

Case Number:	PB 2017-19	
Date Submitted:	5/16/17	
Hearing Date:	6/21/17	
Application Form Adopted 12/14/16		



## TOWN OF EASTHAM PLANNING BOARD

# SITE PLAN APPROVAL - SPECIAL PERMIT

2500 State Highway, Eastham, MA 02642  
All Departments 508-240-5900  
[www.eastham-ma.gov](http://www.eastham-ma.gov)

TOWN OF EASTHAM  
TOWN CLERK

- Application must be completed in its entirety to avoid delays in processing.
- Form must be received by Planning Department with appropriate fees, prior to filing deadline.
- **Submittal must include a denial letter or zoning determination from the Eastham Building Commissioner.**
- File one (1) original and twelve (12) copies of this application with 11"x17" project plans with the Planning Department.

**Property Address:** 4615 State Highway **Map:** 8 **Parcel:** 287

**Building Commissioner's Letter of Denial or Zoning Determination Attached:** YES ☒ NO ☐

<b>OWNER:</b> Dwyer Family Realty Trust	<b>APPLICANT*</b> Eastham DG, LLC
Owner's Address: 148 Whippoorwill Circle	Applicant's Address: 83 Orchard Hill Park Drive
City, State, ZIP: Mashpee, MA 02649	City, State, ZIP: Leominster, MA 01453
Phone:	Phone: 978-466-6661
Email:	Email: John.Scribner@lisciotti.com
Owner Signature:	Applicant Signature: 
<i>If there are multiple owners of a property (i.e. an Association), please list names and signatures and attach.</i>	<i>*If applicant is not the owner of record of the property, written authorization from the owner must accompany this application.</i>
<b>CONTACT/REPRESENTATIVE*:</b>	
Name: John Scribner	Phone: 978-466-6661
Mailing Address: 83 Orchard Hill Park Drive Leominster, MA 01453	Email: John.Scribner@lisciotti.com

**Total Acreage:** 2.8±

**Public Ways to be used** Route 6

**Private Ways to be used:** N/A

**Are there any existing Special Permits or Variances associated with this property?** Yes ☒ No ☐

**Description of Proposal** *(Please attach separate narrative if additional space is needed):*

Construction of a 9,100± square foot Dollar General retail store and associated site improvements. Please see the attached cover letter for more information.

*Please be advised that by making this application, you are authorizing the Planning Board members and their agents to make site inspection of your property. It is imperative that the Street and Property in question are marked. This form must be filled out completely. Please contact Town Planner with any questions prior to filing deadline. **Failure to include all information &/or plans and documentation could cause a delay or denial of your project.***

1. Proposed Site Coverage Calculation:

PROPOSED SITE COVERAGE				
GROSS HORIZONTAL AREA	STRUCTURE	ATTACHED ROOFED STRUCTURE (SQ.FT.)	DETACHED ROOFED STRUCTURE (SQ. FT.)	TOTALS (SQ. FT.)
BASEMENT	N/A	N/A	N/A	N/A
FIRST FLOOR	9,100± SF	N/A	N/A	9,100± SF
SECOND FLOOR	N/A	N/A	N/A	N/A
THIRD FLOOR	N/A	N/A	N/A	N/A
TOTAL	9,100± SF	N/A	N/A	N/A

Note: See Eastham Zoning Bylaw Section III for Site Coverage definition.

2. Proposed Site Coverage (Total): 9,100± sq. ft.  
 3. Lot Size: 122,584 sq. ft.  
 4. Proposed Site Coverage Ratio: 7.42 % [Site Coverage (2) ÷ Lot Size (3)]  
 5. Existing Site Coverage: (if a reconstruction project)

EXISTING SITE COVERAGE				
GROSS HORIZONTAL AREA	STRUCTURE	ATTACHED ROOFED STRUCTURE (SQ.FT.)	DETACHED ROOFED STRUCTURE (SQ. FT.)	TOTALS (SQ. FT.)
BASEMENT				
FIRST FLOOR				
SECOND FLOOR				
THIRD FLOOR				
TOTAL				

6. Existing Site Coverage (Total): sq. ft.  
 7. Existing Site Coverage Ratio: % [Site Coverage (6) ÷ Lot Size (3)]  
 8. Site Coverage Increase: sq. ft.  
 9. Percentage of Expansion: % [Site Coverage Increase (8) ÷ Lot Size (3)]

10.

FRONT SETBACK		REAR SETBACK		SIDE SETBACK 1		SIDE SETBACK 2	
EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED
N/A	114.7± FT	N/A	245± FT	N/A	123.8± FT	N/A	27.2± FT

Note: See Eastham Zoning Bylaw Section IX.B for Setback Requirements.

**PROJECTS REQUIRING SITE PLAN SPECIAL PERMITS**

(Check applicable statement)

- ☒ The construction or exterior alteration of any commercial, retail and/or mixed use structure.
- ☐ The change, alteration or expansion of use of any commercial, retail and/or mixed use structure.
- ☐ The change, in whole or in part, of any residential use to a non-residential use, or of any non-residential use to a residential use.
- ☐ Change of an existing use/structure which constitutes a more intensive use of land, which includes:
- ☐ (1). Changes any pattern of pedestrian or vehicular movement within the site or in relation to adjacent properties or streets including access by emergency vehicles, or creates more pedestrian or vehicular traffic than the existing use,
  - ☐ (2). Requires or will add more parking spaces,
  - ☐ (3). Uses a greater portion of the lot,
  - ☐ (4). Requires a special permit in the district where the existing use is permitted as a matter of right.
- ☐ Outside display of devices, goods or other objects for sale, rent or for the promotion of the business outside, if kept in place after daily business hours. (See Zoning Bylaw Section XIII.B.e for further information.)

## Application Instructions: Site Plan Approval – Special Permit Town of Eastham Zoning By-laws Section XIII

Completed forms, plans and supporting information must be received by the filing deadlines posted in the Planning Board's office with the appropriate fee to be assigned to the earliest possible meeting at which the case can be heard. The Planning Board shall hold a hearing within sixty-five (65) days of receipt of a completed application and shall make a decision within ninety (90) days of opening the public hearing.

Abutter notification will be done by the Planning Board office. Associated fees for this application are \$250.00 filing fee, \$25.00 for the certified list and labels, plus \$8.00 per abutter for the meeting notice by certified mail and notice of final decision by regular mail.

- ☒ Filing Fee (\$250.00)
- ☒ Abutter Certification (\$25.00)
- ☒ Abutter Mailing Fee (\$8.00 per Abutter)
- ☒ Original plus twelve (12) copies of the application along with original plus twelve (12) sets of plans, including floor plan, elevation and septic design, and supporting information shall be filed with the Planning Board.
- ☒ **Denial Letter or Zoning Determination from Building Commissioner**
- ☒ Schedule of Construction Procedures *(Including any proposed removal or demolition of major structural components - required for all renovations, alterations or additions)*
- ☒ Narrative statement describing the project.
- ☒ Building Floor Plans and Elevations (Existing & Proposed) - *(Reduced size plans acceptable 11x17)*
- ☒ **All site plans shall be prepared by a Registered Professional Land Surveyor or a Registered Professional Civil Engineer.** All site plans shall be on standard 11" x 17" sheets, and each shall be at a defined scale suitable for the content of the topic covered on the sheet and shall include the following:

- ☒ The location and boundaries of the lot, adjacent streets/ways and the names of direct abutters.
- ☒ Existing and proposed topography showing <sup>one</sup> ~~two~~ foot contours showing "benchmark" used and significant land features, natural and man-made, including, but not limited to, the location of wetlands, streams, bodies of water, drainage swales and area subject to flooding.
- ☒ Existing and proposed structures, including dimensions and all elevations
- ☒ The existing and proposed location of loading areas, driveways, walkways, access and egress points, and the location and number of parking spaces.
- ☒ The location and description of all proposed site wells, water supply systems, storm drainage systems, utilities, sites for enclosed refuse containers and location and capacity of septic systems.
- ☒ Proposed landscape plan showing the location and description of screening, fencing, plantings, significant trees and finished grade contour.
- ☒ The location and description of existing signs (a photograph is acceptable) and the location and sketch of proposed signs.
- ☒ The location and description of existing and proposed open space or recreation areas.
- ☒ A lighting plan showing existing and proposed exterior lighting, including building and ground lighting.
- ☒ A plan for control of erosion, if applicable.

I acknowledge that the above information is included in the application OR I have indicated items seeking waivers (W). Omitting an item could result in a delay in processing your application.

X (please sign) \_\_\_\_\_

Questions regarding the applicability of any of the above requirements to a specific project can be addressed to the Zoning Officer (Building Commissioner) or Town Planner. Applicable fees must be submitted with the application.

# ***DRAINAGE REPORT***

***FOR***

***PROPOSED***

**DOLLAR GENERAL®**

**RECEIVED**  
MAY 17 2017

TOWN OF EASTHAM  
TOWN CLERK

***Map 8, Lot 287***

***4615 Route 6***

***Town of Eastham, Barnstable County***

***Commonwealth of Massachusetts***

Prepared for:

**LISCIOTTI DEVELOPMENT**

Prepared by:

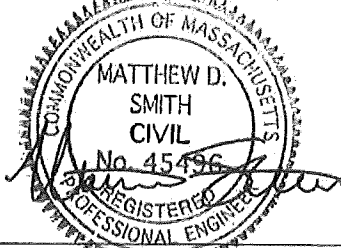
**BOHLER ENGINEERING**

352 Turnpike Road

Southborough, MA 01772

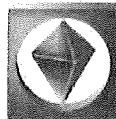
Tel: (508) 480-9900

Fax: (508) 480-9080



Matthew D. Smith, P.E.

Massachusetts P.E. License #45496



**BOHLER**  
ENGINEERING

Dated: May 15, 2017

Job # W171084

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## **DRAINAGE REPORT**

### **I. INTRODUCTION**

The purpose of this study is to analyze the stormwater drainage conditions that are anticipated to occur as a result of the development of a 2.81± acre property located at the corner of Route 6 and Wiley Lane (Undeveloped) in the Town of Eastham, Massachusetts. The lot is further identified by the Town of Eastham Assessor's Office as Map 8, Lot 287.

The project proposes the construction of a 9,100± sq. ft. Dollar General building with driveways, parking areas, utilities, and landscaping. The project also proposes the installation of a new stormwater management system designed in accordance with current Massachusetts Department of Environmental Protection (MassDEP) Stormwater Management Handbook and applicable Town of Eastham regulations.

This report provides a comparative analysis of the calculated pre- and post-development site runoff conditions, with the primary focus being no increases in peak runoff rates exiting the site for the 2-, 10-, 25-, and 100-year storm events. Additionally, steps taken toward meeting the total suspended solid (TSS) removal requirements, as referenced within the MassDEP Stormwater Management Handbook, are also addressed within this report. This report provides calculations documenting the design of the proposed stormwater management system relative to the guidelines set forth in the MassDEP Stormwater Management Handbook and those required by the municipality, as further illustrated within the accompanying Site Development Plans prepared by Bohler Engineering. The project proposes the installation of erosion and sedimentation controls during the demolition and construction periods, as well as long term stabilization and pollution prevention of the site.

## **II. EXISTING SITE CONDITIONS**

The property is currently undeveloped and is bordered by Route 6 to the east, Wiley Lane to the south, commercial (Castaways Marine) and residential properties to the north, and a residential property to the west. The watershed included as part of this analysis is approximately 1.84 acres.

For the purposes of this analysis, the study area has been generally defined through a review of the topography / stormwater infrastructure and record information compiled as part of the project survey. Generally, the analyzed watershed boundaries have been established to be coincidental with the proposed property boundary, abutting right-of-way and limit of work, containing approximately 1.84± acres. According to published USDA/NRCS soils maps, the property contains "252A" consisting of Woodbridge Fine Sandy Loam of Hydraulic Soil Group 'A' (HSG "A"). This information is provided in Appendix B of this report. The geotechnical report, included as Appendix H, shows on-site soils to be a sand material consistent with HSG 'A'.

A topographic review of the subject parcel indicates that stormwater runoff generated within the study area generally converges on one Point of Analysis (POA); the southern portion of the property adjacent to Wiley Lane (POA-1). Accordingly, the pre and post-development stormwater models have been arranged to assess the anticipated stormwater conditions at this location. The existing catchment has been defined as one subcatchment, E-1. E-1 contains approximately 1.84± acres of land, consisting primarily of the subject property, and flows south in direction towards the Wiley Lane (POA-1). The existing 1.84± acre study area contains 1.84± acres of wooded area. The existing catchment areas are indicated on the Pre-Development Watershed Map included in Appendix D, along with watershed calculations for the Pre-Development condition.

## **III. PROPOSED SITE CONDITIONS**

The project proposes the development of the property through the construction of a new 9,100± square foot Dollar General building with associated driveways, parking areas, utilities, and landscaping. The proposed project area has been divided into six (6) catchment areas, P-1 through P-6, as exhibited on the proposed watershed map in Appendix E. The Point of Analysis associated with the post-development model is the same as that included as part of the pre-development model.

Catchment areas P-2 through P-6 are proposed to be directed to a proposed infiltration/detention basin located proximate to the southern property boundary of the site via curb cuts and underground piping.

Catchment area P-1 consists of the area draining towards the Route 6 and Wiley Lane (POA-1). Assessment of the anticipated existing and proposed stormwater flows and volumes was performed using HydroCAD®. HydroCAD® input and output data is included in Appendices D & E.

Subcatchment P-1 resents runoff from the landscaped area located around the proposed detention/infiltration basin. Runoff generated as a part of this subcatchment is designed to sheet flow directly to the detention/infiltration basin.

Subcatchment P-2 resents runoff from the paved areas adjacent to the building at the southern portion of the development. Runoff generated as a part of this subcatchment is designed to flow into a grass channel via a rip rap lined curb opening. The grass channel is proposed to convey stormwater to the detention/infiltration basin. The detention/infiltration basin is designed to treat/infiltrate the requisite water quality and recharge volumes. The detention/infiltration basin is designed to retain/infiltrate all storms analyzed and is proposed with an emergency overflow weir sending treated runoff to POA-1.

Subcatchment P-3 represents the runoff generated from the roof of the building. The roof runoff is proposed to be collected and piped directly to the detention/infiltration basin. The detention/infiltration basin is designed to treat/infiltrate the requisite water quality and recharge volumes. The detention/infiltration basin is designed to retain/infiltrate all storms analyzed and is proposed with an emergency overflow weir sending treated runoff to POA-1.

Subcatchment P-4 resents runoff from the paved areas at the southeast portion of the development. Runoff generated as a part of this subcatchment is designed to flow into a grass channel via a rip rap lined curb opening. The grass channel is proposed to convey stormwater to the detention/infiltration basin. The detention/infiltration basin is designed to treat/infiltrate the requisite water quality and recharge volumes. The detention/infiltration basin is designed to retain/infiltrate all storms analyzed and is proposed with an emergency overflow weir sending treated runoff to POA-1.

Subcatchment P-5 resents runoff from the paved areas at the northeast portion of the development. Runoff generated as a part of this subcatchment is designed to be collected in a deep-sump hooded catch basin and directed to the proposed detention/infiltration basin via underground HDPE piping. The detention/infiltration basin is designed to treat/infiltrate the requisite water quality and recharge volumes. The detention/infiltration basin is proposed with an emergency overflow weir sending treated runoff to POA-1.



Subcatchment P-6 resents runoff from the landscaped areas at the perimeter of the development. Runoff generated as part of this subcatchment is proposed to be directed around the development and flow towards Wiley Lane (POA-1).

The proposed stormwater management system has been designed in accordance with the MassDEP Stormwater Management Handbook and the requirements of the Town of Eastham. Best Management Practices (BMPs) incorporated as part of the proposed stormwater management design include the implementation of grass channels, deep-sump hooded catch basin, sediment forebay, a detention/infiltration basin, and the incorporation of a proposed Stormwater Operation and Maintenance (O&M) schedule inclusive of regularly scheduled inspections and maintenance of stormwater management structures. The proposed drainage system has been designed to provide at least 80% removal of Total Suspended Solids (TSS) and 44% TSS removal prior to detention/infiltration in accordance with the MassDEP Stormwater Handbook and town of Eastham requirements. The detention/infiltration basin has been designed to detain the water quality volume (WQV). Supporting calculations are included in Appendix F.

In addition to stormwater quality requirements, the project is calculated to decrease the peak rate of runoff when compared to the existing conditions for the analyzed storm events. Attenuation of the 2-, 10-, 25-, and 100-yr storm event is provided by the proposed stormwater system.

#### IV. METHODOLOGY

Methodology utilized to design the stormwater management system associated with this project includes compliance with the guidelines set forth in the latest edition of MassDEP Stormwater Handbook. The proposed stormwater management design is calculated to provide decrease peak stormwater runoff rates from the proposed facility for the 2-, 10-, 25- and 100-year design storm events utilizing the SCS TR-20 method. Specifically, the proposed stormwater management design is calculated to result in “net decreases” in stormwater runoff rates directed towards the POA referenced in this report. As previously referenced, the proposed design includes the implementation of several BMPs designed to improve the quality of the post-development stormwater runoff.

Times of concentration (Tc) utilized in the preparation of this report were generated utilizing the SCS TR-55 Urban Hydrology for Small Watersheds method. Runoff coefficients for the pre- and post-development conditions were calculated using widely accepted, and often utilized runoff coefficients and have been documented within the Appendices of this report.

The hydrologic analysis, illustrating the anticipated existing and proposed development stormwater conditions associated with the proposed development of this property have also been created and are included within the Appendices of this report. Specifically included are existing and proposed hydrograph reports, a site specific hydrograph summary report, on-site soil evaluation results, site location information, and other maps/information prepared to directly support the design conclusions contained within this report.

The following rainfall data is used in the calculations as required by the MassDEP Stormwater Management Handbook:

**Table 1 – RAINFALL DATA**

	<u>2-Year</u>	<u>10-Year</u>	<u>25-Year</u>	<u>100-Year</u>
<u>Rainfall (inches)</u>	3.60	4.80	5.70	7.10

The proposed project meets or exceeds the MassDEP Stormwater Management Guidelines based on the following information:

1. MassDEP Standard #1: No New Untreated Discharges – The project has been designed such that proposed pavement areas are collected and directed to the stormwater management system for treatment prior to being discharged to downstream areas. Treatment measures includes deep sump hooded catch basin, grass channels, sediment forebay, and a detention/infiltration basin.
2. MassDEP Standard #2: Peak Rate Attenuation – The proposed stormwater system has been designed to provide peak rate attenuation with no calculated increases in the peak rate of runoff at selected POA for the 2-, 10-, 25- and 100-year storm events when compared to the existing condition. The proposed stormwater management system includes a deep sump hooded catch basin, grass channels, sediment forebay, and a detention/infiltration basin
3. MassDEP Standard #3: Recharge – NRCS soil mapping and the geotechnical investigation support the classification of the native soil material as HSG “A”. As required by the MassDEP Stormwater Management Handbook, groundwater recharge will be provided by the proposed detention/infiltration basin. Supporting groundwater recharge calculations are provided in Appendix F.
4. MassDEP Standard #4: Water Quality – The proposed stormwater management system has been designed to provide eighty percent (80%) removal of Total Suspended Solids (TSS) and 44% TSS removal prior to discharge to an infiltration practice through the use of several Best Management Practices (BMPs) including a deep sump hooded catch basin, grass channels, sediment forebay, and a detention/infiltration basin. The proposed detention/infiltration basin has been designed to accommodate the calculated water quality volume (first 1” of runoff), as demonstrated in the calculations included in Appendix F. The TSS removal rates used as part of the calculations are consistent with those outlined in the MassDEP Stormwater Management Handbook.
5. MassDEP Standard #5: Land Uses with Higher Potential Pollutant Loads – The proposed project is not classified as a “Land Use with Higher Potential Pollutant Loads” (LUHPPL).
6. MassDEP Standard #6: Critical Areas – The proposed stormwater management system has been designed to treat the Water Quality Volume (WQV) of at least 1 inch.
7. MassDEP Standard #7: Redevelopments – The project has been designed in accordance with the requirements described in the MassDEP Stormwater Management Handbook for a new development. The supporting hydrologic calculations are included in the appendices of this report.

8. MassDEP Standard #8: Construction Period Pollution Prevention and Erosion and Sedimentation Control – The project proposes the implementation of construction period erosion and sedimentation controls as indicated on Site Development Plans provided for this project. This includes implementation of a perimeter erosion control barrier, as well as a proposed construction entrance, protection around temporary material stock piles and various other techniques as outlined on the plan noted above.

If the proposed area of disturbance is more than one acre, the project will also require the filing of an electronic Notice of Intent (eNOI) with the US EPA and implement a Stormwater Pollution Prevention Plan (SWPPP) during construction. The contractor is required to maintain erosion controls during construction and prevent erosion or sediment discharges onto abutting properties or roadways, and to file periodic inspection reports consistent with the requirements outlined as part of the SWPPP.

9. MassDEP Standard #9: Operation and Maintenance (O&M) Plan – An O&M Plan for this site has been prepared and is included within Appendix G this report. The O&M Plan outlines procedures and time tables for the long term operation and maintenance of the proposed site stormwater management system, including initial inspections upon completion of construction, and periodic monitoring of the system components in accordance with established practices and manufacturer's recommendations. The O&M Plan includes a list of responsible parties and an estimated budget associated with inspections and maintenance.
10. MassDEP Standard #10: Prohibition of Illicit Discharges – An illicit discharge statement will be submitted prior to discharge or any stormwater to post-construction BMP's.

## V. CONCLUSIONS

In summary, the proposed stormwater management system design, as illustrated within the Site Development Plans prepared by Bohler Engineering, is calculated to result in a "net decrease" in stormwater peak runoff rates from the subject site when compared to pre-development conditions for the 2-, 10-, 25-, and 100-year storm frequencies for flows directed to the POA. Best management practices being implemented as part of the proposed stormwater management system design are proposed to result in the removal of total suspended solids (TSS), consistent with the guidelines established within the MassDEP Stormwater Management Handbook. As a result, the project meets or exceeds the requirements of the Massachusetts Department of Environmental Protection Stormwater Management Guidelines, as applicable. The pre-development versus post-development peak discharge rates are contained within Tables 2A in cubic-feet per second (cfs):

Table 2A – SUMMARY COMPARISON OF CALCULATED STORMWATER RUNOFF RATES				
<i>Runoff rates by Storm Event (cubic feet per second) to (POA-1)</i>				
	<u>2-Year</u>	<u>10-Year</u>	<u>25-Year</u>	<u>100-Year</u>
<u>Pre-Development</u>	0.00	0.00	0.02	0.08
<u>Post-Development</u>	0.00	0.00	0.02	0.06
<u>Difference</u>	0.00	0.00	0.00	-0.02



TOWN OF EASTHAM  
BUILDING DEPARTMENT  
2500 STATE HIGHWAY  
EASTHAM, MA 02642  
508-240-5900 Ext. 202  
508-240-5918 Fax

RECEIVED  
MAY 17 2017

TOWN OF EASTHAM  
TOWN CLERK

I, Thomas J. Wingard Jr., Building Commissioner and Zoning Enforcement Officer for the Town of Eastham, hereby acknowledges that an application for:

☐ Building Permit  
☐ Use & Occupancy Permit

☒ Zoning Determination  
☐

Received From: Ashley, agent for Bohler Engineering On: Apr 25, 2017

An application to: Build a proposed retail store

For property located on: 08-287

Street Address: 4615 STATE HWY Zoning District D

Was Reviewed and Refused by me on: Apr 27, 2017

For the following reasons:

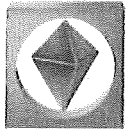
1. Proposed STRUCTURE is not in accordance with the following section(s) of the Zoning By-Laws:  
Section(s): XIII B Projects Requiring Site Plan Special Permits 1 a. construction of a commercial structure

2. Requires a SPECIAL PERMIT per the following section(s) of the Zoning By-Laws:  
Section(s): XIII Requires a Special Permit from the Planning Board

COMMENTS: Proposal is to build a 9,100 sq.ft. retail building on a vacant lot in zoning district D. Front half of the lot is in zoning district I also. Request is an allowed use.

Appeal of any of the above may be made in accordance with MGL Chapter 40A Section 8, by contacting the Zoning Board of Appeals.

Thomas Wingard  
Building Commissioner



# BOHLER<sup>TM</sup>

## ENGINEERING

352 Turnpike Road  
Southborough, MA 01772  
PHONE  
FAX 508.480.9080

April 28, 2017

Town of Eastham  
Zoning Board of Appeals  
2500 State Highway  
Eastham, MA 02642

*Via Federal Express*

**Re: Site Development Traffic Memorandum  
Proposed "Dollar General" Development  
4615 Route 6, Eastham, MA – Map 8, Lot 287**

Dear Members of the Board,

On behalf of the applicant, Eastham DG, LLC, Bohler Engineering has performed the following Trip Generation Analysis in conjunction with the proposed project located on Route 6 and further defined as Map 8, Lot 287 on the Town of Eastham Tax Assessor's maps. The site is located on the northwest side of Route 6.

The proposed project consists of the construction of a 9,100± square foot, freestanding, "Dollar General" retail facility with associated parking and utility infrastructure. The purpose of this analysis is to estimate the traffic generated by the proposed use. This estimate was completed by comparing the proposed site with existing facilities of the same use. In order to complete this estimate, a trip rate was calculated utilizing data and procedures from the Institute of Transportation Engineers (ITE) Trip Generation Manual, Ninth Edition. The proposed retail use falls under the ITE land use category Variety Store (ITE Code 814). However, a peak hour directional distribution is not calculated by ITE for the Variety Store category. For this reason, the ITE land use category Specialty Retail Center (ITE code 826) was used in this analysis for determining peak hour directional distribution.

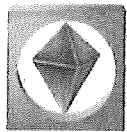
Based upon the ITE information described above, traffic generated by the proposed project was estimated during the AM and PM peak hours for the proposed "Dollar General" store based upon the floor area of the building. This information is summarized in the table below:

**Table 1. Trip Generation Estimate**

ITE Code	Description	Floor Area (SF)	Weekday Peak Hour 7-9 AM (Enter/Exit)		Weekday Peak Hour 4-6 PM (Enter/Exit)	
814	Variety Store	9,100	13	16	25	27
Totals			29		52	

As outlined in the table above, the proposed "Dollar General" store is expected to generate a total of 29 trips in the AM peak hour and 52 trips in the PM peak hour upon completion of the store. ITE recommends that traffic impact studies be performed whenever an increase in trips in any peak hour is greater than 100 trips per





# BOHLER<sup>TM</sup>

## ENGINEERING


352 Turnpike Road  
Southborough, MA 01772  
PHONE  
FAX 508.480.9080


hour since this is the point where a change in roadway capacity may be found and mitigation may or may not be needed. Based upon the minimal changes in traffic volume it is anticipated that the proposed development will not have a negative impact on the surrounding street network nor merit a full traffic impact study.

Should you have any questions or need additional information, please do not hesitate to contact me at 508-480-9900.

Sincerely,

**BOHLER ENGINEERING**

  
Matthew Bombaci, P.E.

  
Austin F. Turner

Purchase and Sale Agreement  
4615 State Highway, Eastham, Massachusetts 02642

Notice of Agreement

The undersigned hereby certify that Seller and Buyer have entered into an Option Agreement ("Agreement") upon the following terms:

**SELLER:** The Dwyer Family Realty Trust, a Massachusetts trust

**BUYER:** Lisciotti Development Corp., a Massachusetts corporation

**PROPERTY:** 4615 State Highway, Eastham, Massachusetts 02642.

**SELLER'S TITLE:** See the Deed dated December 31, 1990 and recorded at the Barnstable County Registry of Deeds at Book 7400, Page 251.

**DATE OF EXECUTION OF AGREEMENT:** *March*  
~~February~~ 3, 2017

**BUYER'S PERMITTING RIGHTS:** Buyer may file, in Buyer's name (or, if required by any governmental agency, in Seller's name, as Seller's agent) and for Buyer's benefit, zoning code approvals, variances, changes or other appropriate relief, subdivisions, environmental or other related approvals.

This Memorandum is executed only for the purpose of giving notice of the existence of the Agreement and is not intended to modify, expand or reduce any of the rights of Seller and Buyer as set forth in the Agreement.

Signatures On Following Page

Purchase and Sale Agreement  
4615 State Highway, Eastham, Massachusetts 02642

---

EXECUTED under seal.

**SELLER:**

**The Dwyer Family Realty Trust u/d/t December 31, 1990,**  
a Massachusetts trust

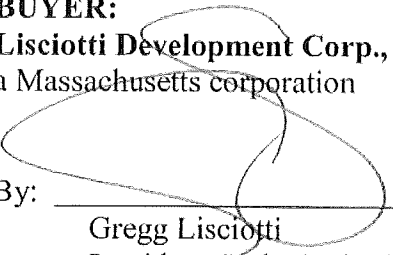
By: \_\_\_\_\_  
Beverly Ormston  
Trustee, Duly Authorized

By: \_\_\_\_\_  
Denise Reeves  
Trustee, Duly Authorized

By: \_\_\_\_\_  
John Dwyer  
Trustee, Duly Authorized

**BUYER:**

**Lisciotti Development Corp.,**  
a Massachusetts corporation

By: \_\_\_\_\_  
  
Gregg Lisciotti  
President, Duly Authorized

Purchase and Sale Agreement  
4615 State Highway, Eastham, Massachusetts 02642

---

EXECUTED under seal.

**SELLER:**

The Dwyer Family Realty Trust u/d/t December 31, 1990,  
a Massachusetts trust

By: \_\_\_\_\_  
Beverly Ormston  
Trustee, Duly Authorized

By: Denise R. Reeves  
Denise Reeves  
Trustee, Duly Authorized

By: \_\_\_\_\_  
John Dwyer  
Trustee, Duly Authorized

**BUYER:**

Lisciotti Development Corp.,  
a Massachusetts corporation

By: \_\_\_\_\_  
Gregg Lisciotti  
President, Duly Authorized

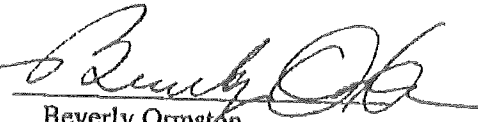
Purchase and Sale Agreement  
4615 State Highway, Eastham, Massachusetts 02642

---


EXECUTED under seal.

**SELLER:**

The Dwyer Family Realty Trust u/d/t December 31, 1990,  
a Massachusetts trust

By:   
Beverly Ormston  
Trustee, Duly Authorized

By: \_\_\_\_\_  
Denise Reeves  
Trustee, Duly Authorized

By:   
John Dwyer  
Trustee, Duly Authorized

**BUYER:**

Lisciotti Development Corp.,  
a Massachusetts corporation

By: \_\_\_\_\_  
Gregg Lisciotti  
President, Duly Authorized



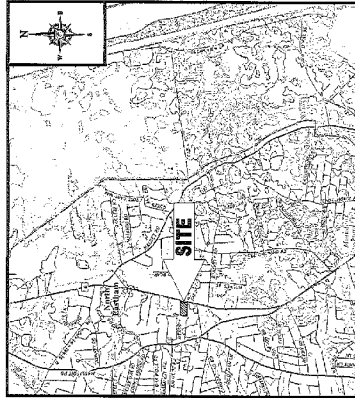
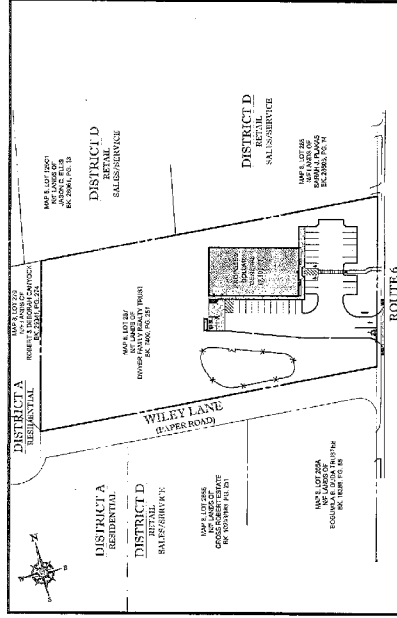
# SITE DEVELOPMENT PLANS

FOR:  
PROPOSED

**DOLLAR GENERAL**

LISCIOTTI DEVELOPMENT CORP.

LOCATION OF SITE:  
4615 ROUTE 6, TOWN OF EASTHAM  
BARNSTABLE COUNTY, MASSACHUSETTS  
MAP #8, LOT #287



LOCATION MAP

SCALE: 1" = 100'

SHEET INDEX

SHEET TITLE	SHEET NUMBER
COVER SHEET	1 OF 13
GENERAL NOTES SHEET	2 OF 13
REVISION PLAN	3 OF 13
SITE PLAN	4 OF 13
GRADING & DRAINAGE PLAN	5 OF 13
UTILITY PLAN	6 OF 13
SOIL EROSION & SEDIMENT CONTROL PLAN	7 OF 13
SOIL EROSION CONTROL NOTES & DETAILS SHEET	8 OF 13
LANDSCAPE PLAN	9 OF 13
LANDSCAPE NOTES & DETAILS SHEET	10 OF 13
CONSTRUCTION DETAIL SHEET	11 OF 13
CONSTRUCTION DETAIL SHEET	12 OF 13
ALTA/INSPS LAND TITLE SURVEY (BY OTHERS)	13 OF 13
ALTA/INSPS LAND TITLE SURVEY (BY OTHERS)	2 OF 2
LIGHTING PLAN (BY OTHERS)	1 OF 1

**BOHLER ENGINEERING**

1000 ROUTE 1, SUITE 100  
BARNSTABLE, MASSACHUSETTS 02706  
PHONE: 508-465-0000  
FAX: 508-465-0001  
WWW.BOHLERENGINEERING.COM

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**PERMIT SET**

PROJECT: 4615 ROUTE 6  
SHEET: 1 OF 13  
DATE: 05/17/2017  
BY: [Signature]

**SITE DEVELOPMENT PLANS**

FOR: LISCIOTTI DEVELOPMENT CORP.

**BOHLER ENGINEERING**

1000 ROUTE 1, SUITE 100  
BARNSTABLE, MASSACHUSETTS 02706  
PHONE: 508-465-0000  
FAX: 508-465-0001  
WWW.BOHLERENGINEERING.COM

**MASSACHUSETTS**

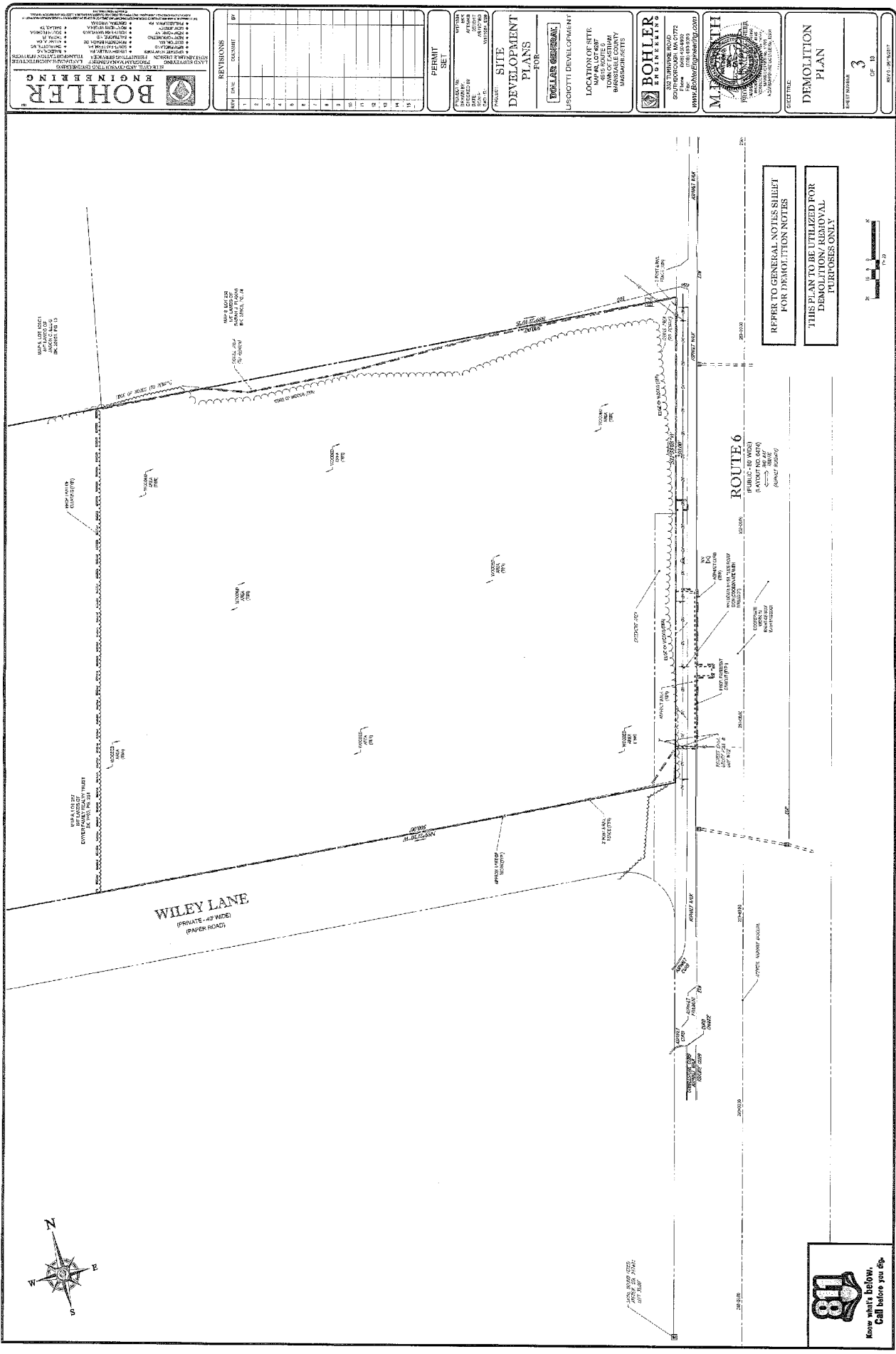
REGISTERED PROFESSIONAL ENGINEER  
No. 10000  
Exp. 12/31/2018

**COVER SHEET**

1 OF 13







**BOHLER ENGINEERING**

11811 STATE STREET, SUITE 100, DALLAS, TEXAS 75243  
PHONE: (214) 343-1111  
FAX: (214) 343-1112  
WWW.BOHLENGINEERING.COM

**REVISIONS**

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**PERMIT SET**

PROJECT NO. 11811-001  
SHEET NO. 3 OF 10  
DATE: 01/15/2011

**SITE DEVELOPMENT PLANS FOR**

**LOCATION OF SITE**  
11811 STATE STREET  
DALLAS, TEXAS 75243  
BRANSFORD COUNTY  
MARSHALLS CITIES

**BOHLER ENGINEERING**

301 TURNING ROAD  
DALLAS, TEXAS 75243  
PHONE: (214) 343-1111  
FAX: (214) 343-1112  
WWW.BOHLENGINEERING.COM

**DEMOLITION PLAN**

SHEET NUMBER 3 OF 10  
REVISED 01/15/2011

REFER TO GENERAL NOTES SHEET FOR DEMOLITION NOTES

THIS PLAN IS TO BE UTILIZED FOR DEMOLITION/REMOVAL PURPOSES ONLY

**118**

Now visit below.  
Call before you dig.

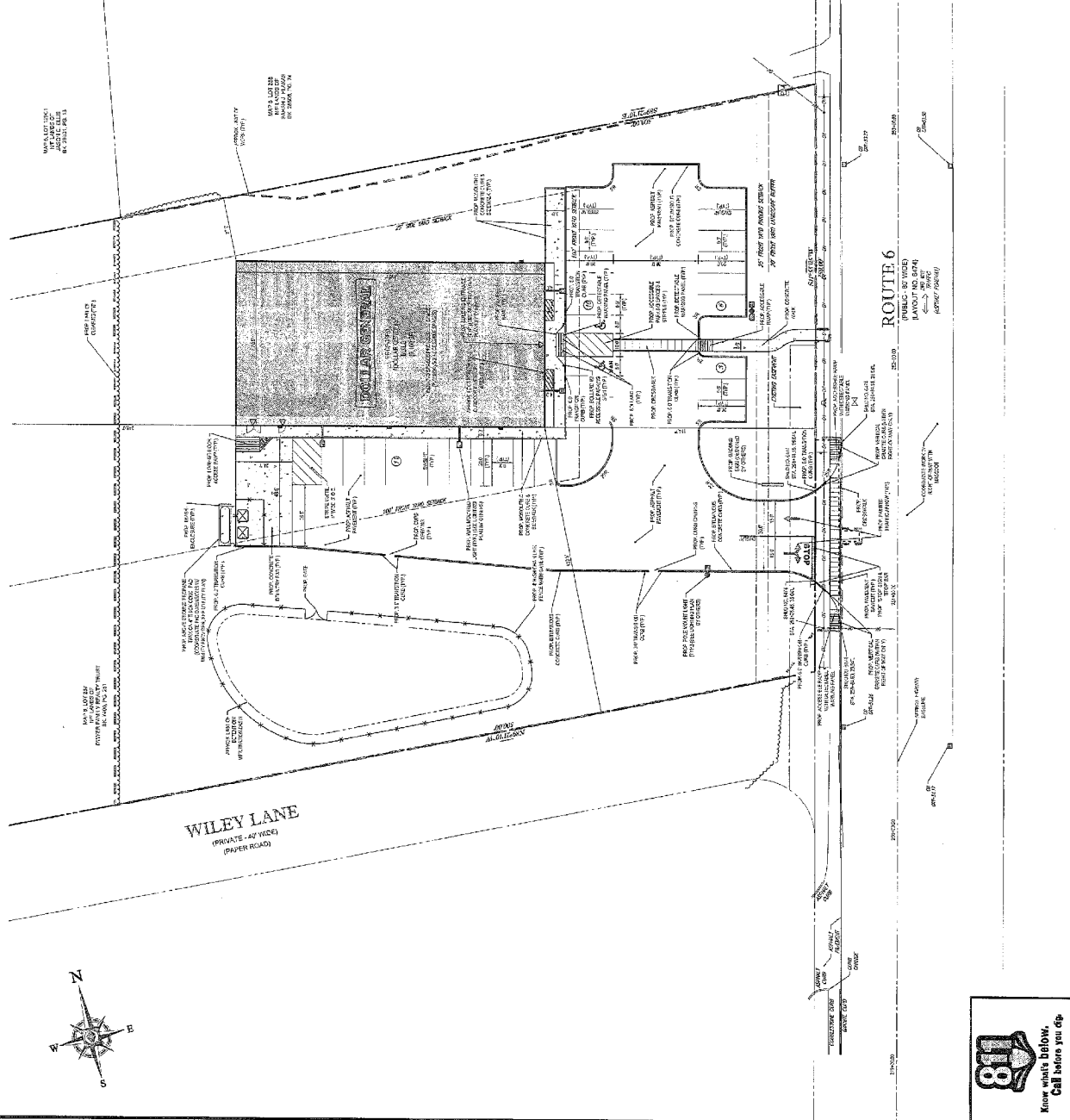
# LAND USE / ZONING INFORMATION & NOTES

1. FOLLOW THE ZONING CODE.
2. FOLLOW THE ZONING CODE.
3. FOLLOW THE ZONING CODE.
4. FOLLOW THE ZONING CODE.
5. FOLLOW THE ZONING CODE.

ZONING ANALYSIS TABLE			
ZONING DISTRICT	PERMITTED USES	PROPOSED USE	COMMENTS
INDUSTRIAL	MANUFACTURING, WAREHOUSING, DISTRIBUTION, OFFICE, RETAIL, SERVICE, REPAIR, STORAGE, etc.	INDUSTRIAL	
COMMERCIAL	RETAIL, SERVICE, REPAIR, STORAGE, etc.	COMMERCIAL	
RESIDENTIAL	SINGLE-FAMILY, TWO-FAMILY, THREE-FAMILY, etc.	RESIDENTIAL	
AGRICULTURAL	AGRICULTURE, HORSE-RANCHING, etc.	AGRICULTURAL	
UNDEVELOPED	WOODLAND, OPEN SPACE, etc.	UNDEVELOPED	

THE GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFYING POSTAL DELIVERY METHOD WITH THE LOCAL POST OFFICE. THE LOCAL POST OFFICE IS THE RESPONSIBILITY OF THE PROPERTY OWNER.

PAINT STRIPING LEGEND
1. PAINT STRIPING
2. PAINT STRIPING
3. PAINT STRIPING



**BOHLER ENGINEERING**  
1000 W. 10th St.  
Tomball, TX 77475  
713-261-1111  
www.bohler-engineering.com

**PERMIT SET**

PROJECT NO. 1000000000  
DATE 10/1/2010  
SCALE 1/8" = 1'-0"

**SITE DEVELOPMENT PLANS FOR**

**BOHLER ENGINEERING**

LOCATION OF SITE  
4000 ROUTE 6  
TOMBALL COUNTY  
TOMBALL, TEXAS

**BOHLER ENGINEERING**

1000 W. 10th St.  
Tomball, TX 77475  
713-261-1111  
www.bohler-engineering.com

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Tomball, TX 77475  
713-261-1111  
www.bohler-engineering.com

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**BOHLER ENGINEERING**

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Tomball, TX 77475  
713-261-1111  
www.bohler-engineering.com

**811**

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1000 WEST 10TH AVENUE  
SUITE 100  
DENVER, CO 80202  
TEL: 303.733.1100  
WWW.BOHLENGINEERING.COM

LAND SURVEYING  
ENGINEERING  
ARCHITECTURAL  
PLANNING  
DESIGN  
CONSTRUCTION  
MANAGEMENT

NO.	DATE	REVISION
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**PERMIT SET**

PROJECT: POLAR GENERAL  
SHEET: 5 OF 12

**SITE DEVELOPMENT PLANS**

ENCLOSURE DEVELOPMENT

**BOHLER ENGINEERING**

1000 WEST 10TH AVENUE  
SUITE 100  
DENVER, CO 80202  
TEL: 303.733.1100  
WWW.BOHLENGINEERING.COM

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1000 WEST 10TH AVENUE  
SUITE 100  
DENVER, CO 80202  
TEL: 303.733.1100  
WWW.BOHLENGINEERING.COM

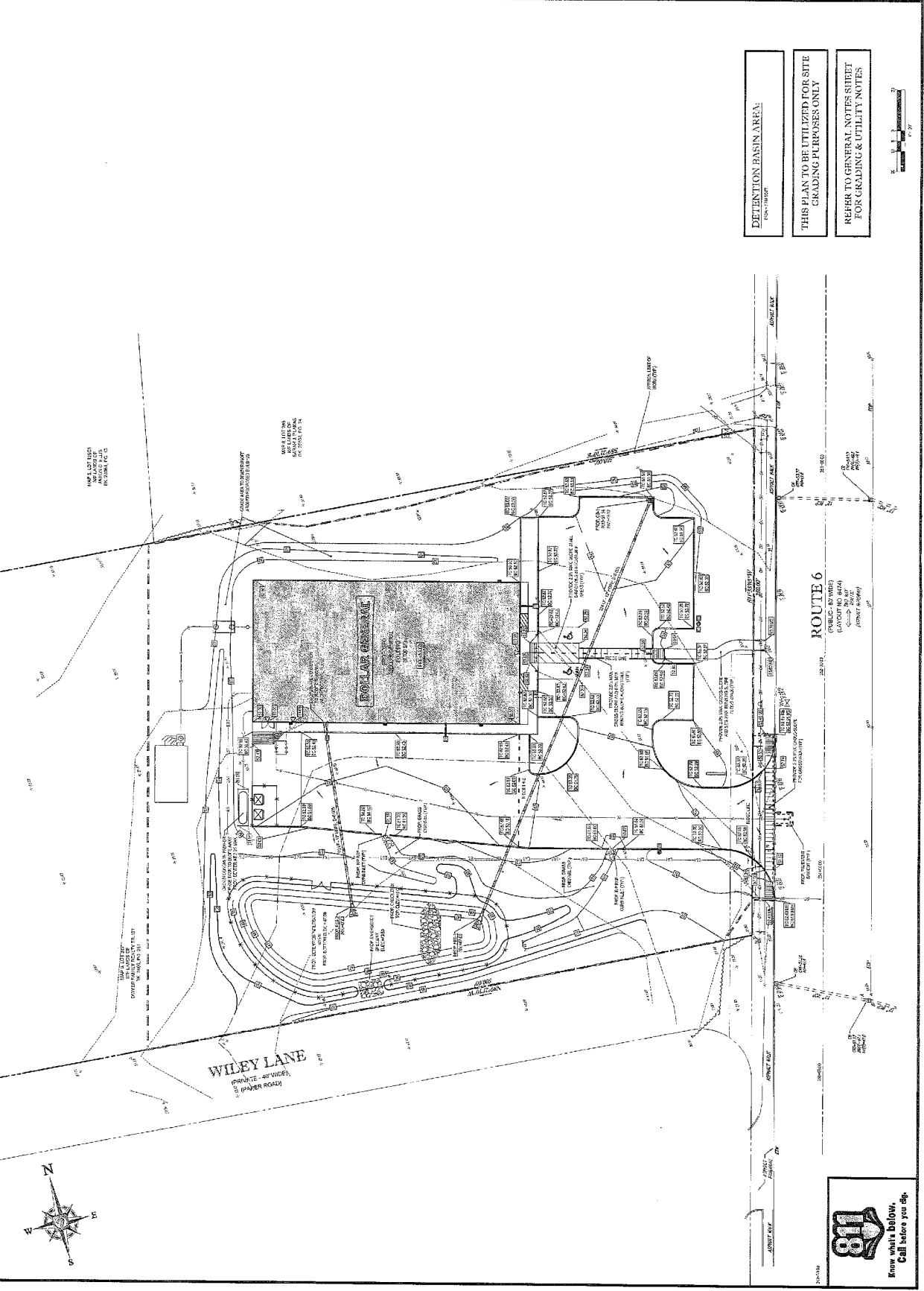
**M.D. SMITH**

REGISTERED PROFESSIONAL ENGINEER  
NO. 10000  
STATE OF COLORADO

**GRADING & DRAINAGE PLAN**

5 OF 12

DATE: 10/1/00  
BY: J. BOHLER



**DEFINITION BASIN AREA**

THIS PLAN TO BE UTILIZED FOR SITE GRADING PURPOSES ONLY

REFER TO GENERAL NOTES SHEET FOR GRADING & UTILITY NOTES



**811**

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**BOHLER ENGINEERING**

Professional Engineer  
No. 10000  
State of Massachusetts

1000 Main Street  
Boston, MA 02108  
Tel: 617-552-1234  
Fax: 617-552-1235  
www.bohler-engineering.com

REV	DATE	DESCRIPTION
1	01/15/08	ISSUED FOR PERMIT
2	02/10/08	REVISED PER PERMIT COMMENTS
3	03/10/08	REVISED PER PERMIT COMMENTS
4	04/10/08	REVISED PER PERMIT COMMENTS
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100	04/10/16	REVISED PER PERMIT COMMENTS

**PERMIT SET**

PROJECT: 08-001  
SHEET: 1 OF 12  
DATE: 01/15/08

**SITE DEVELOPMENT PLANS FOR**

USCOTT DEVELOPMENT

**LOCATION OF SITE**

400 SQUAD  
SANDWICH TOWN  
SANDWICH COUNTY  
MASSACHUSETTS

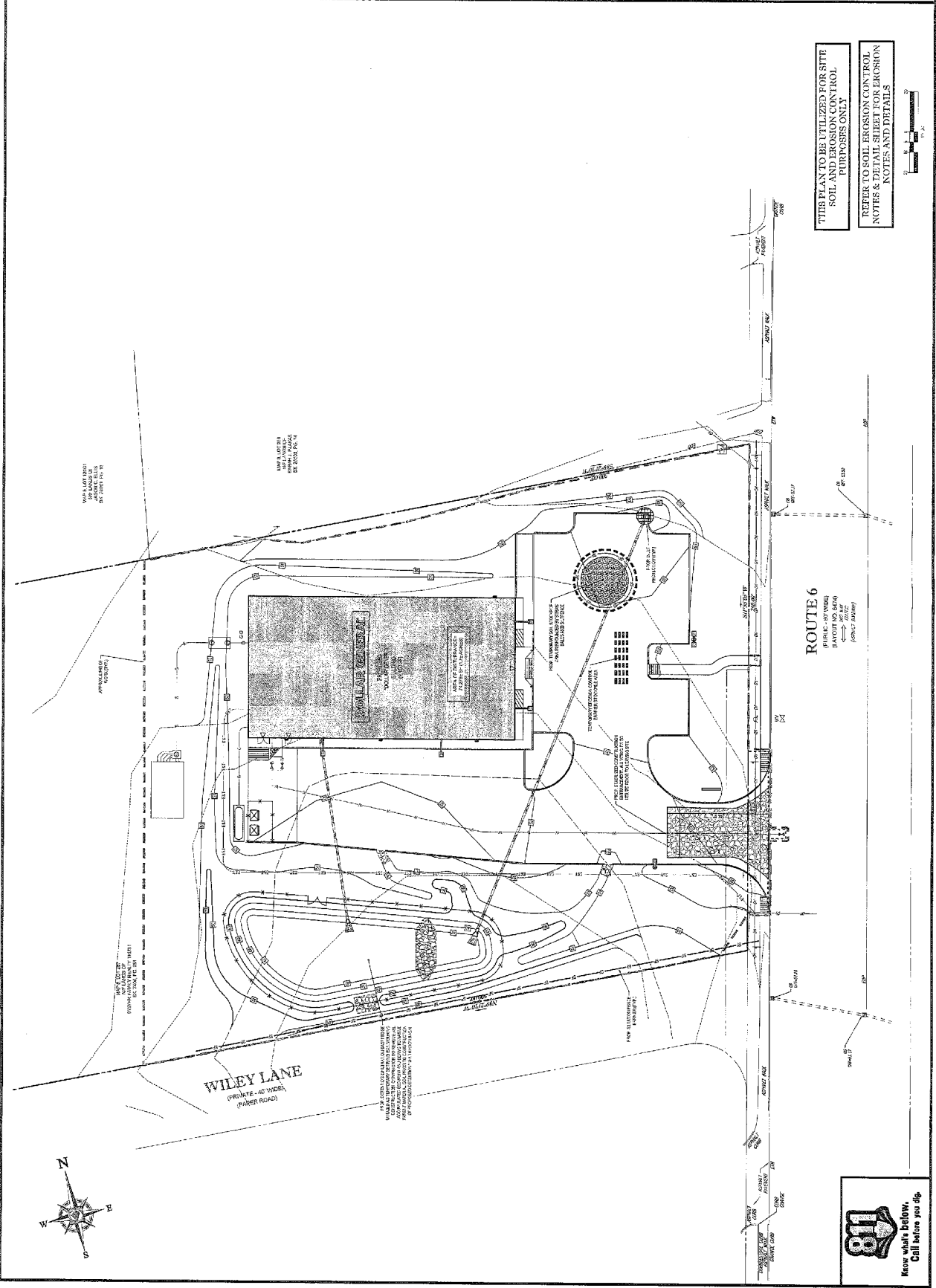
**BOHLER ENGINEERING**

1000 Main Street  
Boston, MA 02108  
Tel: 617-552-1234  
Fax: 617-552-1235  
www.bohler-engineering.com



**SOIL EROSION & SEDIMENT CONTROL PLAN**

7



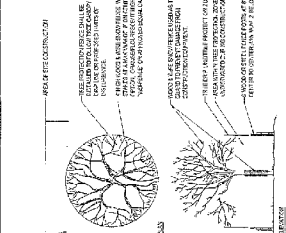
THIS PLAN TO BE UTILIZED FOR SITE SOIL AND EROSION CONTROL PURPOSES ONLY

REFER TO SOIL EROSION CONTROL NOTES & DETAIL SHEET FOR EROSION NOTES AND DETAILS



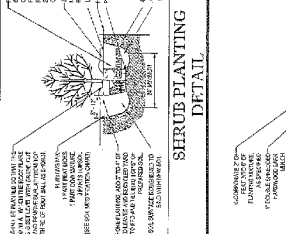


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## FREE PROTECTION DURING SITE CONSTRUCTION

7000 DOWNSIDE DRIVE, SUITE 100, NEWTON, MA 02459-1000  
 TEL: 617/552-3300 FAX: 617/552-3301  
 WWW: WWW.MIT.EDU



## GROUNDCOVER PLANTING

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## HYDROSEED SPECIFICATIONS

**TABLE 1**

## WETMIX SPECIFICATIONS

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## SITE DEVELOPMENT PLANS

FOR

LOCATION OF SITE  
MAP #9, LOT #287  
4815 ROUTE 5  
TOWNSHIP OF FARMINGTON

TOWN OF EASTHAM  
BARNSTABLE COUNTY  
MASSACHUSETTSBOHLER  
ENGINEERING

552 TURNPIKE ROAD  
SOUTHBRIDGE, MA 01772  
Phone: (508) 453-5000  
Fax: (508) 453-9350  
[www.SchlarEngineering.com](http://www.SchlarEngineering.com)

**REGISTRATION**

## LANDSCAPE


NOTES &amp; DETAILS SHEET

10  
CF 13

REV-02102017







**BOHLER ENGINEERING**  
 1000 WEST 10TH AVENUE  
 SUITE 100  
 DENVER, CO 80202  
 (303) 733-1100  
 www.bohler-engineering.com

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PROJECT NO. \_\_\_\_\_  
 SHEET NO. \_\_\_\_\_  
 DATE \_\_\_\_\_

**SITE DEVELOPMENT PLANS**

FOR \_\_\_\_\_

**BOHLER ENGINEERING**  
 LICENSED PROFESSIONAL ENGINEER  
 LICENSE NO. \_\_\_\_\_  
 STATE OF COLORADO

**BOHLER ENGINEERING**  
 1000 WEST 10TH AVENUE  
 SUITE 100  
 DENVER, CO 80202  
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 LICENSE NO. \_\_\_\_\_  
 STATE OF COLORADO

**BOHLER ENGINEERING**  
 LICENSED PROFESSIONAL ENGINEER  
 LICENSE NO. \_\_\_\_\_  
 STATE OF COLORADO

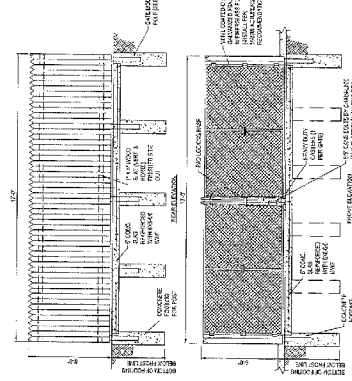
**BOHLER ENGINEERING**  
 LICENSED PROFESSIONAL ENGINEER  
 LICENSE NO. \_\_\_\_\_  
 STATE OF COLORADO

**BOHLER ENGINEERING**  
 1000 WEST 10TH AVENUE  
 SUITE 100  
 DENVER, CO 80202  
 (303) 733-1100  
 www.bohler-engineering.com

**BOHLER ENGINEERING**  
 LICENSED PROFESSIONAL ENGINEER  
 LICENSE NO. \_\_\_\_\_  
 STATE OF COLORADO

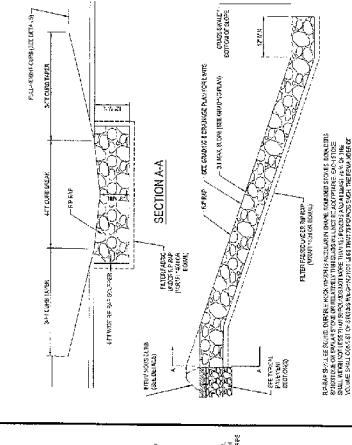
**BOHLER ENGINEERING**  
 LICENSED PROFESSIONAL ENGINEER  
 LICENSE NO. \_\_\_\_\_  
 STATE OF COLORADO

**BOHLER ENGINEERING**  
 LICENSED PROFESSIONAL ENGINEER  
 LICENSE NO. \_\_\_\_\_  
 STATE OF COLORADO



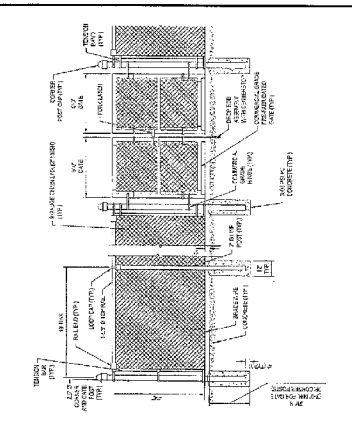
**STOCKADE FENCE TRASH ENCLOSURE DETAIL**

NOTES:  
 1. ENCLOSURE SHALL BE CONSTRUCTED OF 4" X 4" POSTS AND 2" X 4" RAILS.  
 2. ENCLOSURE SHALL BE 6' HIGH.  
 3. ENCLOSURE SHALL BE 10' WIDE.  
 4. ENCLOSURE SHALL BE 10' DEEP.  
 5. ENCLOSURE SHALL BE 10' LONG.



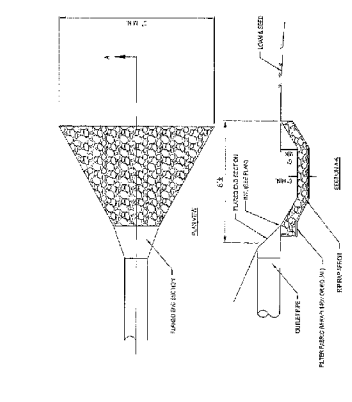
**RIP RAP CURB INLET**

NOTES:  
 1. INLET SHALL BE 4' WIDE.  
 2. INLET SHALL BE 4' DEEP.  
 3. INLET SHALL BE 4' LONG.



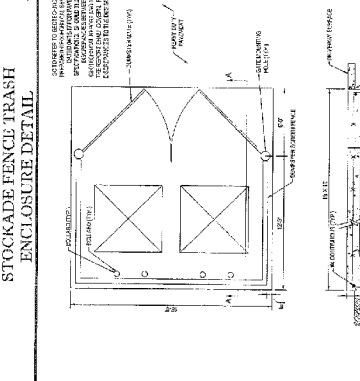
**4' HIGH CHAIN LINK FENCE WITH DOUBLE GATE DETAIL**

NOTES:  
 1. FENCE SHALL BE 4' HIGH.  
 2. FENCE SHALL BE 4' WIDE.  
 3. FENCE SHALL BE 4' DEEP.



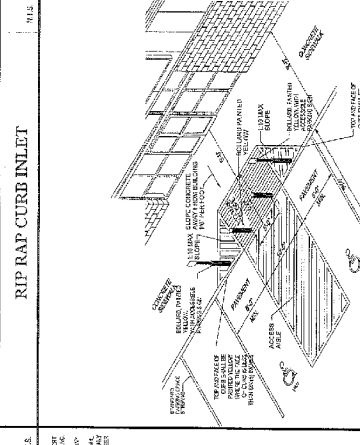
**FLARED END SECTION WITH RIP RAP APRON DETAIL**

NOTES:  
 1. APRON SHALL BE 4' WIDE.  
 2. APRON SHALL BE 4' DEEP.  
 3. APRON SHALL BE 4' LONG.



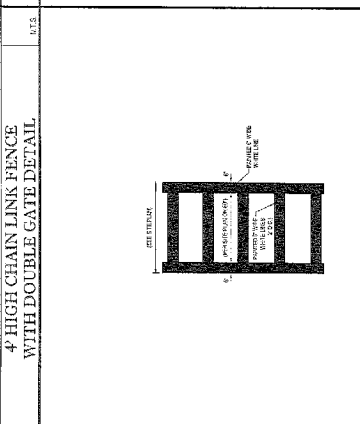
**DUMPSTER PAD WITH SCREENING**

NOTES:  
 1. PAD SHALL BE 4' WIDE.  
 2. PAD SHALL BE 4' DEEP.  
 3. PAD SHALL BE 4' LONG.



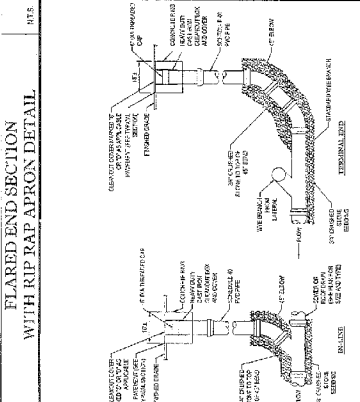
**ACCESSIBLE PARKING AND ACCESS AISLE DETAIL**

NOTES:  
 1. PARKING SPACE SHALL BE 8' WIDE.  
 2. PARKING SPACE SHALL BE 8' DEEP.  
 3. PARKING SPACE SHALL BE 8' LONG.



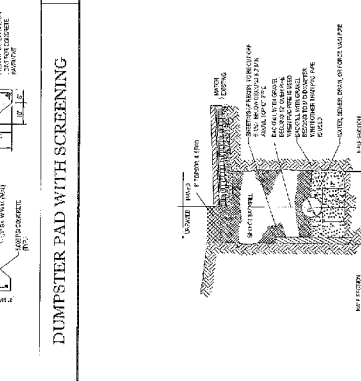
**CROSSWALK DETAIL**

NOTES:  
 1. CROSSWALK SHALL BE 4' WIDE.  
 2. CROSSWALK SHALL BE 4' DEEP.  
 3. CROSSWALK SHALL BE 4' LONG.



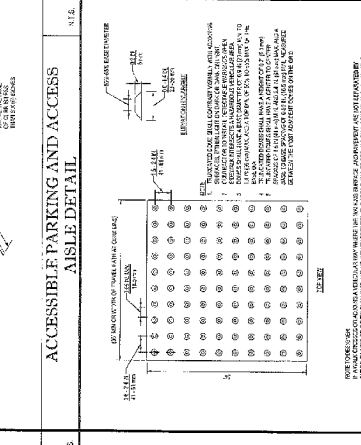
**CLEANOUT DETAIL**

NOTES:  
 1. CLEANOUT SHALL BE 4' WIDE.  
 2. CLEANOUT SHALL BE 4' DEEP.  
 3. CLEANOUT SHALL BE 4' LONG.



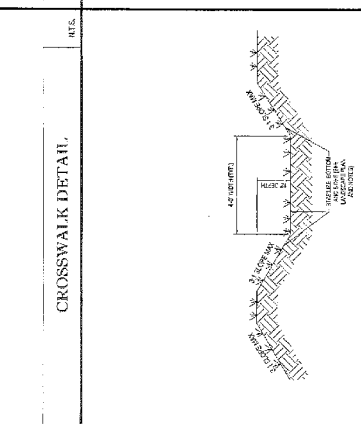
**TYPICAL UTILITY TRENCH**

NOTES:  
 1. TRENCH SHALL BE 4' WIDE.  
 2. TRENCH SHALL BE 4' DEEP.  
 3. TRENCH SHALL BE 4' LONG.



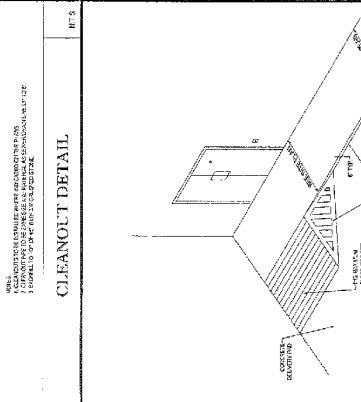
**DETECTIVE WARNING PANEL**

NOTES:  
 1. PANEL SHALL BE 4' WIDE.  
 2. PANEL SHALL BE 4' DEEP.  
 3. PANEL SHALL BE 4' LONG.



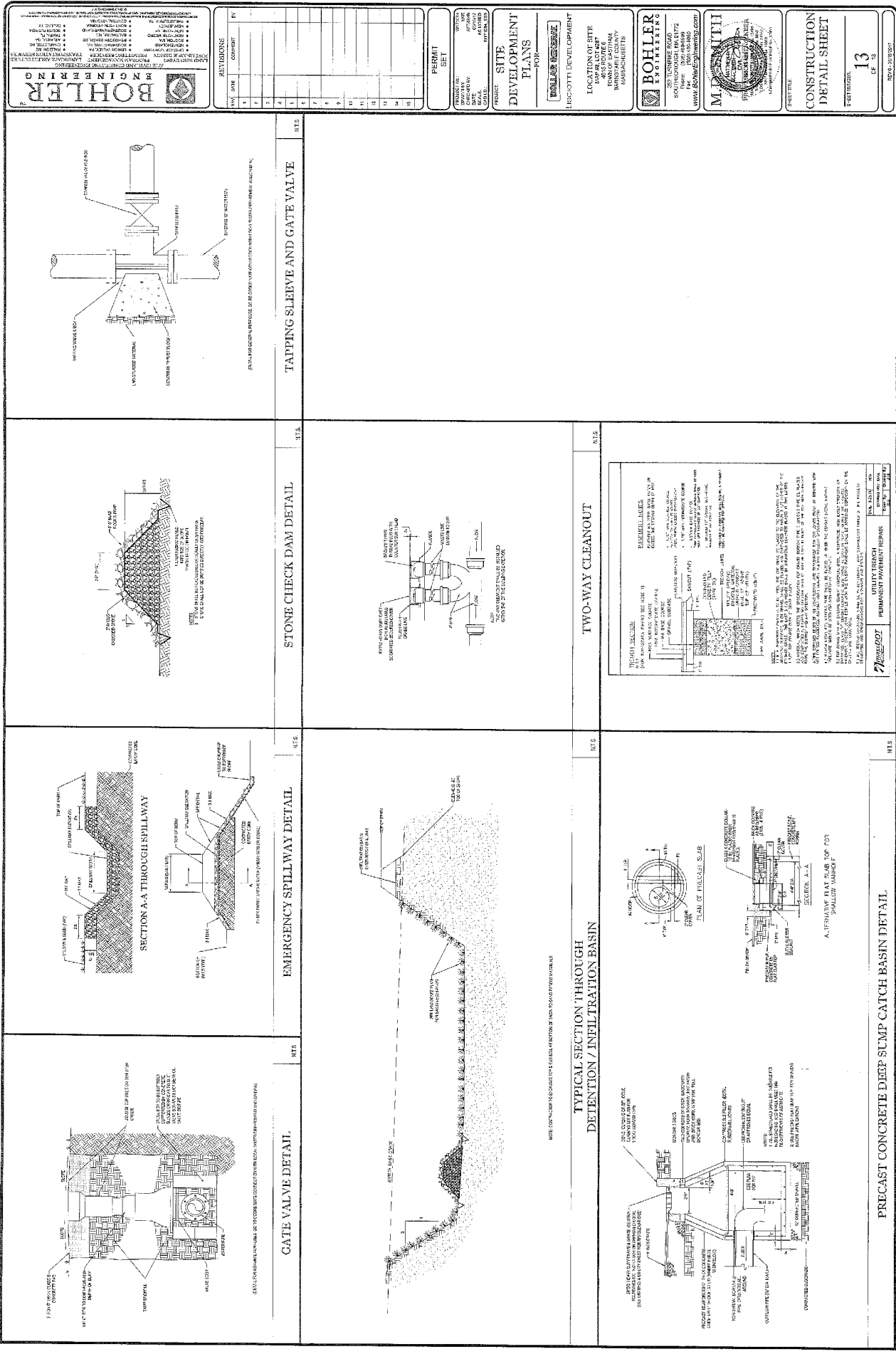
**TYPICAL GRASS SWALE SECTION**

NOTES:  
 1. SWALE SHALL BE 4' WIDE.  
 2. SWALE SHALL BE 4' DEEP.  
 3. SWALE SHALL BE 4' LONG.

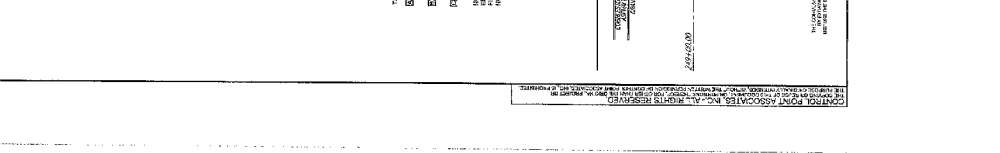


**TYPICAL SERVICE RAMP DETAIL**

NOTES:  
 1. RAMP SHALL BE 4' WIDE.  
 2. RAMP SHALL BE 4' DEEP.  
 3. RAMP SHALL BE 4' LONG.





[illegible]

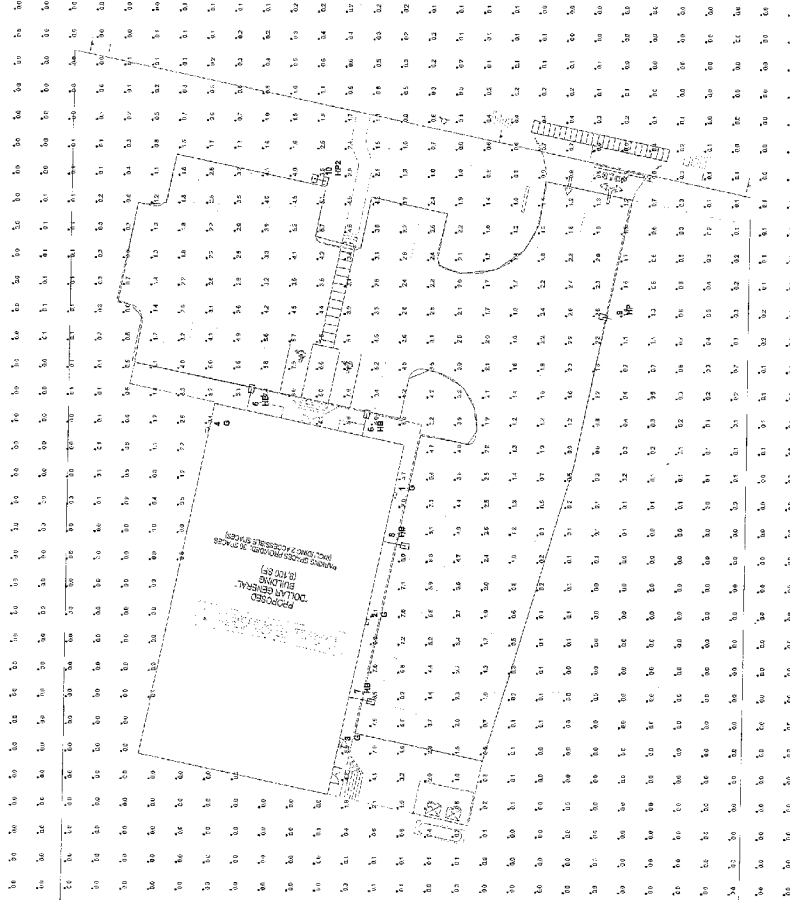
TECHLIGHT  
2707 SATSUMA  
DALLAS, TX  
75229

Project:  
DOLLAR  
GENERAL  
EASTHAM,  
MA

Notes:

FILE:  
dg-eastham2.ag

Date:  
5-12-17



Footcandle Summary		Type		Qty		Avg		Min		Max		Footcandle	
Footcandle	Footcandle	Footcandle	Footcandle	Footcandle	Footcandle	Footcandle	Footcandle	Footcandle	Footcandle	Footcandle	Footcandle	Footcandle	Footcandle
1	0	1	0	1	0	1	0	1	0	1	0	1	0
2	0	2	0	2	0	2	0	2	0	2	0	2	0
3	0	3	0	3	0	3	0	3	0	3	0	3	0
4	0	4	0	4	0	4	0	4	0	4	0	4	0
5	0	5	0	5	0	5	0	5	0	5	0	5	0
6	0	6	0	6	0	6	0	6	0	6	0	6	0
7	0	7	0	7	0	7	0	7	0	7	0	7	0
8	0	8	0	8	0	8	0	8	0	8	0	8	0
9	0	9	0	9	0	9	0	9	0	9	0	9	0
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100	0	100	0	100	0	100	0	100	0	100	0	100	0

SCALE  
0 20 40 60

- DUE TO CHANGING LIGHTING ORDINANCES IT IS THE CONTRACTORS RESPONSIBILITY TO SUBMIT THE SITE PHOTOMETRICS AND LUMINAIRE SPECS TO THE LOCAL INSPECTOR BEFORE ORDERING TO ENSURE THIS PLAN COMPLIES WITH LOCAL LIGHTING ORDINANCES.  
- THIS LIGHTING DESIGN IS BASED ON INFORMATION SUPPLIED BY OTHERS. CHANGES IN ELECTRICAL SUPPLY, AREA GEOMETRY AND OBJECTS WITHIN THE LIGHTED AREA MAY PRODUCE ILLUMINATION VALUES DIFFERENT FROM THE PREDICTED RESULTS SHOWN ON THIS LAYOUT.  
- THIS LAYOUT IS BASED ON JES FILES THAT WERE LAB TESTED OR COMPUTER GENERATED. ACTUAL RESULTS MAY VARY.