

# **SITE DEVELOPMENT PLAN**

## **SOLAR ENERGY FIELD**

### **BOUTILIER ROAD**

#### **IN**

## **LEICESTER, MASSACHUSETTS**

### **JUNE 14, 2016**

**REVISIONS THROUGH AUGUST 1, 2016**

#### **CONTRACTOR**

PRO-TECH ENERGY SOLUTIONS, LLC  
MICHAEL ALADICH  
215 EXECUTIVE DRIVE  
MOORESTOWN, NEW JERSEY 08057  
(856) 437-6220

#### **APPLICANT:**

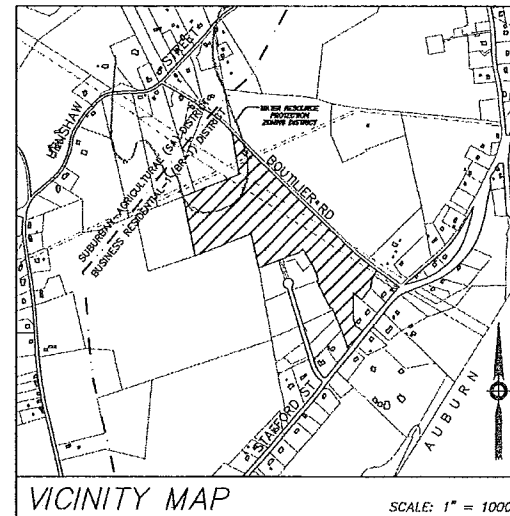
ZPT ENERGY SOLUTIONS, LLC  
BRENDAN GOVE, MANAGER  
309 EAST COUNTY ROAD  
RUTLAND, MASSACHUSETTS 01543  
TEL: (774) 696-8729

#### **OWNER**

THE LAFLASH FAMILY REVOCABLE TRUST 2015  
25 THOMPSON POND ROAD  
SPENCER, MA 01562

#### **CIVIL ENGINEER & LAND SURVEYOR:**

HANNIGAN ENGINEERING, INC.  
8 MONUMENT SQUARE  
LEOMINSTER, MASSACHUSETTS 01453  
TEL: (978) 534-1234

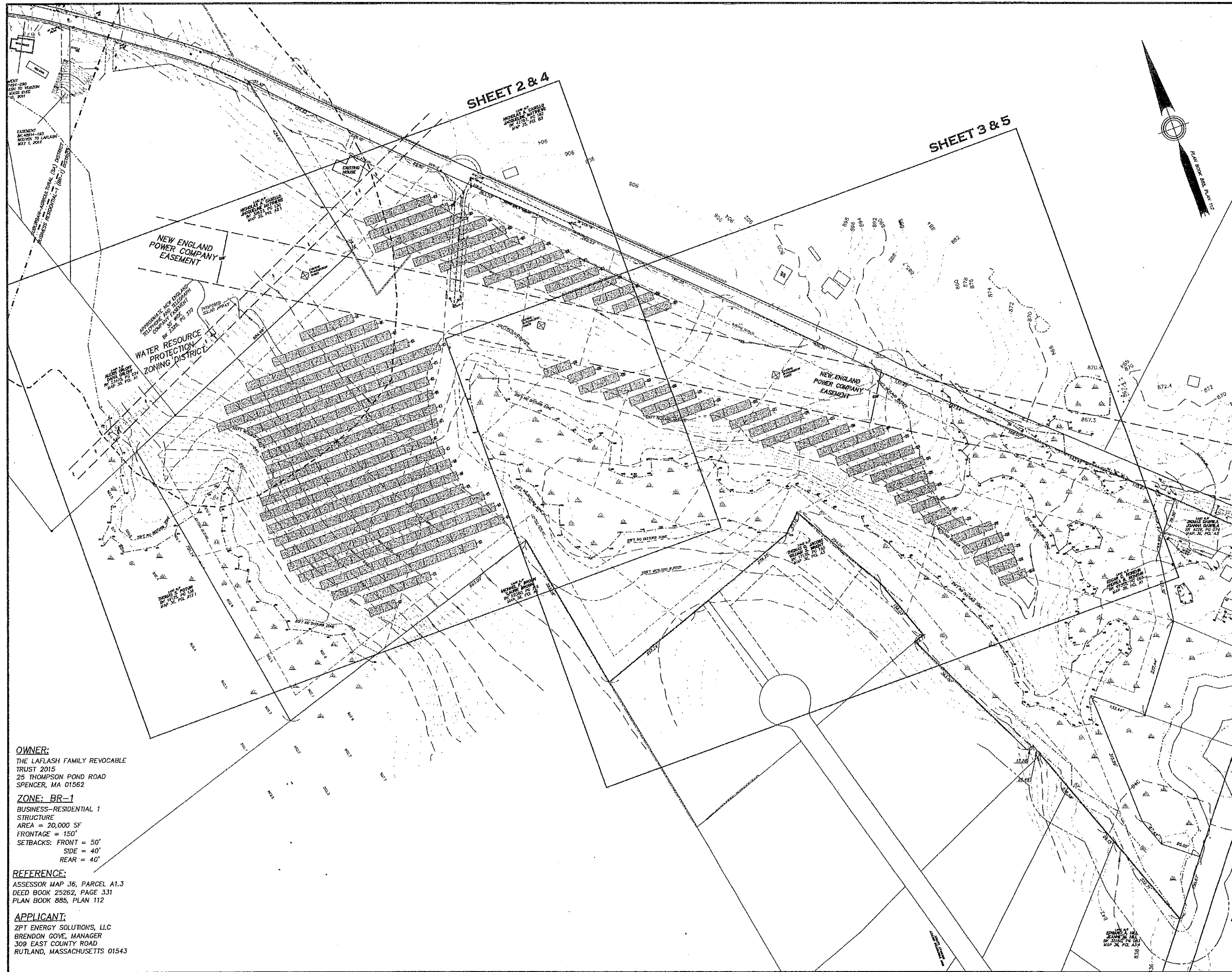


#### **PLAN INDEX**

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SHEETS	2-3	EXISTING CONDITIONS
SHEETS	4-5	SITE DEVELOPMENT PLAN
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**PERMITTING SET**

NO.	DATE	REVISIONS	BY
1	08/01/2016	PEER REVIEW COMMENTS	CMA



# PROJECT INFORMATION

LAND INFORMATION	
MAP/PARCEL:	36/A1.3
DEED BOOK/PAGE:	25262/331
PROPOSED FRONTAGE:	150.67 FT (STAFFORD STREET)
PROPOSED AREA:	39.05 ACRES
ZONING INFORMATION	
ZONING DISTRICT:	BUSINESS-RESIDENTIAL 1
DIMENSIONAL REQUIREMENTS:	
MINIMUM AREA:	20,000 SF
MINIMUM FRONTAGE:	150 FEET
MINIMUM SETBACKS:	
FRONT YARD:	50 FT
SIDE YARD:	40 FT
REAR YARD:	40 FT

- GENERAL NOTES:**
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  - LOCATION OF ALL UTILITIES ARE APPROXIMATE AS SHOWN AND BASED UPON VISIBLE STRUCTURES AT THE TIME OF THE FIELD SURVEY. LOCATION OF EXISTING UTILITIES AND SUBSURFACE STRUCTURES, WHETHER OR NOT SHOWN ON THESE PLANS, SHALL BE DETERMINED BY THE CONTRACTOR, MARKED IN THE FIELD, AND REVIEWED BY THE ENGINEER PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR SHALL BE AWARE OF THE OBLIGATION TO ALL UTILITY COMPANIES AND AGENCY AS WELL AS DIG-SAFE PRIOR TO EXCAVATION. (SEE NOTE)
  - NOTIFICATION REQUIREMENTS SHOWN ON THIS PLAN SHALL NOT RELIEVE THE CONTRACTOR OF ANY OTHER REQUIREMENTS WHICH MAY EXIST UNDER LOCAL, STATE, OR FEDERAL JURISDICTION TO WHICH THE CONTRACTOR IS OBLIGATED.
  - RELOCATION OF AND/OR CONNECTION TO EXISTING UTILITIES SHALL BE PERFORMED IN ACCORDANCE WITH PROVISIONS OF THE APPROPRIATE UTILITY COMPANY AND/OR REGULATORY AGENCY.
  - UNLESS OTHERWISE SPECIFIED, ALL MATERIALS AND WORKMANSHIP SHALL CONFORM WITH THE REQUIREMENTS OF THE TOWN OF LEICESTER AND THE MASS DOT SPECIFICATIONS OF HIGHWAYS AND BRIDGES.
  - ALL SLOPES UNLESS OTHERWISE SPECIFIED, SHALL BE LOADED AND SEEDING FOR STABILIZATION.
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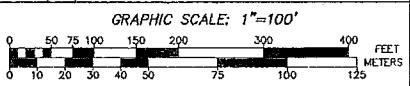
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**HANNIGAN ENGINEERING, INC.**  
CIVIL ENGINEERS & LAND SURVEYORS

8 MONUMENT SQUARE (978) 534-1234 (T)  
LEOMINSTER, MASSACHUSETTS 01453 (978) 534-6060 (F)  
WWW.HANNIGANENGINEERING.COM

## SHEET INDEX PLAN IN LEICESTER, MASSACHUSETTS

PREPARED FOR:  
PRO-TECH ENERGY SOLUTIONS  
MICHAEL ALADICH  
215 EXECUTIVE DRIVE  
MOORESTOWN, NEW JERSEY 08057  
TEL: (856) 437-6220



CALC:	CMA/WDH	DRWN:	CMA/WDH	SCALE:	1"=100'
CHKD:	WDH	APPD:	WDH	DATE:	JUN 14, 2016
SRV:	JEF-PJB	FB:	E.2570042818	JOB NO:	2570
TAB:	1-OSITE	SHEET	1 OF 8	PLAN NO:	C-12-22

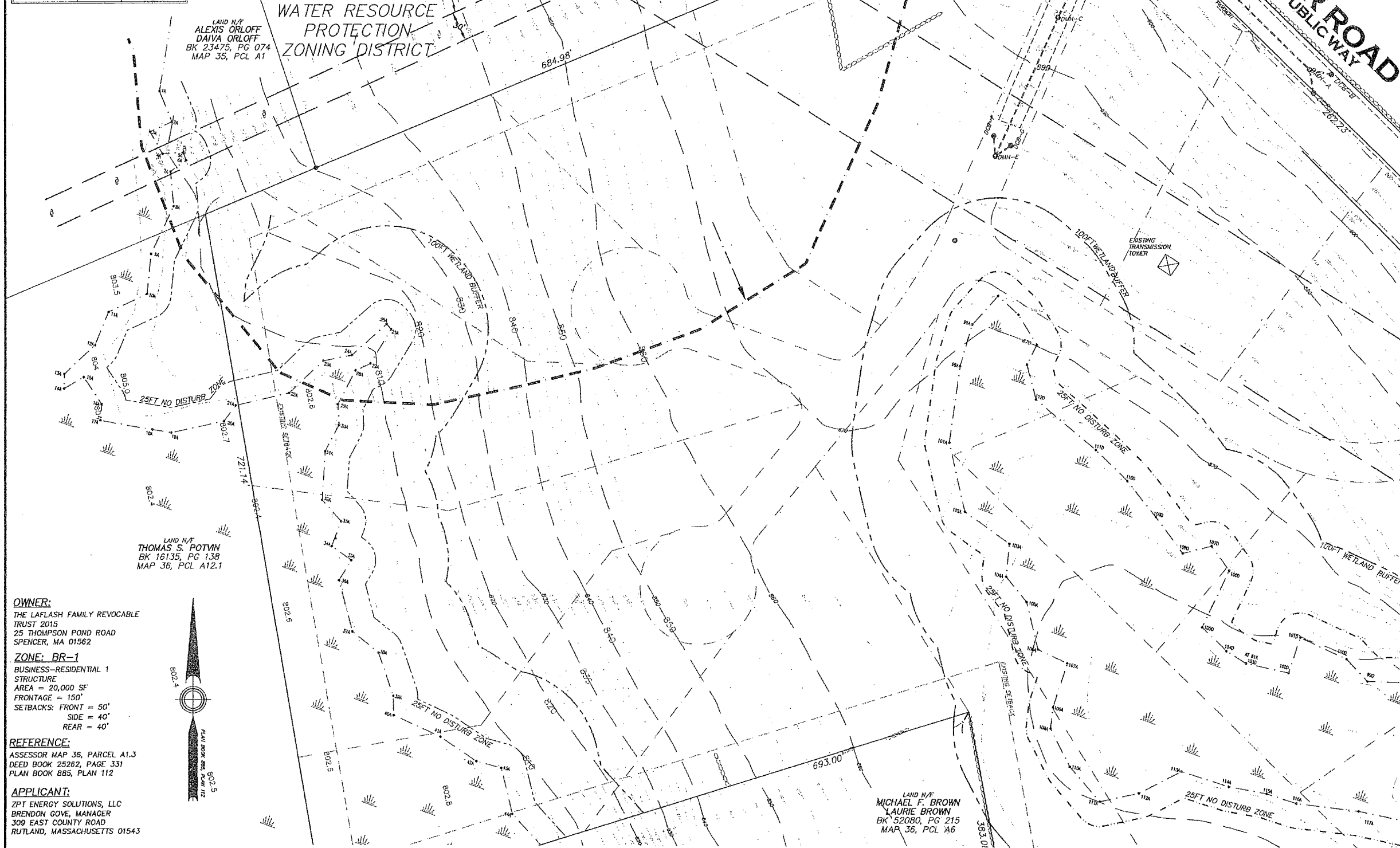
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SPENCER, MA 01562

**ZONE: BR-1**  
BUSINESS-RESIDENTIAL 1  
STRUCTURE  
AREA = 20,000 SF  
FRONTAGE = 150'  
SETBACKS: FRONT = 50'  
SIDE = 40'  
REAR = 40'

**REFERENCE:**  
ASSESSOR MAP 36, PARCEL A1.3  
DEED BOOK 25262, PAGE 331  
PLAN BOOK 885, PLAN 112

**APPLICANT:**  
ZPT ENERGY SOLUTIONS, LLC  
BRENDON GOVE, MANAGER  
309 EAST COUNTY ROAD  
RUTLAND, MASSACHUSETTS 01543

SCHEDULE OF DRAINAGE STRUCTURES & ELEVATIONS			SCHEDULE OF DRAINAGE STRUCTURES & ELEVATIONS		
FROM	PIPE	TO	FROM	PIPE	TO
DCB-A RM=801.52 WM=802.32	12" HDPE L=15 FT S=-0.000 F/F	DAN-000(P20) RM=801.52 WM=802.32 WM=802.32 (OUT)	DAN-000(P20) RM=801.52 WM=802.32 WM=802.32 (OUT)	12" HDPE L=15 FT S=-0.000 F/F	DAN-000(P20) RM=801.52 WM=802.32 WM=802.32 (OUT)
DCB-B RM=801.52 WM=802.32	12" HDPE L=15 FT S=-0.000 F/F	DAN-000(P20) RM=801.52 WM=802.32 WM=802.32 (OUT)	DAN-000(P20) RM=801.52 WM=802.32 WM=802.32 (OUT)	12" HDPE L=15 FT S=-0.000 F/F	DAN-000(P20) RM=801.52 WM=802.32 WM=802.32 (OUT)
DCB-C RM=801.52 WM=802.32	12" HDPE L=15 FT S=-0.000 F/F	DAN-000(P20) RM=801.52 WM=802.32 WM=802.32 (OUT)	DAN-000(P20) RM=801.52 WM=802.32 WM=802.32 (OUT)	12" HDPE L=15 FT S=-0.000 F/F	DAN-000(P20) RM=801.52 WM=802.32 WM=802.32 (OUT)
DCB-D RM=801.52 WM=802.32	12" HDPE L=15 FT S=-0.000 F/F	DAN-000(P20) RM=801.52 WM=802.32 WM=802.32 (OUT)	DAN-000(P20) RM=801.52 WM=802.32 WM=802.32 (OUT)	12" HDPE L=15 FT S=-0.000 F/F	DAN-000(P20) RM=801.52 WM=802.32 WM=802.32 (OUT)
DCB-E RM=801.52 WM=802.32	12" HDPE L=15 FT S=-0.000 F/F	DAN-000(P20) RM=801.52 WM=802.32 WM=802.32 (OUT)	DAN-000(P20) RM=801.52 WM=802.32 WM=802.32 (OUT)	12" HDPE L=15 FT S=-0.000 F/F	DAN-000(P20) RM=801.52 WM=802.32 WM=802.32 (OUT)
DCB-F RM=801.52 WM=802.32	12" HDPE L=15 FT S=-0.000 F/F	DAN-000(P20) RM=801.52 WM=802.32 WM=802.32 (OUT)	DAN-000(P20) RM=801.52 WM=802.32 WM=802.32 (OUT)	12" HDPE L=15 FT S=-0.000 F/F	DAN-000(P20) RM=801.52 WM=802.32 WM=802.32 (OUT)
DCB-G RM=801.52 WM=802.32	12" HDPE L=15 FT S=-0.000 F/F	DAN-000(P20) RM=801.52 WM=802.32 WM=802.32 (OUT)	DAN-000(P20) RM=801.52 WM=802.32 WM=802.32 (OUT)	12" HDPE L=15 FT S=-0.000 F/F	DAN-000(P20) RM=801.52 WM=802.32 WM=802.32 (OUT)
DCB-H RM=801.52 WM=802.32	12" HDPE L=15 FT S=-0.000 F/F	DAN-000(P20) RM=801.52 WM=802.32 WM=802.32 (OUT)	DAN-000(P20) RM=801.52 WM=802.32 WM=802.32 (OUT)	12" HDPE L=15 FT S=-0.000 F/F	DAN-000(P20) RM=801.52 WM=802.32 WM=802.32 (OUT)
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 DEED BOOK/PAGE: 25262/131  
 PROPOSED FRONTAGE: 150.67 FT (STAFFORD STREET)  
 PROPOSED AREA: 39.05 ACRES±

**ZONING INFORMATION**  
 ZONING DISTRICT: BUSINESS-RESIDENTIAL 1  
 MINIMUM AREA: 20,000 SF  
 MINIMUM FRONTAGE: 150 FEET  
 MINIMUM SETBACKS:  
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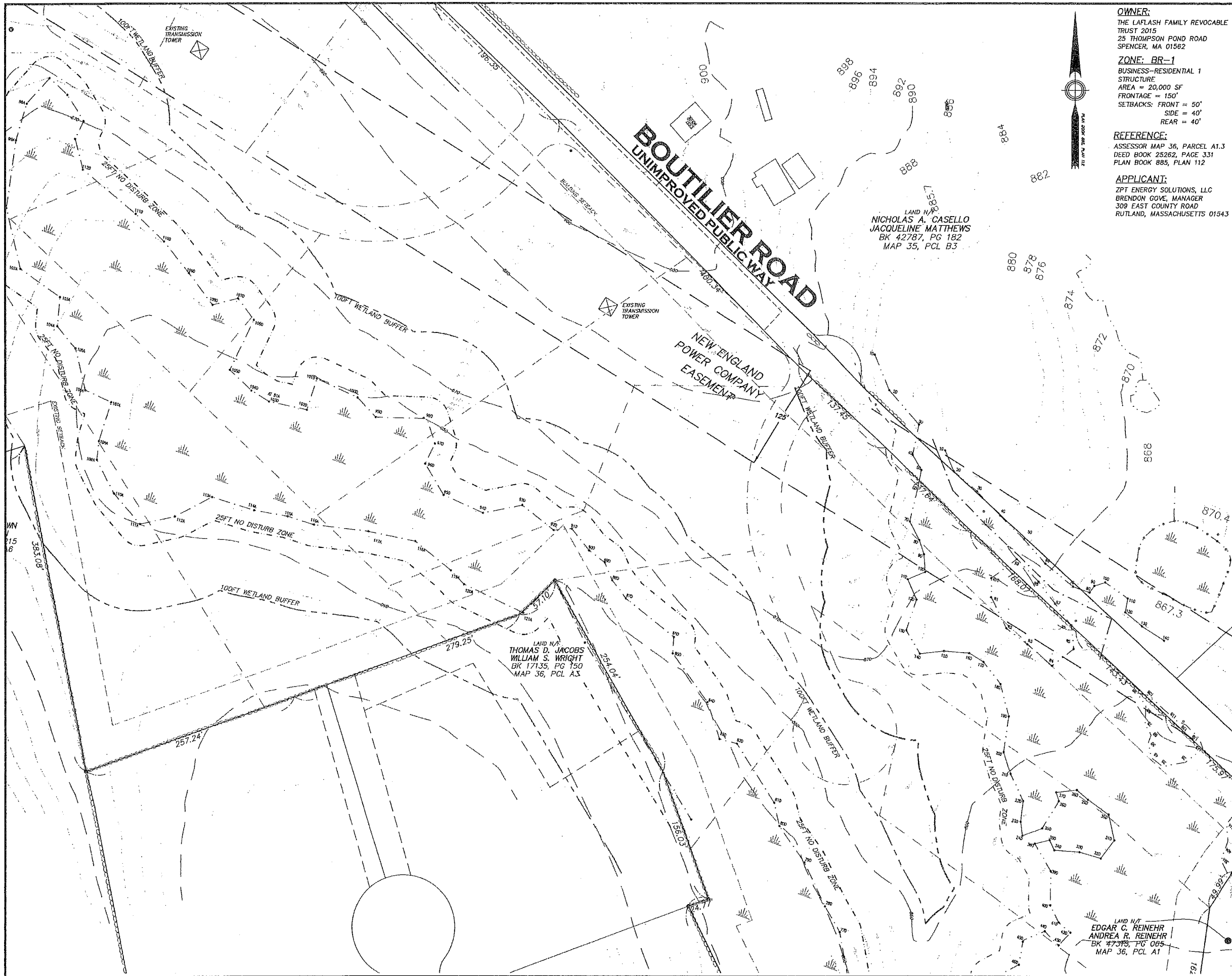
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 WWW.HANNIGANENGINEERING.COM

**EXISTING CONDITION PLAN**  
 IN  
 LEICESTER, MASSACHUSETTS

**PREPARED FOR:**  
 PRO-TECH ENERGY SOLUTIONS  
 MICHAEL ALADICH  
 215 EXECUTIVE DRIVE  
 MOORESTOWN, NEW JERSEY 08057  
 TEL: (856) 437-6220

**GRAPHIC SCALE: 1"=50'**  
 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200  
 FEET  
 0 5 10 15 20 25 30 35 40 45 50 55 60  
 METERS

CALC: CMA/WDH	DRWN: CMA/WDH	SCALE: 1"=50'
CHKD: WDH	APPD: WDH	DATE: JUN 14, 2016
SRV: JEF-PJB	FB: E.2570042816	JOB NO: 2570
TAB: 2-EXCOND	SHEET 2 OF 8	PLAN NO: C-12-22



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### EXISTING CONDITIONS PLAN

IN  
LEICESTER, MASSACHUSETTS

PREPARED FOR:  
PRO-TECH ENERGY SOLUTIONS  
MICHAEL ALADICH  
215 EXECUTIVE DRIVE  
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GRAPHIC SCALE: 1"=50'  
0 10 20 30 40 50 75 100 150 200 FEET  
0 5 10 15 20 30 40 50 60 METERS

CALC:	CMA/WDH	DRWN:	CMA/WDH	SCALE:	1"=50'
CHKD:	WDH	APPD:	WDH	DATE:	JUN 14, 2016
SRV:	JEF-PJB	FB:	E.2570042816	JOB NO:	2570
TAB:	3-EXCOND	SHEET	3 OF 8	PLAN NO:	C-12-22



SCHEDULE OF PROPOSED DRAINAGE STRUCTURES & ELEVATIONS		
FROM	PIPE	TO
QWH-C (WCU) STRUCTURE TO BE FITTED WITH STORAGE/450 UNIT INV=888.3± (OUT)	12" HDPE L=189 FT S=0.049 F/F	FE#3 ELEV=879.0±
DS#1 RIM=809.7± THROAT=808.5± (S) SUBDRAIN=808.4± INV=808.3±-OUT	12" RCP L=29 FT S=0.010 F/F	FE#2 ELEV=806.0±



# PROJECT INFORMATION

<b>LAND INFORMATION</b>	
MAP/PARCEL:	36/A1.3
DEED BOOK/PAGE:	25262/331
PROPOSED FRONTAGE:	150.67 FT (STAFFORD STREET)
PROPOSED AREA:	38.05 ACRES±
<b>ZONING INFORMATION</b>	
ZONING DISTRICT:	BUSINESS-RESIDENTIAL 1
<b>MINIMUM REQUIREMENTS:</b>	
MINIMUM AREA:	20,000 SF
MINIMUM FRONTAGE:	150 FEET
MINIMUM SETBACKS:	
FRONT YARD:	50 FT
SIDE YARD:	40 FT
REAR YARD:	40 FT
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13. AREAS OF FILL TO BE COMPACTED TO A MINIMUM 95% DRY DENSITY IN AREAS WITHIN ROADWAYS AND UTILITY EASEMENTS. OTHER AREAS OF FILL TO BE COMPACTED TO A MINIMUM 90% DRY DENSITY. ALL FILL MATERIALS ARE TO BE CLEAN FILL, FREE OF DELETERIOUS MATERIALS AND DEBRIS.	
14. THE AREA PROPOSED FOR DEVELOPMENT IS NOT WITHIN A 100 YEAR FLOOD PLAIN, ZONE A, PER F.E.M.A. FIRM MAP NO. 25027C0784E, DATED: JULY 4, 2011. COMPLIANCE WITH APPLICABLE REGULATIONS IS REQUIRED.	
15. ALL REINFORCED CONCRETE PIPE TO BE CLASS B UNLESS OTHERWISE NOTED.	
16. PRE-CONSTRUCTION CONFERENCE SHALL BE HELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.	
17. ALL UTILITIES ARE TO BE INSTALLED BY A LICENSED UTILITY CONTRACTOR LICENSED BY THE TOWN OF LEICESTER.	

1	08/01/2016	PEER REVIEW COMMENTS	CMA
NO.	DATE	REVISIONS	BY

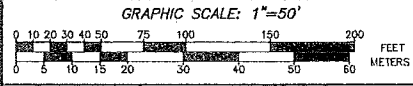


**HANNIGAN ENGINEERING, INC.**  
CIVIL ENGINEERS & LAND SURVEYORS

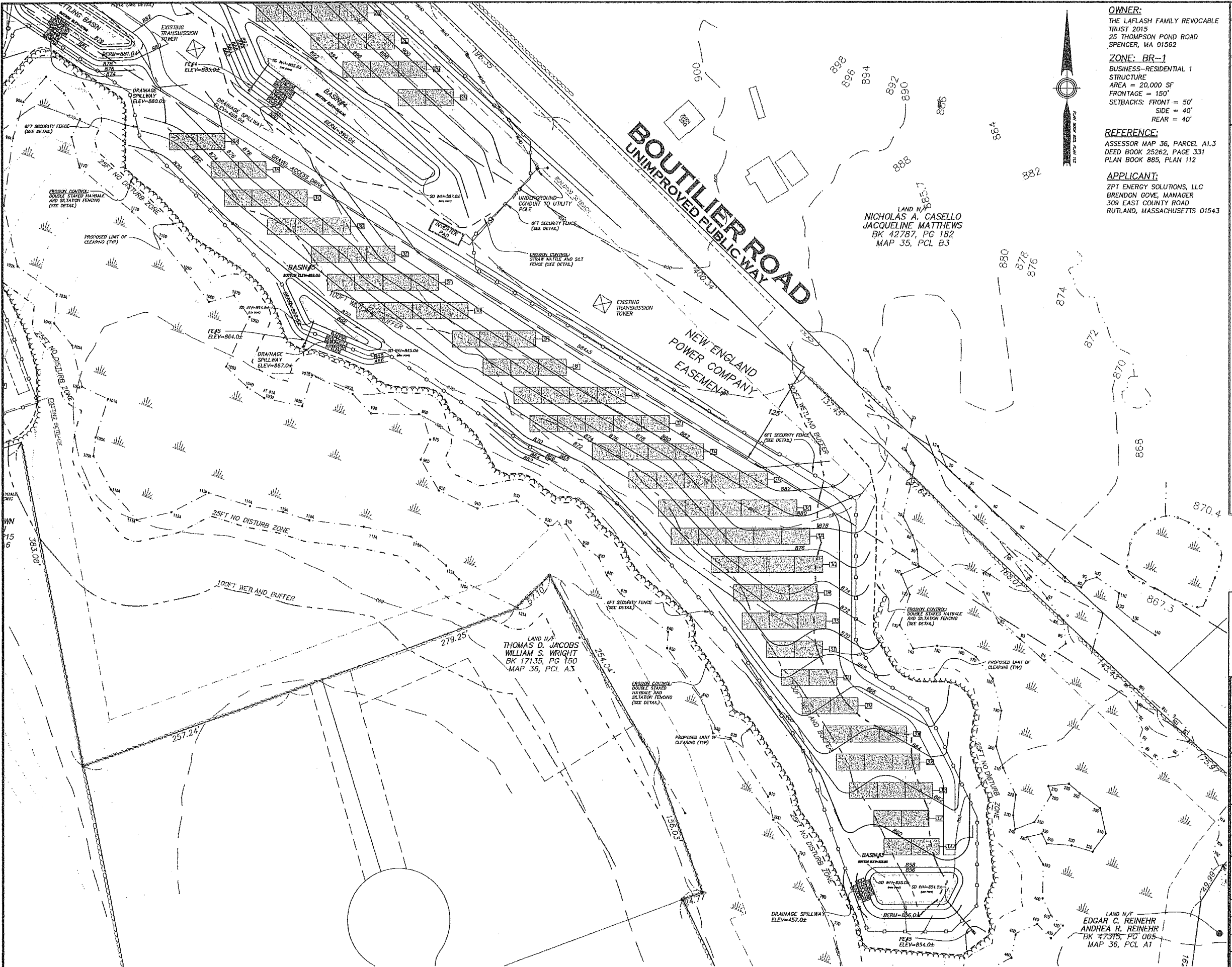
8 MONUMENT SQUARE (978) 534-1234 (T)  
LEICESTER, MASSACHUSETTS 01453 (978) 534-6060 (F)  
WWW.HANNIGANENGINEERING.COM

## SITE DEVELOPMENT PLAN IN LEICESTER, MASSACHUSETTS

PREPARED FOR:  
PRO-TECH ENERGY SOLUTIONS  
MICHAEL ALADICH  
215 EXECUTIVE DRIVE  
MOORESTOWN, NEW JERSEY 0807  
TEL: (856) 437-6220



CALC: CMA/WDH	DRWN: CMA/WDH	SCALE: 1"=50'
CHKD: WDH	APPD: WDH	DATE: JUN 14, 2016
SRV: JEF-PJB	FB: E.2570042816	JOB NO: 2570
TAB: 4-SITE	SHEET 4 OF 8	PLAN NO:C-12-22



**OWNER:**  
THE LAFASH FAMILY REVOCABLE TRUST 2015  
25 THOMPSON POND ROAD  
SPENCER, MA 01562

**ZONE: BR-1**  
BUSINESS-RESIDENTIAL 1  
STRUCTURE  
AREA = 20,000 SF  
FRONTAGE = 150'  
SETBACKS: FRONT = 50'  
SIDE = 40'  
REAR = 40'

**REFERENCE:**  
ASSESSOR MAP 36, PARCEL A1.3  
DEED BOOK 25262, PAGE 331  
PLAN BOOK 885, PLAN 112

**APPLICANT:**  
ZPT ENERGY SOLUTIONS, LLC  
BRENDON GOVE, MANAGER  
309 EAST COUNTY ROAD  
RUTLAND, MASSACHUSETTS 01543

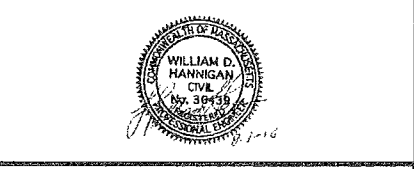
**PROJECT INFORMATION**

**LAND INFORMATION**  
MAP/PARCEL: 36/A1.3  
DEED BOOK/PAGE: 25262/331  
PROPOSED FRONTAGE: 150.67 FT (STAFFORD STREET)  
PROPOSED AREA: 39.05 ACRES

**ZONING INFORMATION**  
ZONING DISTRICT: BUSINESS-RESIDENTIAL 1  
DIMENSIONAL REQUIREMENTS:  
MINIMUM AREA: 20,000 SF  
MINIMUM FRONTAGE: 150 FEET  
MINIMUM SETBACKS:  
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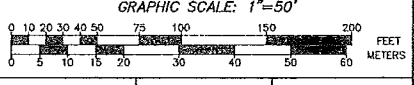
NO.	DATE	PEER REVIEW COMMENTS	CMA
1	08/01/2016	PEER REVIEW COMMENTS	CMA



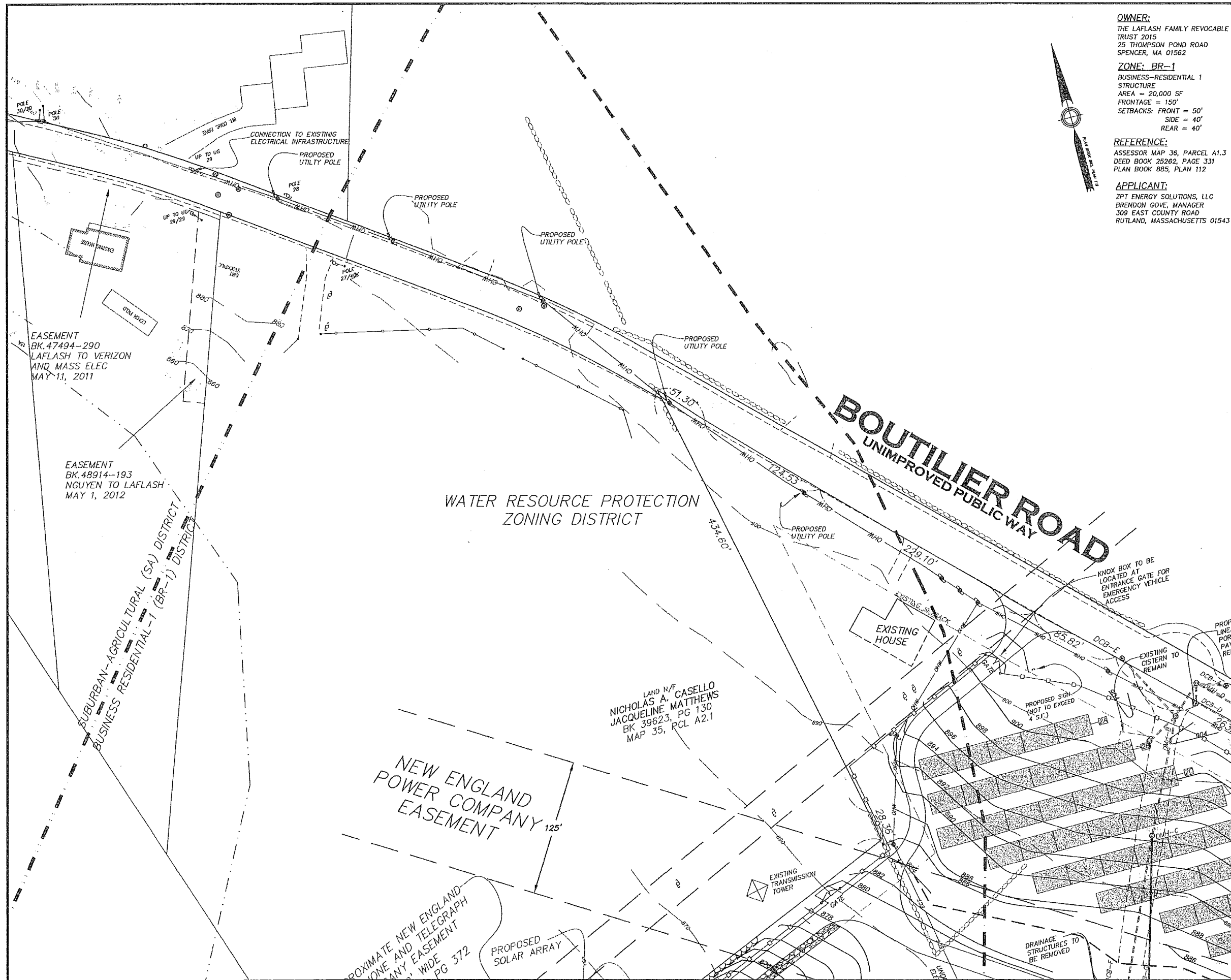
**HANNIGAN ENGINEERING, INC.**  
CIVIL ENGINEERS & LAND SURVEYORS  
8 MONUMENT SQUARE (978) 534-1234 (T)  
LEOMINSTER, MASSACHUSETTS 01453 (978) 534-6060 (F)  
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**SITE DEVELOPMENT PLAN**  
IN  
**LEICESTER, MASSACHUSETTS**

PREPARED FOR:  
PRO-TECH ENERGY SOLUTIONS  
MICHAEL ALADICH  
215 EXECUTIVE DRIVE  
MOORESTOWN, NEW JERSEY  
TEL: (856) 437-6220



CALC: CMA/WDH	DRWN: CMA/WDH	SCALE: 1"=50'
CHKD: WDH	APPD: WDH	DATE: JUN 14, 2016
SRV: JEF-PJB	FB: E.2570042816	JOB NO: 2570
TAB: 5-SITE	SHEET 5 OF 8	PLAN NO: c-12-22



**OWNER:**  
THE LAFLASH FAMILY REVOCABLE TRUST 2015  
25 THOMPSON POND ROAD  
SPENCER, MA 01562

**ZONE: BR-1**  
BUSINESS-RESIDENTIAL 1  
STRUCTURE  
AREA = 20,000 SF  
FRONTAGE = 150'  
SETBACKS: FRONT = 50'  
SIDE = 40'  
REAR = 40'

**REFERENCE:**  
ASSESSOR MAP 36, PARCEL A1.3  
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**APPLICANT:**  
ZPT ENERGY SOLUTIONS, LLC  
BRENDON GOVE, MANAGER  
309 EAST COUNTY ROAD  
RUTLAND, MASSACHUSETTS 01543

**PROJECT INFORMATION**

**LAND INFORMATION**  
MAP/PARCEL: 36/A1.3  
DEED BOOK/PAGE: 25262/331  
PROPOSED FRONTAGE: 150.67 FT (STAFFORD STREET)  
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8 MONUMENT SQUARE (978) 594-1234 (T)  
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WWW.HANNIGANENGINEERING.COM

**ELECTRICAL CONNECTION PLAN**  
IN  
LEICESTER, MASSACHUSETTS

PREPARED FOR:  
PRO-TECH ENERGY SOLUTIONS  
MICHAEL ALADICH  
215 EXECUTIVE DRIVE  
MOORESTOWN, NEW JERSEY 08057  
TEL: (856) 437-6220

GRAPHIC SCALE: 1"=40'  
0 10 20 30 40 50 100 150 FEET  
0 5 10 15 20 30 40 50 METERS

CALC: CMA/WDH DRWN: CMA/WDH SCALE: 1"=40'  
CHKD: WDH APPD: WDH DATE: JUN 14, 2016  
SRV: JEF-PJB FB: E.2570042816 JOB NO: 2570  
TAB: 6-ELEC SHEET 6 OF 8 PLAN NO: C-12-22



## EROSION & SEDIMENTATION CONTROL PLAN

### GENERAL:

1. THE PURPOSE OF THIS PLAN IS TO PRESENT A PREVENTIVE METHOD OF CONSTRUCTION TO MINIMIZE THE IMPACT OF THE CONSTRUCTION ACTIVITIES UPON WETLAND AND OTHER SENSITIVE AREAS. THE DATA CONTAINED ON THIS PLAN IS INTENDED TO SUPPLEMENT THE DEVELOPER OR CONTRACTOR'S EXPERTISE AND IS NOT MEANT TO CIRCUMVENT LOCAL DECISIONS REQUIRED BY A VARIETY OF FIELD CONDITIONS, INCLUDING WEATHER AND THE TYPE OF EQUIPMENT AVAILABLE TO THE CONTRACTOR.

2. THE CONTRACTOR IS TO BE AWARE OF THE REQUIREMENTS AND OBLIGATIONS TO COMPLY WITH CHAPTER 121, SECTION 40 OF THE MASSACHUSETTS GENERAL LAWS, OTHERWISE KNOWN AS THE WETLANDS PROTECTION ACT, AND ITS ASSOCIATED REGULATIONS (310 CMR 10.00). CERTAIN PERMITS IN THE FORM OF AN ORDER OF CONDITIONS, OR OTHER FORMAT, MAY BE REQUIRED FOR THE CONSTRUCTION AS DETICED ON THIS PLAN. THESE PERMITS SHALL BE REVIEWED AND ADHERED TO BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PROCESS. THE CONTRACTOR SHALL ALSO MAINTAIN COPIES OF ALL PERMITS ON SITE AT ALL TIMES.

3. IF CHANGES IN THE PROJECT ARE REQUIRED DUE TO FIELD CONDITIONS THE DEVELOPER/CONTRACTOR SHALL PROMPTLY NOTIFY THE ENGINEER FOR REVIEW OF THESE CONDITIONS. UPON REVIEW, AND PRIOR TO THE IMPLEMENTATION OF ANY CHANGES, THE CONTRACTOR AND THE ENGINEER SHALL MEET WITH THE APPROPRIATE LOCAL AND/OR STATE OFFICIAL, OR ITS AGENT, TO DETERMINE IF THE CHANGE REQUIRES MODIFICATION TO EXISTING APPROVED PERMITS.

4. ALTERATION AND/OR DESTRUCTION OF WETLAND AREAS WITHOUT PRIOR CONSENT OF THE CONSERVATION COMMISSION IS PROHIBITED. SILTATION PLUMES, KILLOT DISCHARGES, OR INADVERTANT ALTERATION SHALL BE CONSIDERED AS ACTIVITIES NOT PERMITTED BY THE ORDER AND SHALL BE REPORTED TO THE CONSERVATION COMMISSION ALONG WITH THE PROPOSED MITIGATIVE MEASURES.

5. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE EROSION AND SEDIMENT CONTROL BARRIER SHALL BE INSTALLED AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN THE EROSION CONTROL BARRIER UNTIL ALL WORK IS COMPLETE AND ALL AREAS HAVE BEEN STABILIZED. THE REMOVAL OF SEDIMENT CONTROL DEVICES SHALL BE ONLY UPON THE APPROVAL OF THE CONSERVATION COMMISSION.

6. EROSION AND SEDIMENTATION CONTROL DEVICES, SUCH AS CHECK DAMS, SEDIMENT BASINS, ETC. ARE TO BE INSTALLED AS SHOWN ON THE SITE DEVELOPMENT PLANS WITH ASSOCIATED DETAILS, AS APPROPRIATE.

7. CONSTRUCTION OPERATIONS SHALL NOT CAUSE NOTICEABLE SEDIMENTATION PLUMES TO OCCUR ON OR SURROUNDING THE PROJECT. SHOULD SEDIMENT EXTEND BEYOND THE EROSION CONTROL BARRIERS, THE CONTRACTOR SHALL STOP WORK AND INSTAL ADDITIONAL MITIGATION MEASURES TO PREVENT FURTHER SEDIMENTATION.

8. NO MATERIAL SUBJECT TO EROSION SHALL BE STOCKPILED OVERNIGHT WITHIN 100 FEET OF ANY WETLAND AREAS WITHOUT PROPER EROSION AND SEDIMENTATION DEVICES IN PLACE.

9. EQUIPMENT SHALL NOT BE PARKED WITHIN WETLAND OR BUFFER AREAS EXCEPT DURING ACTUAL OPERATIONS REQUIRING SAID EQUIPMENT.

10. ACCUMULATED SEDIMENT ALONG EROSION CONTROL BARRIERS SHALL BE PERIODICALLY REMOVED AND DISPOSED OF BY THE CONTRACTOR AS REQUIRED BY THE CONSERVATION COMMISSION OR AS DIRECTED BY THE ENGINEER.

### EROSION CONTROL METHODS:

1. IT IS OF GREAT IMPORTANCE THAT CONCENTRATION OF RUNOFF BE AVOIDED IN ORDER TO PREVENT THE TRANSPORT OF SEDIMENT.

2. THE PRIMARY EROSION CONTROL METHOD TO BE UTILIZED IS TO LIMIT THE AREA OF DISTURBANCE DURING CONSTRUCTION ACTIVITIES. THIS IS ACCOMPLISHED BY PROMPT STABILIZATION OF DISTURBED AREAS UPON COMPLETION OF SEQUENCES OF CONSTRUCTION.

3. EROSION AND SEDIMENT CONTROL DEVICES SUCH AS HAY BALES, SILT FENCES, DIVERSION DRENCHES, ETC. SHALL BE UTILIZED FOR THE PROTECTION OF THE AREAS BEYOND THE LIMIT OF CONSTRUCTION.

### DEMARCATION OF SENSITIVE AREAS:

1. IT IS RECOMMENDED THAT BARRIERS BE PLACED ON THE SITE TO CONTROL THE LIMITS OF THE DISTURBANCE. AS AN EXAMPLE, HAY BALE BARRIERS PROVIDE SUCH DEMARCATION DETAILS, AS APPROPRIATE, SUCH AS LOG BARRIERS, ROPE WITH FLAGGING, ETC. MAY BE UTILIZED.

2. CARE SHOULD BE TAKEN IN THE OPERATION OF EQUIPMENT, SUCH THAT ONLY THE MINIMUM AREA NEEDED TO BE ALTERED IS DISTURBED.

### ACCESS:

1. ACCESS TO THE SITE SHALL BE MADE IN THE AREA OF A PERMANENT DRIVEWAY OR ROADWAY UNLESS DOING SO WOULD RESULT IN A TRAFFIC HAZARD.

2. AN AREA OF CRUSHED STONE SHALL BE PLACED AT THE DRIVEWAY ENTRANCE TO INSURE THAT MUD IS NOT TRACKED ONTO THE EXISTING ROAD (SEE CONSTRUCTION ENTRANCE DETAIL). IF MUD IS INADVERTENTLY TRACKED ONTO THE ROAD, IT SHOULD BE PROMPTLY REMOVED.

3. LABORERS VEHICLES SHALL BE PARKED IN A DESIGNATED AREA AS TO MINIMIZE DISTURBED SURFACES AND TO INSURE THAT RUTS ARE NOT CREATED AND WHICH COULD CARRY WATER TO A WETLAND OR OTHER SENSITIVE AREA.

4. SUITABLE MEASURES SHALL BE TAKEN TO INSURE THAT LARGE DELIVERY TRUCKS SERVING THE SITE DO NOT DAMAGE TO AREAS OF EXISTING VEGETATION OR CAUSE DISTURBANCE TO STABILIZED AREAS.

### ORDERLY CONSTRUCTION PROCEDURES:

1. THE CONTRACTOR SHALL PERFORM SITE CONSTRUCTION IN A MANNER WHICH WILL INSURE THE STABILIZATION OF AREAS IN PROXIMITY OF OR TRIBUTARY TO WETLAND AREAS AS SOON AS POSSIBLE.

2. EROSION CONTROL DEVICES SUCH AS HAY BALE BARRIERS, SILT FENCES AND MULCH SHALL BE BROUGHT TO THE SITE AND STOCKPILED PRIOR TO INITIATING CONSTRUCTION.

3. THE CONTRACTOR SHALL PROVIDE AREAS FOR THE TEMPORARY STORAGE OF CONSTRUCTION DEBRIS. CONSTRUCTION DEBRIS SHALL NOT BE ALLOWED TO ACCUMULATE FOR AN EXTENDED PERIOD OF TIME.

### CLEARING:

1. LAND CLEARING SHALL BE PERFORMED IN PHASES CONSISTENT WITH ACTUAL CONSTRUCTION REQUIREMENTS. FINAL LAND CLEARING SHALL BE LIMITED TO RETURN TO GRADE SLOPES.

2. TREES SHALL BE CUT FOR ENTIRE SITE LEAVING STUMPS IN PLACE TO MAINTAIN SOIL STABILIZATION.

3. STUMPS SHALL BE PULLED AND STOCKPILED FOR GRINDING.

4. BRUSH AND BRANCHES SHOULD BE CHIPPED AND UTILIZED FOR WOOD MULCH IF PRACTICAL.

5. VEHICLES UTILIZED IN THE CLEARING OPERATION SHOULD NOT TRAVERSE WETLANDS OR FLOWING BROOKS OR STREAMS WITHOUT PRIOR APPROVAL FROM THE LOCAL CONSERVATION COMMISSION OR AGENT.

### ROUGH GRADING:

1. THE ROUGH GRADING OF THE SITE SHALL FOLLOW THE FILL AND EXCAVATION SEQUENCES AS DESCRIBED ON THE CONSTRUCTION PHASING PLANS. SLOPES SHALL BE MAINTAINED AWAY FROM WETLANDS AND SENSITIVE AREAS AS MUCH AS PRACTICAL.

2. DURING THIS PROCESS THE EROSION POTENTIAL IS HIGH. SUFFICIENT EROSION CONTROL BARRIERS SHOULD BE KEPT IN PROXIMITY TO THE WORK AREA TO ALLOW QUICK ACTION SHOULD EROSION BECOME AN ISSUE AND TO INSURE THAT NO SEDIMENT REACHES WETLANDS OR OTHER SENSITIVE AREAS.

3. IN AREAS OF CUT AND/OR FILL WHERE SLOPES COULD DIERT WATER TOWARD WETLAND AREAS, DIVERSION TRENCHES AND/OR SWALES SHOULD BE CONSIDERED AND IMPLEMENTED TO DIVERT WATER AWAY FROM THESE AREAS.

4. STEEP SIDE SLOPES IN EXCAVATION OR FILL SHOULD BE AVOIDED.

5. DISTURBED AREAS SHALL BE STABILIZED BY LOAMING AND SEEDING OR RIPRAPPED IMMEDIATELY AFTER THE FINISH GRADE HAS BEEN MET. IF FINAL GRADING DOES NOT OCCUR DURING THE GROWING SEASON, THESE AREAS SHALL BE MULCHED WITH HAY WITH A TACKIFIER. IF NECESSARY SLOPED AREAS MAY REQUIRE ADDITIONAL CONTROLS SUCH AS EROSION CONTROL SOCKS OR HAYBALES.

6. A GROUND COVER SUFFICIENT TO RETAIN SOILS IN A STABILIZED CONDITION MUST BE PROVIDED WITHIN 14 WORKING DAYS, SEASON PERMITTING, ON ANY PORTION OF THE TRACT UPON WHICH FURTHER ACTIVE CONSTRUCTION IS NOT BEING UNDERTAKEN.

### DRAINAGE:

1. IF DRAINAGE PIPES OR SWALES ARE TO BE INSTALLED, THEY SHALL BE CONSTRUCTED FROM DOWNSTREAM UP AND CONSTRUCTION SHALL INCLUDE THE PLACEMENT OF OUTFALL RIPRAP AND OTHER MITIGATIVE MEASURES SHOWN ON THE PLAN.

2. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, HAY BALES OR OTHER SUITABLE METHODS TO ENTRAP SEDIMENT SHALL BE PLACED DOWNSTREAM.

3. THE TOE OF EMBANKMENTS SHALL BE STABILIZED IMMEDIATELY, MULCHED AND TACKED DOWN BY SUITABLE MEANS.

### CREATION OF DETENTION BASIN:

1. THE DETENTION BASIN HAS BEEN PLACED AS A SEPARATE ITEM TO EMPHASIZE THE IMPORTANCE OF EROSION CONTROL DURING ITS CONSTRUCTION.

2. THE PRIMARY EROSION CONTROL METHOD FOR BASIN CONSTRUCTION, AS WELL AS FOR THE SITE IS THE RAPID STABILIZATION OF ALL SURFACES. SECONDARY IN IMPORTANCE IS THE CONCENTRATION OF RUNOFF BE AVOIDED IN ORDER TO PREVENT THE TRANSPORT OF SEDIMENT.

3. DURING CONSTRUCTION, THE FILL AND EXCAVATION SEQUENCES SHOWN ON THE CONSTRUCTION PHASING PLANS, ALONG WITH THE DETAILS PROVIDED IN THIS PLAN SET SHALL BE UTILIZED. THESE SEQUENCES REQUIRE THAT SLOPED AREAS LEFT FOR ANY PERIOD OF TIME NOT SLOPED TOWARDS THE WETLAND OR SENSITIVE AREA, BUT RATHER BACK INTO THE FILL MATERIAL.

4. THE BASIN BERM IS TO BE CONSTRUCTED BY EQUIPMENT WORKING ON STABLE MATERIAL ONLY. HAY BALES SHALL BE PLACED AT THE TOE OF SLOPE UNTIL SURFACES ARE STABILIZED.

5. NO EXCAVATION WITHIN THE BASIN SHALL COMMENCE UNTIL THE BERM IS IN PLACE.

6. CARE SHOULD BE TAKEN TO INSURE THAT ORGANIC MATERIAL REMOVED FROM THE BASIN AREA IS RESERVED FOR FINISH GRADING AND THE STABILIZATION OF DISTURBED AREAS.

7. DEWATERING IS NECESSARY, PUMPING TO A SETTLING BASIN SHALL BE PERMITTED IF SETTLING BASIN IS CONSTRUCTED, MAINTAINED AND OPERATED EFFECTIVELY.

8. AT NO TIME SHALL RUNOFF CARRYING SEDIMENT BE ALLOWED TO FLOW TO THE WETLANDS OR SENSITIVE AREAS.

9. THE WORK AREA SHALL REMAIN FREE OF LITTER AND DEBRIS AT ALL TIMES AND MONITORED ON A DAILY BASIS TO ENSURE COMPLIANCE.

10. ALL MATERIALS STOCKPILED SHALL BE LOCATED, MULCHED OR OTHERWISE TREATED TO INSURE THAT MATERIALS CONTAINED, THEREIN, AREA NOT CARRIED INTO THE WETLANDS.

11. ANY MATERIALS BLOWN OR CARRIED BY WATER AWAY FROM THE CONSTRUCTION SITE OR INTO THE WETLAND AREAS SHALL BE PROMPTLY REMOVED AS REQUIRED BY THE LOCAL CONSERVATION COMMISSION.

12. A GEOTECHNICAL FILTER FABRIC SHALL BE PLACED OVER THE BASIN SUBDRAIN DURING CONSTRUCTION TO PREVENT SEDIMENT FROM ENTERING AND CLOGGING THE DRAIN. THE FABRIC SHALL BE REMOVED FOR BASIN PREPARATION FOR FINAL STABILIZATION.

### GRUBBING AND STRIPPING:

1. TOP SOIL SHALL BE RETAINED AND STOCKPILED FOR LANDSCAPING PURPOSES.

2. GRUBBING AND STRIPPING OF SLOPES LEADING TO WETLAND AREAS SHOULD NOT BE UNDERTAKEN DURING PERIODS OF INTENSE RAINFALL.

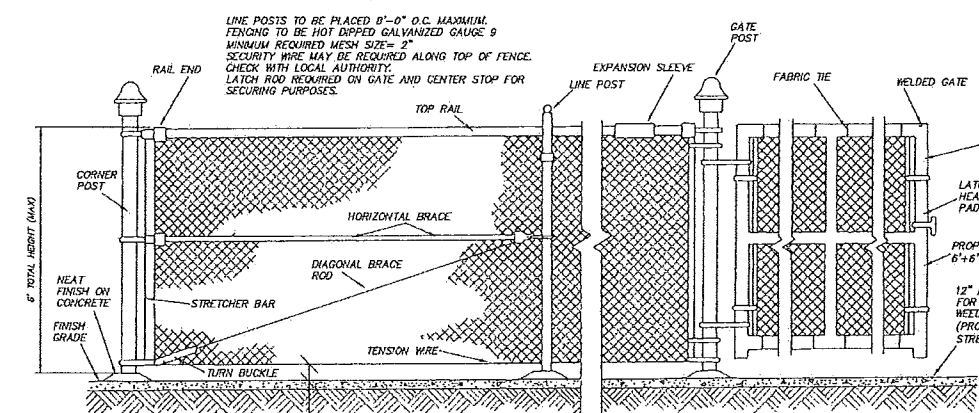
3. TOP SOIL STOCKPILE LOCATIONS ARE DEPICTED ON THE SITE DEVELOPMENT PLAN, THE EROSION CONTROL PLAN, AND/OR THE CONSTRUCTION PHASING PLAN AND SHALL BE ADHERED TO.

4. WHEN WORKING IN THE VICINITY OF WETLANDS, TOP SOIL SATURATED WITH WATER SHALL BE REMOVED, AND CONTAINED PRIOR TO BEING USED.

5. AREAS LEADING TO WETLANDS SHALL HAVE HAY BALE BARRIERS INSTALLED ACROSS THEM IN AREAS CONTAINING DOWN THE HILL. AT A INTERVALS SUFFICIENT TO MITIGATE RUNOFF CARRYING SEDIMENT.

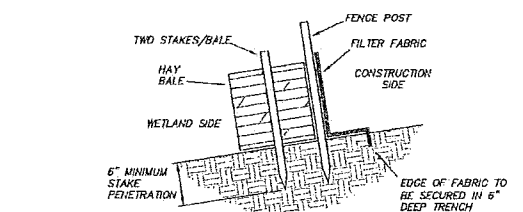
6. DURING PERIODS OF INTENSE RAINFALL, OR IF THE PROJECT IS TO BE LEFT FOR A PERIOD OF TIME, CONSIDERATION SHOULD BE GIVEN TO SUPPLEMENT HAY BALE BARRIERS WITH EITHER CRUSHED STONE OR ARMORED BARRIERS. CONSIDERATION MAY ALSO BE GIVEN TO DIVERTING RUNOFF INTO TEMPORARY SEDIMENTATION CONTROL AREAS.

7. WHENEVER PRACTICAL, NATURAL VEGETATION SHALL BE RETAINED, PROTECTED AND SUPPLEMENTED.

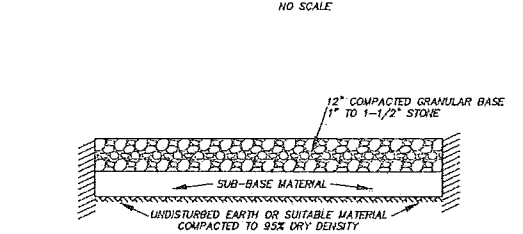


PROVIDE 6" GAP AT BOTTOM FOR HABITAT - VINE VEGETATION TO PLANTED AT 15 FOOT INTERVAL ALONG LENGTH OF FENCE TO PROVIDE VISUAL BUFFER.

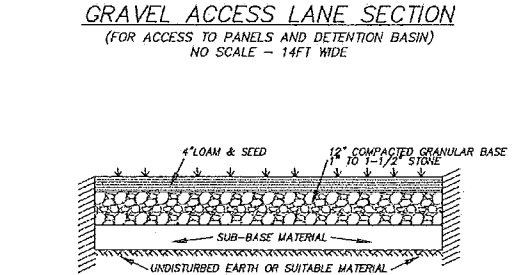
CHAIN LINK FENCE DETAIL  
NO SCALE



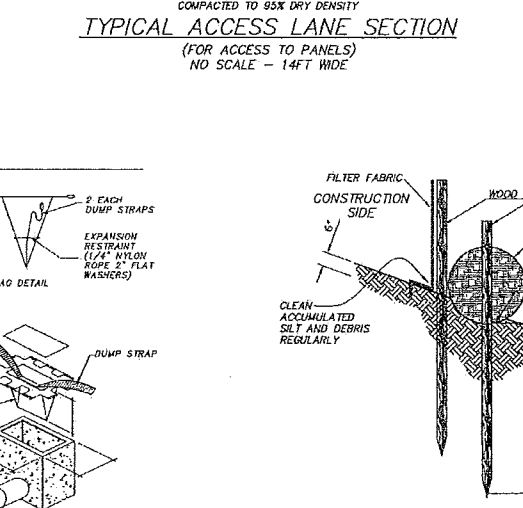
HAYBALES WITH SILT FENCE DETAIL  
NO SCALE



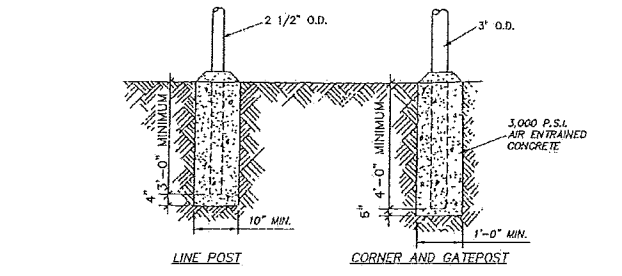
GRAVEL ACCESS LANE SECTION  
(FOR ACCESS TO PANELS AND DETENTION BASIN)  
NO SCALE - 14FT HIDE



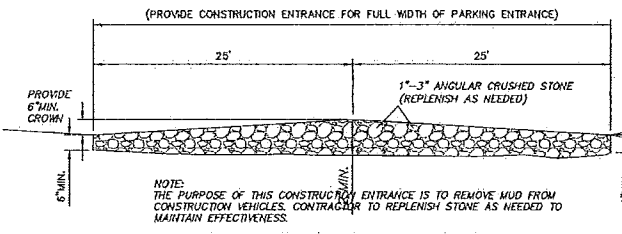
TYPICAL ACCESS LANE SECTION  
(FOR ACCESS TO PANELS)  
NO SCALE - 14FT HIDE



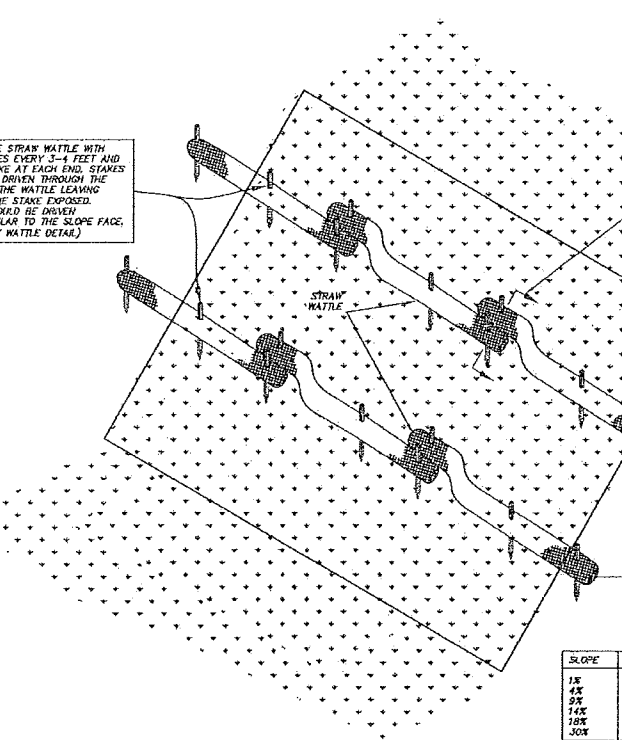
STRAW WATTLE DETAIL  
NO SCALE



FENCE POST DETAIL  
NO SCALE



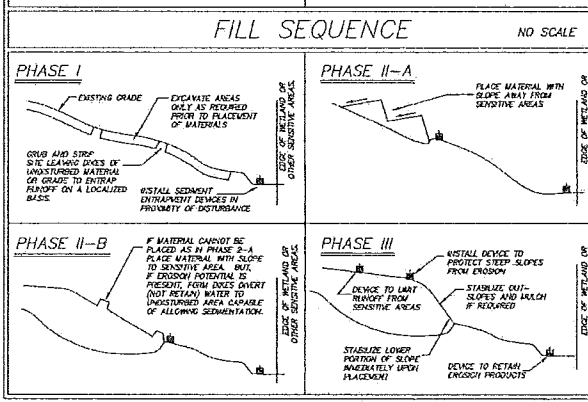
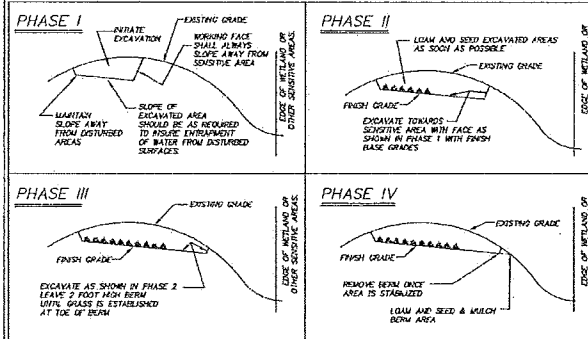
CONSTRUCTION ENTRANCE  
NO SCALE



EROSION CONTROL SLOPE DETAIL

## EXCAVATION SEQUENCE

NO SCALE

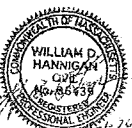


**APPLICANT:**  
ZPT ENERGY SOLUTIONS, LLC  
BRENDON COVE, MANAGER  
309 EAST COUNTY ROAD  
RUTLAND, MASSACHUSETTS 01543

**OWNER:**  
THE LAFASH FAMILY REVOCABLE TRUST 2015  
25 THOMPSON POND ROAD  
SPENCER, MA 01562

**REFERENCE:**  
ASSESSOR MAP 36, PARCEL A1.3  
DEED BOOK 25262, PAGE 331  
PLAN BOOK 885, PLAN 112

NO.	DATE	PEER REVIEW COMMENTS	CMA
1	08/01/2016	PEER REVIEW COMMENTS	CMA



## HANNIGAN ENGINEERING, INC.

CIVIL ENGINEERS & LAND SURVEYORS

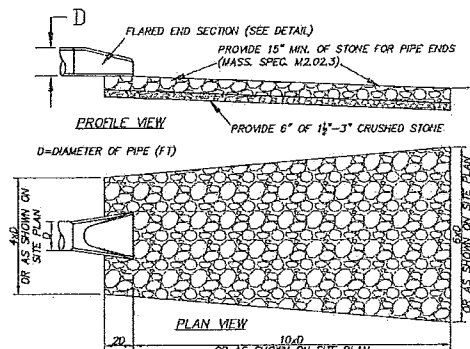
B MONUMENT SQUARE (978) 534-1294 (T)  
LEOMINSTER, MASSACHUSETTS 01453 (978) 534-6060 (F)  
WWW.HANNIGANENGINEERING.COM

## CONSTRUCTION DETAILS IN LEICESTER, MASSACHUSETTS

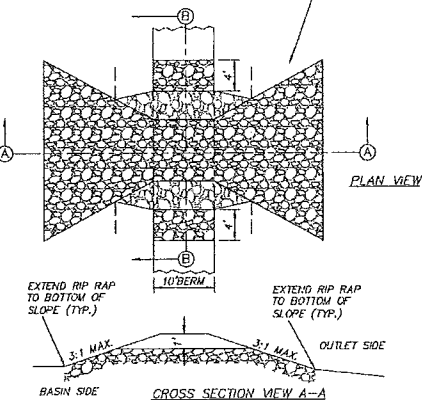
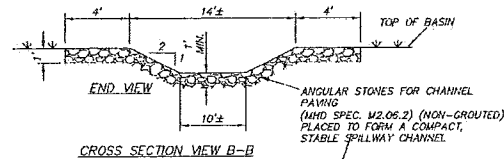
PREPARED FOR:  
PRO-TECH ENERGY SOLUTIONS  
MICHAEL ALADICH  
215 EXECUTIVE DRIVE  
MOORESTOWN, NEW JERSEY 08057  
TEL: (856) 437-6220

CALC:	CMA/WDH	DRWN:	CMA/WDH	SCALE:	NONE
CHKD:	WDH	APPD:	WDH	DATE:	JUN 14, 2016
SRV:	FB:			JOB NO:	2570
TAB:	7-8 DETAIL	SHEET	7 OF 8	PLAN NO:	C-12-22

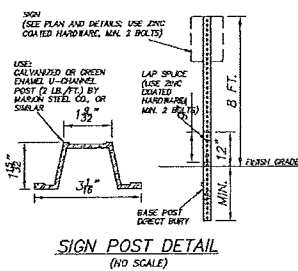




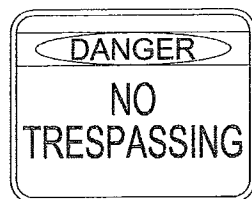
**RIP RAP APRON DETAIL**  
NO SCALE



**EMERGENCY SPILLWAY DETAIL**  
NO SCALE

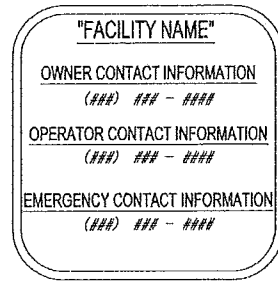


**SIGN POST DETAIL**  
(NO SCALE)



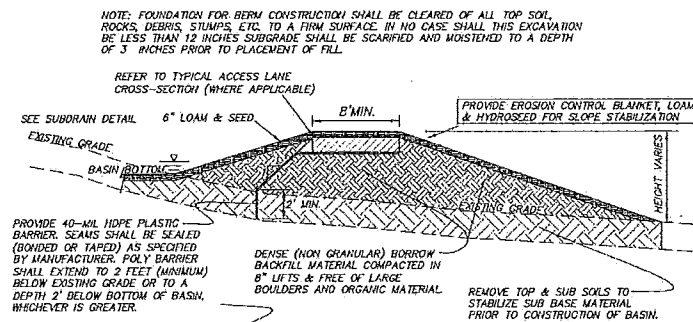
**PERIMETER SIGNAGE**  
NO SCALE

SIGNS TO BE PLACED ALONG FENCELINE AT 50 FT INTERVALS

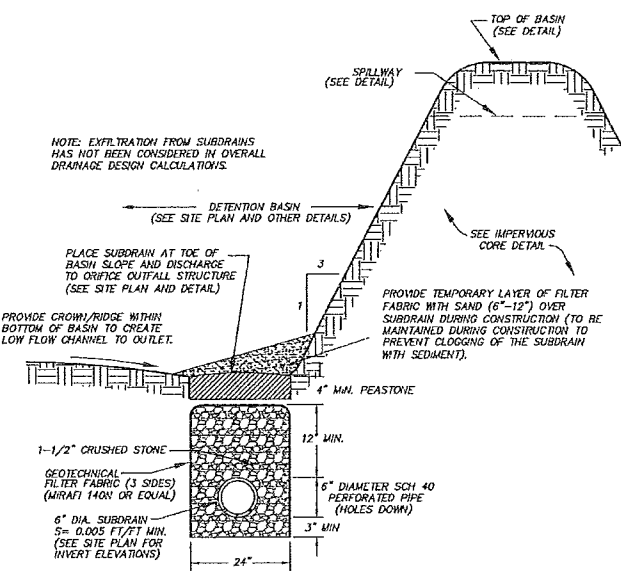


**TYPICAL PROJECT SIGN**  
NO SCALE

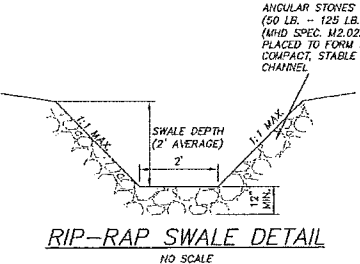
SIGNS TO BE PLACED AT ENTRANCE OF PROJECT SITE



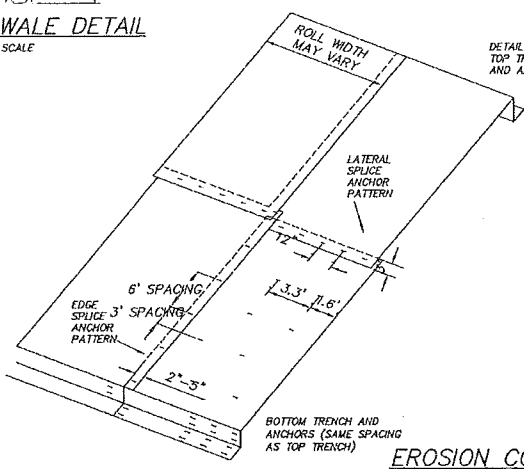
**DETENTION BASIN BERM**  
(REQUIRED FOR DETENTION BASIN CONSTRUCTION)  
NO SCALE



**DETENTION BASIN SUBDRAIN DETAIL**  
NO SCALE



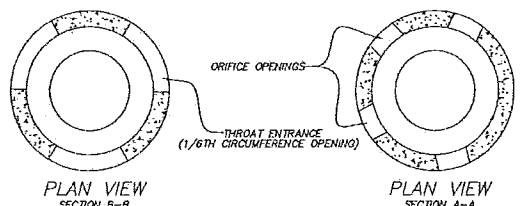
**RIP-RAP SWALE DETAIL**  
NO SCALE



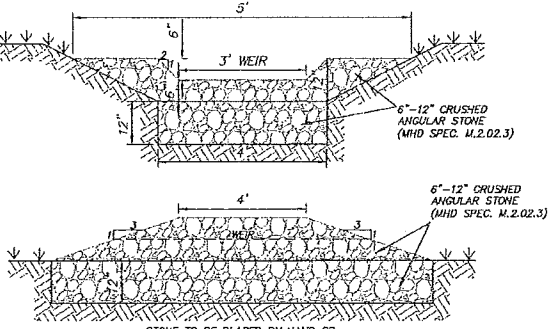
**EROSION CONTROL BANKET PLACEMENT**  
NO SCALE

**PROCEDURES FOR INSTALLATION OF EROSION CONTROL BANKET:**

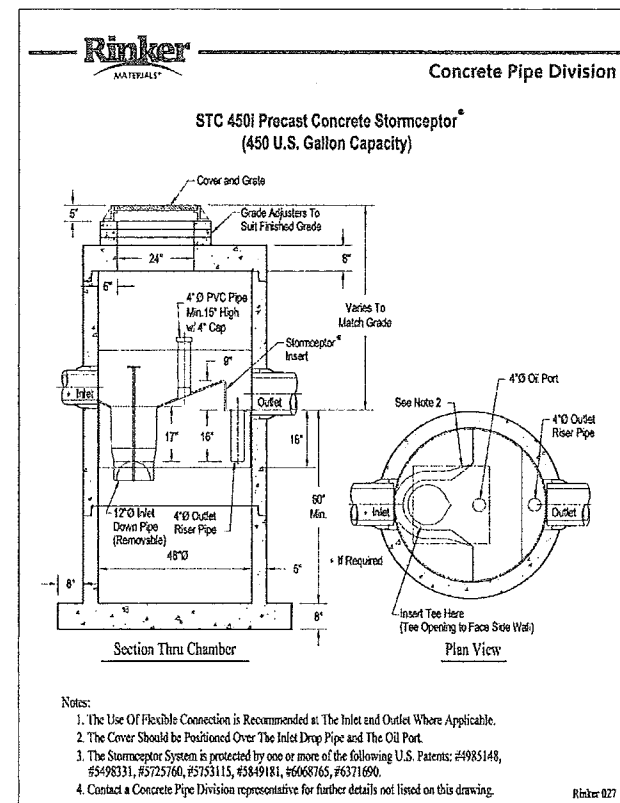
- 1) PREPARE SLOPES WITH FINAL GRADING AND LOAM PLACEMENT. RAKE AND SMOOTH FINAL SURFACE, APPLY APPLICABLE SEED MIX.
- 2) START AT THE TOP OF SLOPE BY ANCHORING BLANKETS IN A 6" DEEP x 6" WIDE ANCHOR TRENCH. PLACE BLANKETS, STAPLE (8" STAPLES), BACKFILL AND COMPACT WITH FABRIC OVERLAP OF 12".
- 3) ROLL BLANKETS DOWN THE SLOPE. STAPLE THE OPEN BLANKET EDGE USING ONE ROW OF STAPLES AT 2' INTERVALS. THE INTERIOR OF THE BLANKET SHOULD BE STAPLED USING A 2" WIDE x 3" HIGH STAPLE PATTERN. BE SURE TO LAY BLANKETS LOOSELY ON THE GROUND ALLOWING A GOOD CONTACT BETWEEN SOIL AND BLANKETS.
- 4) USE AN 8" OVERLAP BETWEEN BLANKET SPICES. USE A SINGLE ROW OF STAPLES TO ANCHOR BLANKETS TOGETHER.
- 5) PROVIDE 6" x 6" ANCHOR TRENCH AT TOE OF SLOPE.
- 6) EROSION CONTROL BANKET TYPE SHALL BE PROPERLY SELECTED FOR SOIL CONDITIONS AND MAXIMUM ALLOWABLE SLOPE.
- 7) ANY/METALLIC ANCHORS SHALL BE PROMPTLY REMOVED ONCE THE VEGETATIVE COVER HAS BEEN ESTABLISHED.
- 8) GRASS SEED VARIETY SHALL BE PROPERLY CHOSEN FOR SPECIFIC SITE CONDITIONS (SHADE OR SUN, ETC.).



**D-BASIN OUTLET STRUCTURE**  
WITH 1/8TH CIRCUMFERENCE THROAT OPENINGS  
NO SCALE



**ROCK CHECK DAM**  
NO SCALE



- Notes:
1. The Use Of Flexible Connection Is Recommended At The Inlet And Outlet Where Applicable.
  2. The Cover Should Be Positioned Over The Inlet Drop Pipe And The Oil Port.
  3. The Stormceptor System Is Protected By One Or More Of The Following U.S. Patents: #4983148, #5498331, #5725760, #5753115, #5849181, #6068765, #6371690.
  4. Contact A Concrete Pipe Division Representative For Further Details Not Listed On This Drawing.

Rinker 027

**STORMWATER OPERATION AND MAINTENANCE PLAN**

THE FOLLOWING SHALL BE CONSIDERED THE OPERATION & MAINTENANCE PLAN (OMP) FOR THE STORMWATER COLLECTION FACILITY FOR THIS DEVELOPMENT. THIS OMP HAS BEEN PREPARED IN ACCORDANCE WITH THE STORMWATER MANAGEMENT POLICY AS ISSUED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

**I. SYSTEM OWNERSHIP**

THE SYSTEM SHALL INCLUDE THE DRAINAGE INFRASTRUCTURE AND ALL OF ITS COMPONENTS AS SHOWN ON THE SITE DEVELOPMENT PLANS, INCLUDING THE DETENTION FACILITIES AND OUTFALL AREAS OF THE DRAINAGE SYSTEM. THE STRUCTURES OF THE SYSTEM SHALL INCLUDE THE DRAINAGE SWALES AND THE OUTFALL & CONTROL STRUCTURES. THE SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CONSTRUCTION DETAILS AND THE APPROVED PLANS.

UPON THE COMPLETION OF CONSTRUCTION OF THE DRAINAGE SYSTEM DESCRIBED ABOVE AND AS DEPICTED ON THE SITE PLANS, THE SYSTEM SHALL BECOME THE PROPERTY OF THE LAND OWNER, WITH SPECIFIC EASEMENT RIGHTS TO THE OPERATOR OF THE SOLAR SYSTEM TO MAINTAIN THE DRAINAGE SYSTEM AS DEPICTED ON THE APPROVED PLANS. SAID EASEMENT RIGHTS SHALL BE SPECIFICALLY DESCRIBED IN LEASE DOCUMENTS FOR THE PROJECT.

**II. RESPONSIBLE PARTIES**

THE OPERATOR OF THE SOLAR SYSTEM SHALL BE CONSIDERED THE RESPONSIBLE PARTY FOR THE OPERATION AND MAINTENANCE OF THE STORMWATER MANAGEMENT SYSTEM. THE SYSTEM SHALL INCLUDE THE DRAINAGE INFRASTRUCTURE AND ALL OF ITS COMPONENTS AS SHOWN ON THE APPROVED PLANS. THE SYSTEM SHALL ALSO INCLUDE THE DETENTION FACILITIES AND THE OUTFALL AREAS OF THE DRAINAGE SYSTEM.

**III. INSPECTION & MAINTENANCE SCHEDULE**

THE FOLLOWING MAINTENANCE SCHEDULE SHALL BE FOLLOWED IN ORDER TO MAINTAIN THE EFFECTIVENESS OF THE STORMWATER MANAGEMENT SYSTEM.

STRUCTURE TYPE	INSPECTION	MAINTENANCE	TASK
RIP/RAP APRONS	TWICE A YEAR	EVERY 10 YEARS	REMOVE DEBRIS & ADD STONE
SUBDRAINS	TWICE A YEAR	EVERY 4 YEARS	REPLACE PEASTONE
DETENTION BASINS	MONTHLY (MAY-OCT)	MONTHLY (MAY-OCT)	MOW GRASS AREAS & REMOVE DEBRIS
OUTFALL STRUCTURES:	TWICE A YEAR	EVERY 10 YEARS	REMOVE DEBRIS & ADD STONE
SPILLWAYS	ANNUALLY IN THE SPRING	WHENEVER THE DEPTH OF DEPOSITS IS GREATER THAN 15% OF THE TOTAL STORAGE CAPACITY (WRT OF SEDIMENT).	REMOVE SEDIMENT FROM SUMPS
STORMCEPTOR	SEASONALLY	SEASONALLY OR WHENEVER THE DEPTH OF DEPOSITS IS GREATER THAN OR EQUAL TO ONE HALF THE DEPTH FROM THE BOTTOM OF THE INVERT OF THE LOWEST PIPE.	REMOVE SEDIMENT FROM SUMPS
CATCH BASINS	SEASONALLY	SEASONALLY OR WHENEVER THE DEPTH OF DEPOSITS IS GREATER THAN OR EQUAL TO ONE HALF THE DEPTH FROM THE BOTTOM OF THE INVERT OF THE LOWEST PIPE.	**GRATES TO BE KEPT CLEAR THROUGHOUT THE YEAR**

NOTE: THE DETENTION BASINS ON THIS PROJECT MAY GROW VEGETATION IN THE BOTTOM WHICH MAY INCLUDE SPECIES PART OF THE WETLAND PROTECTION ACT. THESE PLANTS SHALL NOT BE CONSIDERED AS HAVING PROTECTION UNDER THE ACT AND SHALL BE CONSIDERED OPPORTUNISTIC GROWTH PLANTS. ADDITIONALLY, THIS AREA SHALL NOT BE CONSIDERED A CONSTRUCTED WETLAND.

**SEEDING OPERATION AND MAINTENANCE PLAN**

**I. RESPONSIBLE PARTIES**

THE OPERATOR OF THE SOLAR SYSTEM SHALL BE CONSIDERED THE RESPONSIBLE PARTY FOR THE OPERATION AND MAINTENANCE OF THE GRASS & VEGETATION. THE VEGETATION SHALL INCLUDE ALL OF ITS AREAS AS SHOWN ON THE APPROVED PLANS. THE SYSTEM SHALL ALSO INCLUDE THE GRASSED AREAS AROUND THE PANELS AND DRAINAGE STRUCTURES.

**II. INSPECTION & MAINTENANCE SCHEDULE**

THE FOLLOWING MAINTENANCE SCHEDULE SHALL BE FOLLOWED IN ORDER TO MAINTAIN THE VEGETATED AREAS

ACTIVITY	MAINTENANCE	TASK
GRASS CUTTING	MONTHLY	GRASS HEIGHT TO BE ALLOWED TO GROW TO A HEIGHT OF NO MORE THAN 18 INCHES AND BE CUT TO A HEIGHT OF 4 TO 6 INCHES.

**III. APPROPRIATE SEED MIX AND APPLICATION RATES**

THE FOLLOWING SEED SCHEDULE SHALL BE FOLLOWED IN ORDER TO PROPERLY MAINTAIN VEGETATED AREAS

SEED TYPE (NATIVE SEED REQUIRED)	APPLICATION RATE	% OF MIX
WILDFLOWER SEED MIX	5 TO 10 POUNDS PER ACRE	50%
WHITE CLOVER SEED MIX	3 TO 5 POUNDS PER ACRE	10%
KENTUCKY BLUEGRASS	80 TO 100 POUNDS PER ACRE	40%

**IV. HERBICIDES & PESTICIDES**

THERE WILL NO HERBICIDES OR PESTICIDES USED ON THIS PROJECT.

**APPLICANT:**  
ZPT ENERGY SOLUTIONS, LLC  
BRENDON GOVE, MANAGER  
309 EAST COUNTY ROAD  
RUTLAND, MASSACHUSETTS 01543

**OWNER:**  
THE LAFASH FAMILY REVOCABLE TRUST 2015  
25 THOMPSON POND ROAD  
SPENCER, MA 01562

**REFERENCE:**  
ASSESSOR MAP 36, PARCEL A1.3  
DEED BOOK 25262, PAGE 331  
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NO.	DATE	REVISIONS	BY
1	08/01/2016	PEER REVIEW COMMENTS	CMA



**HANNIGAN ENGINEERING, INC.**  
CIVIL ENGINEERS & LAND SURVEYORS

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LEOMINSTER, MASSACHUSETTS 01453  
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(978) 534-6060 (F)  
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**CONSTRUCTION DETAILS**  
IN  
LEICESTER, MASSACHUSETTS

PREPARED FOR:  
PRO-TECH ENERGY SOLUTIONS  
MICHAEL ALADICH  
215 EXECUTIVE DRIVE  
MOORESTOWN, NEW JERSEY 08057  
TEL: (856) 437-6220

CALC: CMA/WDH	DRWN: CMA/WDH	SCALE: NA
CHKD: WDH	APPD: WDH	DATE: JUN 14, 2016
SRV:	FB:	JOB NO: 2570
TAB: 7-8 DETAIL	SHEET 8 OF 8	PLAN NO: C-12-22