the entire Sudbury System was officially removed from active use and classified as an emergency water supply in 1976. Since 1976, only once in 1981 was the Sudbury System actually used for emergency purposes. The Metropolitan District Commission owned and managed hundreds on acres within Cedar Swamp and in December of 2008 over 800 acres of land within Cedar Swamp area of Westborough and Hopkinton, and along the Sudbury River in Hopkinton and Southborough were transferred to The Department of Conservation and Recreation Division of State Parks and Recreation. As can be seen, a major shift regarding the value of these lands within Cedar Swamp has changed from public water supply protection to these lands now being under the State Parks Division.

The two public water supply wells in Westborough are over 6,525 feet from the project site and the well in Hopkinton is over 3,850 feet away. There are no private wells immediately within the project area and all the commercial/industrial existing facilities are on Town water.

#### ***Protection of Groundwater Supply***

The existing facility contains a closed drainage system with catchbasins located within the parking lot that discharged into the two metal corrugated culverts and discharged south of the tracks. These two culverts have been replaced and were completely deteriorated. The existing stormwater runoff receives minimal treatment for total suspended solids. The redevelopment of this site will now have deep sump hooded catchbasins, at least four new stormwater water quality structures at the discharge points. The redeveloped site will provide the required total suspended solid removal rate. The redevelopment will be a significant improvement over existing conditions and will protect the ground/surface water within the project area.

#### ***Flood Control***

No work will be performed within any areas that are jurisdictional to 310 CMR 10.57 (Bordering Land Subject to Flooding or the 100-year floodplain). Flooding has been a major issue within this area of Town. As a result, the Emergency Certification was given to allow the pre-existing culverts to be replaced. The project has been closed out by DEP and the Town and the hydrology in this area is back to normal levels. There will be no increase in pavement and only a slight increase in runoff associated with the western lead

track extension. The slight increase is due to change in cover type but will not impact the surrounding resource areas.

### ***Storm Damage Prevention***

By replacing the existing culverts, Transflo has made a major contribution to the protection of this Interest as well as Flood Control. Erosion and sedimentation will be controlled on-site by the implementation of the National Pollution Discharge Elimination System (NPDES) Construction Permit and associated Stormwater Pollution Prevention Plan (SWPPP) and the Earth Moving Special Permit. There will be no damage to other neighboring buildings associated with the redevelopment. Rip-rap or velocity dissipation was installed at the discharge point of the two replaced culverts. The contractor installed the greatest amount of rip-rap that was allowed to be placed within the resource area to protect against erosion and scouring. No work will be performed south of the tracks so no modification will be made to the rip-rap protection. There will be no damage to any wetland resource vegetation. In fact, by replacing the failed culverts less damage to the vegetation will occur. Because the culverts were blocked, many stands of White Cedar have died and other species have become uprooted.

### ***Prevention of Pollution***

The site will be meeting the applicable Massachusetts Stormwater Standards associated with redevelopment projects. The site is being redeveloped into a transloading facility containing various types of materials ranging from plastic pellets to hazardous materials. The site is regulated as a Higher Potential Pollutant Load discharging near a Critical Area in accordance with the Stormwater Standards. As a result of being subject to both these Standards, several documents and design features must be in place prior to the site being operational. Both these Standards contain language for “source control” and “pollution prevention”. The following are examples how this Interest is being met:

*Circles of Containment* – Although the final stormwater design has yet to be finalized, there will be a raised berm or circle within each loading area to contain a spill should one occur. There will also be drip pans within each loading area beneath the rail car. Also there will be emergency shut offs at each of the four water quality treatment units. As the plans progress, a section drawing will be provided demonstrating how these areas will be constructed and operated.

*Hazardous Materials Management Plan* – This Plan was developed specifically for the transfer of hazardous and non-hazardous commodities from railcar to highway vehicles for the Westborough facility. The Plan has been reviewed and commented on by the Fire Department and will be in place prior to the facility operating.

*Emergency Action Plan* – This Plan is to be utilized in the event of a fire, explosion, accidental release, or other natural man-made emergency. The purpose of the Plan is to minimize and eliminate where possible the hazards to human health, the environment, and property.

*National Pollution Discharge Elimination System (NPDES), Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP)* - Please refer to my email dated October 20, 2010 regarding this EPA permit. This permit will need to be referenced with the Order of Conditions in accordance with 310 CMR 10.03(4).

*Stormwater Operation and Maintenance Plan (O&M)* – This site will contain a very specific O&M Plan detailing maintenance requirements within the facility. These will be inspected on a regular basis and will also be included within my yearly review associated with the stormwater maintenance project.

The above are some examples of “source control” and “pollution prevention” measures that will be in place prior to the facility being operated. All of these documents and plan changes will be incorporated into the final Order of Conditions.

Should the general public request the Conservation Commission to regulate the types of commodities being brought to the facility, I have contacted the Federal Railroad Administration and they supplied me with the federal regulation under Title 49 CFR 171.1(f) which preempts any state, local or Indian tribe in regulating the actual commodity.

#### ***Protection of Fisheries***

The wetland resource areas surrounding the site do not contain habitat suitable to support fish populations.

#### ***Protection of Wildlife Habitat***

A full copy of the Notice of Intent was sent to the Natural Heritage and Endangered Special Program for review. The Program has 30 days to respond back to the applicant and the Conservation Commission. The review will determine if the project will impact rare or endangered species in accordance with 310 CMR 10.59. The Commission will have the review for the January meeting. Lastly, at this point in the design, there are no wildlife impacts that exceed the thresholds as prescribed in 310 CMR 10.60. As a result, no wildlife evaluation is warranted.

#### **Stormwater Management Overview**

As mentioned previously, the plans are only developed to 30% completion and will not be at 60% until some time in January. Many components of the drainage can be reviewed now in anticipation of the final design. One of the key issues to the stormwater design that I mentioned at my November 23<sup>rd</sup> meeting with the development team was my concern for not designing for the future phase 3 area of the facility. I cited 310 CMR 10.05(6)(n) which in part states “*For phased projects the determination of whether the Stormwater Management Standards apply is made on the entire project as a whole including all phases*”. The initial plans and calculations did not take into account phase 3. The issue is phase 3 will eventually tie its stormwater into phase 1, and the water quality structures are designed for a certain amount of volume of treatment. Presently,

the units have only been sized for phase 1 and potentially would have to be modified in the future to accept phase 3. I have also asked for all grading in phase 3 to be shown on the final plans. Having the entire design presented once allows the Commission to see the entire project, as well as, other Departments. I indicated that extensions would be given so that phase 3 can be built in accordance with the final approved plans when the economy indicates that phase 3 is required for Transflo's operations.

I have also requested phase 3 be grassed until such time that it is developed. A geotechnical report will be supplied shortly. A recommendation may be to leave the entire existing pavement in place and put the required fill over the pavement. The pavement provides a structural support for the future redevelopment. The plans always have left the pavement in place within phase 3. Phase 1 would be filled to the proper contours and a slope would delineate phase 1 from phase 3. The issue is having phase 3 being left with pavement for an unknown amount of time, potentially years. The development team is now considering putting a layer of material over the existing pavement and seed phase 3. Several large squares of pavement would be removed prior to the placement of fill for adequate infiltration. Also, the one existing northern discharge will be removed within phase 3. In the future, phase 3 would then be developed in accordance with the approved plans. This will be 6 acres of grass versus pavement and a good interim measure to help further protect the adjacent resource areas.

Another design issue that was raised at the November 23<sup>rd</sup> meeting dealt with the drainage calculations. The preliminary calculations modeled the site under existing conditions with the old culverts and then was modeled with the newly replaced culverts under proposed conditions. This has led to inconsistencies. As a result, the site will be re-modeled under existing conditions with the new culverts and the proposed development will now also take into account phase 3.

### **Massachusetts Stormwater Standards**

Below is a brief explanation of the Stormwater Standards in accordance with 310 CMR 10.05(6)(k)(1-10).

#### ***Standard # 1 – No New Untreated Discharges***

There is one new discharge that will be located to the west of the maintenance garage and discharge to the north of the site near wetland flag W12-55. The discharge will be treated by a water quality structure labeled as WQS-4. The stormwater within this catchment area under existing conditions discharged to the east of the existing building located, at 30 Walkup Drive (Tate & Lyle), via a 24-inch culvert. The drainage then flows into a culvert that is referenced as "Culvert Number 5" in the report entitled "Flood Hazard Analysis Upper Sudbury River", dated 1973. The culvert takes flows from the northern side of the track to the southern side of the track. Like many culverts that are located within the railroad right-of-way, Culvert 5 is deteriorating. The preliminary design reduces the amount of existing stormwater discharging to Culvert 5 which is performed by the addition of the above described new discharge via WQS-4. I agree with this preliminary approach. The discharge from WQS-4 will now go into the newly replaced culverts and discharge to the south side of the tracks. A waiver from the Wetland Bylaw

Regulations may be required for this new discharge. A separation of 30-feet from the resource area may not be feasible.

***Standard # 2 – Peak Rate Attenuation***

As mentioned previously, the drainage calculations will change as a result of how the existing conditions were previously modeled for the 30% design drawings. A few items within the 30 % analysis will not change. A decrease of peak rate will occur on the eastern most discharge to Culvert 5 via water quality structure, WQS-3. As stated above, the less drainage getting to this old cross culvert is a good design option. The hydrology change will not effect the wetland composition. There will be a slight increase in peak rate of runoff in phase 2, the western lead track extension. There are no proposed drainage structures in this area which is common throughout the railroad right-of-ways in Town. The drainage infiltrates into the ballast or stone. Much of the western lead track extension is adjacent to non-jurisdictional uplands. There will be no impact to surrounding wetland resource areas and no drainage can travel to the south side of the track because there is no cross culverts located within this area of phase 2.

The Commission will receive an updated stormwater report in the near future and at that time, the new calculation tables can be reviewed for further consistency with Standard 2.

***Standard # 3 – Recharge to Groundwater***

The existing site provides no recharge and there will be no increase in impervious so pre-development will meet post-development numbers. The soils at the existing site are comprised mostly of fill. The roof run off (clean water) from both the proposed office and maintenance garage may be able to be put into infiltration structures. Also, because the site qualifies as a Higher Potential Pollutant Load discharging near a Critical Area, any recharge (excluding roof) needs 44% total suspended solid removal prior to infiltration. The site constraints to not promote this type of design. Phase 2 will mimic all other similar right-of-ways adjacent to the railroad in Westborough and infiltration will occur through the ballast. If the soils on the east side of the property near the maintenance garage and office due support recharge then this will reduce some of the overall stormwater leaving the facility.

***Standard # 4 – Water Quality***

The existing facility has no water quality structures. The preliminary design has a total of 4 water quality treatment units that will separate and trap debris, sediment, oil and grease from stormwater runoff and prior to discharge to the wetland resource areas. Even though this project qualifies as a redevelopment, the preliminary design has removed the required 80% total suspended solid removal rate that is applied to all new developments. Water quality structures WQS-1 & WQS-2 are located on the south side of the facility and tie directly into the last two manholes within the newly replaced culverts, WQS-3 is located on the east side of the facility near 30 Walkup Drive, and WQS-4 is the new outfall to the west of the maintenance garage and discharges to the north of the facility. Some of the water quality structures may change when the drainage analysis includes phase 3 build-out.

I have asked the development team to consider setting up a water quality monitoring/sampling plan for both the northern and southern side of the tracks and possibly the southern rip-rap swales. The eastern side is currently being sampled by DEP and no point source discharges occur on the west side of the facility. In accordance with 310 CMR 10.05(6)(b), the Commission can “*impose conditions setting limits on the quantity and quality of discharge from a point source (both closed and open channel), when said limits are necessary to protect the Interests identified within the Wetlands Protection Act*”. The water quality testing will ensure that the design is meeting the intent of the Act as well as the Stormwater Standards which are embodied within the Act. The team will be putting together a plan to address this request which will be referenced within the final Order of Conditions.

***Standard # 5 – Higher Potential Pollutant Load***

The redevelopment project use does constitute as a land use that poses a greater threat to environment. The site will require an EPA NPDES Multi-Sector General Permit for Stormwater Discharges Associated Industrial Activity. An industrial activity qualifies for this permit based upon its Standard Classification Code (SIC). This redevelopment use is listed as an SIC under “Sector P: Land Transportation and Warehousing, subsection Railroad Transportation – SIC # 4011, 4013”. This permit will be referenced within the final Order of Conditions and obtained prior to the facility operating. A copy will be placed in the file along with all other applicable state and federal permits pertaining to the prevention of pollution. The water quality structures, emergency shutoff valves, circles of containment, and applicable prevention plans together provide for meeting Standard 5. The Fire/Police Department has been working with Transflo on the hazardous management plans.

***Standard # 6 – Critical Areas***

Cedar Swamp is classified as an Outstanding Resource Water (ORW) because it is designated as an Area of Critical Environmental Concern (ACEC). Also, the CVPs to the west of the facility are also classified as an ORW. There will be no discharge of stormwater to any of the CVPs. Also, there will be no direct untreated stormwater discharging to the ACEC. All discharges will be routed through one of the four water quality treatment units. As mentioned previously, there is one existing catchbasin and associated discharge in what is deemed to be within phase 3. This existing discharge will be removed and no longer conveying stormwater to the ACEC. Phase 3 will be grassed and banked for future development. The preliminary stormwater design will promote far greater protection to these Critical Areas than under existing conditions.

***Standard 7 – Redevelopment Standards***

The project does qualify as a redevelopment and must only meet the Stormwater Standards of 2, 3, 4, 5, and 6 to the maximum extent practicable. I have already discussed these Standards above and they have been met and further information will be provided upon Beals & Thomas’s re-evaluation of the drainage calculations.

***Standard 8 – Erosion and Sediment Control***

The geo-technical report is forthcoming and as stated earlier may support leaving all the existing asphalt in place and fill over the existing facility. Phase 3 will only have a minimal amount of material spread over the asphalt to support grass. Erosion control barriers will be in place at all times. The only vegetation removal is for the western lead track extension and the existing right-of-way will be utilized for access. A NPDES Construction General Permit and accompanied Stormwater Pollution Prevention Plan will also be in place prior to the commencement of construction. Lastly, an Earthmoving Special Permit will be obtained by the Planning Board.

***Standard 9 – Operation and Maintenance***

There will be a site specific Stormwater Operation and Maintenance Plan in place for the stormwater structures at the facility. Upon completion of the drainage design this document will be finalized to reflect specific manufactures recommendations for cleaning the water quality structures. If the facility does not connect to Town sewer, then there will be a holding tank for the floor drains associated with the maintenance garage. There are also many other requirements that the facility will be responsible for associated with the previously mentioned state and federal pollution prevention plans.

***Standard 10 – Illicit Discharges***

The current site is vacant and possesses no such discharges. There has been an issue with 30 Walkup Drive which is owned by CSX and leased to Tate & Lyle. I specifically can not get into the exact nature of the issues. I did walk the property with the Department of Environmental Protection on November 23, 2010, and soon the Department will enter into a Settle Agreement with Tate & Lyle to rectify a previous illicit discharge.

Considerable effort has been made with the development team to ensure that the Stormwater Standards are met in full compliance and to the maximum extent practicable when applicable. As the drainage design progresses, I will be meeting with the team to further ensure compliance and working with the Town Engineering Department.

***Potential Town Sewer Extension***

Currently, the existing site has a septic system that was previously approved by the Conservation Commission and the Board of Health. If used, it will require some modifications and those will be approved by the Board of Health. Also, the site is not serviced with natural gas. Both natural gas and Town sewer would benefit the redevelopment and the surrounding environment. For example, back-up generators could utilize natural gas versus on-site storage tanks for diesel run generators. The holding tank required for the floor drains in the maintenance garage could be put into an oil/water separator and then discharged to the Town sewer thereby eliminating the constant maintenance associated with holding tanks. Holding tanks also need to be licensed with DEP.

The nearest location to tie into Town sewer is in front of 20 Walkup Drive. The nearest gas location is still being investigated. The ACEC boundary for Cedar Swamp as

mapped on Plate 5-1 of the previously referenced 1973 report includes the southern terminus of Walkup Drive. The surface elevation of this roadway is at or below 281.2 which is the determined ACEC elevation. I have a close working relationship with the State's ACEC Director and her preliminary discussions seem to indicate that a permit would be needed to extend these utilities from 20 Walkup Drive into the site through a mapped ACEC. These additional permits can be extensive. It is difficult to ascertain that Walkup Drive, which is an industrial roadway constitutes a protected resource area. Because this would change the filing status of the Notice of Intent, I have done some research in preparation, in case this potential utility extension is pursued.

Cedar Swamp was the first designated ACEC in the Commonwealth on July 3, 1975. On May 29, 1969, the Commonwealth of Massachusetts Department of Natural Resources (now DEP) issued permit number P-809 to High Voltage Engineering Corporation for the construction of 20 Walkup Drive. The permit is recorded in Book 4994, Page 279. The plans referenced within this permit are recorded in Plan Book 332, Page 17, and are entitled "Grading Plans for Hatch Act Conformity", dated February 1969. The Hatch Act and the Jones Act were replaced by the Wetlands Protection Act in 1972. The plans show the layout for what is known as Walkup Drive and the wetland fill associated with its construction. The official layout of Walkup Drive is recorded in Plan Book 327, Plan 2 with a plan date of April 25, 1969 and a previous plan recorded in Plan Book 325, Plan 83 which is dated March 7, 1969. The relevancy is, Walkup Drive was in existence prior to the ACEC designation. The existing facility was also in existence prior to the designation but was filed over the surface elevation of 281.2 and is not mapped within the ACEC boundary. High Voltage Engineering Corporation, transferred Walkup Drive to the Town of Westborough at the September 22, 1975 fall Town meeting under Article 63 and the formal conveyance is recorded in Book 6074, Page 76. The road was actually on the warrant for the spring (March) 1975 Town meeting. Town meeting got through 58 total articles but never resumed that meeting until September 22, 1975. So even then, Walkup Drive could have been accepted as a Town way prior to the July 3, 1975 designation. If Cedar Swamp was to be designated today, the edge of roadway would be the actual boundary within this particular location as has been similar re-mapped at E.L. Harvey & Sons.

The pump station located in front of 20 Walkup Drive was approved for construction by the Conservation Commission on May 11, 1999. The Sewer agreement is recorded in Land Court in Document Number 71326, dated November 9, 1999 & the Easement Deed in Land Court Document Number 71327, dated November 17, 1999 both document simultaneously recorded on November 29, 1999.

This information will be useful to me if needed when conversing with the ACEC Director. The wetlands near the pump station were flagged during early November 2010.

### ***Projected Timeline***

The public hearing will be continued until the final stormwater design has been presented and reviewed.