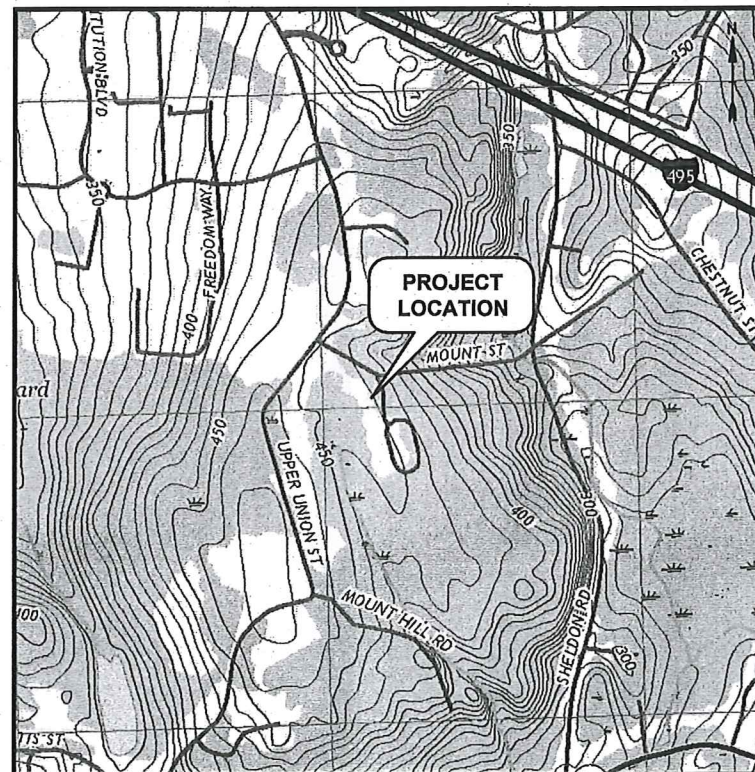


FRANKLIN SOLAR PROJECT

PERMIT APPLICATION SET

FRANKLIN, MASSACHUSETTS DECEMBER 2018

SHEET NO.	SHEET TITLE
	COVER SHEET
G-001	GENERAL NOTES & LEGEND
C-001	EXISTING CONDITIONS - OVERALL
C-002	EXISTING CONDITIONS - SOUTH
C-003	EXISTING CONDITIONS - NORTH
C-004	PROPOSED CONDITIONS - OVERALL
C-005	PROPOSED CONDITIONS - SOUTH
C-006	PROPOSED CONDITIONS - NORTH
C-007	SITE DETAILS - 1
C-008	SITE DETAILS - 2



SCALE: 1" = 1,000'

DEVELOPER:

KEARSARGE FRANKLIN, LLC
1200 SOLDIERS FIELD ROAD
SUITE 202
BOSTON, MA 02134

LAND OWNER:

THE CISTERCIANS OF THE STRICT
OBSERVANCE IN MASSACHUSETTS, INC.
#1061 UPPER UNION STREET
FRANKLIN, MA 02038

CIVIL ENGINEER:

TIGHE & BOND
53 SOUTHAMPTON ROAD
WESTFIELD, MA 01085

RECEIVED
2019 JAN 10 A 11:13
TOWN OF FRANKLIN
TOWN CLERK

RECEIVED
JAN 4 2019
PLANNING DEPT.



12/28/18



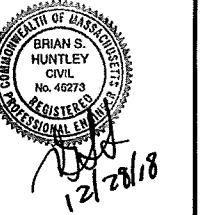
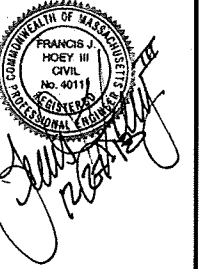
12/27/18

Tighe & Bond
Engineers | Environmental Specialists

PERMIT SET - NOT FOR CONSTRUCTION

COMPLETE SET 10 SHEETS


PERMIT DRAWINGS- NOT FOR CONSTRUCTION



Franklin Solar Project

Franklin
Kearsarge, LLC

Franklin,
Massachusetts

VERIFY SCALE
BAR IS 1 INCH ON
ORIGINAL DRAWING
0  1 INCH
IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY
























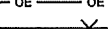
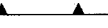
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PROJECT NO:	K-0092	
DATE:	2018/12/27	
FILE:	Details.dwg	
DRAWN BY:	ELD	
CHECKED:	BSH/JEC	
APPROVED:	FJH	

GENERAL NOTES & LEGEND

SCALE: NO SCALE

G-001

LEGEND

- | | |
|---|----------------------------------|
|  | UTILITY POLE |
|  | WETLAND FLAG |
|  | VEGETATION BUFFER |
|  | PROPERTY LINE |
|  | PROPERTY SETBACK LINE |
|  | PROJECT LOCUS |
|  | INTERMEDIATE CONTOURS |
|  | INDEX CONTOURS |
|  | GRAVEL CART PATH |
|  | EXISTING EDGE OF PAVEMENT |
|  | EXISTING STONE WALL |
|  | EROSION CONTROL BARRIER |
|  | LIMIT OF WORK |
|  | EXISTING TREE LINE |
|  | EXISTING OVERHEAD ELECTRIC LINE |
|  | NEW OVERHEAD ELECTRIC LINE |
|  | CHAIN LINK FENCE |
|  | LIMIT OF WETLAND |
|  | 25 FEET WETLANDS BUFFER |
|  | 50 FEET WETLANDS BUFFER |
|  | 100 FEET WETLANDS BUFFER |
|  | LIMIT OF FEMA ZONE X |
|  | STABILIZED CONSTRUCTION ENTRANCE |
|  | EXISTING BUILDING |
|  | PROPOSED ACCESS ROAD |

GENERAL NOTES:

1. PER MASSACHUSETTS LAW, CALL 1-888-DIG-SAFE, (1-888-344-7233), THE MUNICIPALITY AND THE PROPERTY OWNER PRIOR TO ANY UNDERGROUND EXCAVATION ON SITE. THE DIG-SAFE VERIFICATION NUMBER SHALL BE SUBMITTED TO THE TOWN OF LUDLOW AND TOWN OF GRANBY PRIOR TO ANY EXCAVATION, DEMOLITION AND REMOVAL OR CONSTRUCTION WORK.
2. FIELD VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION. IF FIELD CONDITIONS ARE OBSERVED THAT SIGNIFICANTLY VARY FROM THOSE SHOWN ON THESE PLANS, IMMEDIATELY NOTIFY THE ENGINEER FOR RESOLUTION OF THE CONFLICTING INFORMATION.
3. COMPLY WITH OSHA'S LATEST STANDARDS. PROVIDE ALL REQUIREMENTS OF OSHA'S EXCAVATION STANDARDS, INCLUDING BUT NOT LIMITED TO PROVISION FOR A COMPETENT PERSON ON SITE AND ALL DOCUMENTATION REQUIRING CERTIFICATION BY A PROFESSIONAL ENGINEER.
4. MAINTAIN ALL UTILITIES IN THE AREAS UNDER CONSTRUCTION. LEAVE ALL PIPES, SWALES AND STRUCTURES WITHIN THE LIMIT OF THIS CONTRACT IN CLEAN AND OPERABLE CONDITION AT THE COMPLETION OF THE WORK. TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SAND AND SILT FROM DISTURBED AREAS FROM ENTERING THE SYSTEM. CONTRACTOR IS RESPONSIBLE FOR DAMAGE SUSTAINED TO ANY EXISTING UTILITIES AND WILL MAKE REPAIRS THAT COMPLY WITH REQUIREMENTS OF OWNER OR RESPECTIVE UTILITY COMPANY.
5. LOAM AND SEED ALL DISTURBED AREAS UNLESS OTHERWISE SPECIFIED.
6. TEST PITS TO LOCATE EXISTING UTILITIES ARE STRONGLY ENCOURAGED AND MAY BE ORDERED BY ENGINEER.
7. UNDERDRAIN SYSTEMS ARE COMMON IN AGRICULTURAL FIELDS AND ARE NOT DOCUMENTED ON SITE NOR LOCATED BY SURVEY. IF UNDERDRAINS ARE DAMAGED DURING CONSTRUCTION THEY SHALL BE REPAIRED SO EXISTING SUBSURFACE DRAINAGE SYSTEM IS FUNCTIONAL AT THE END OF THE CONSTRUCTION.

PLAN REFERENCES:

1. EXISTING CONDITIONS INFORMATION USED ON THIS PROJECT WAS OBTAINED FROM AN EXISTING CONDITIONS PLAN TITLED "FRANKLIN MASSACHUSETTS" DATED NOVEMBER 12, 2018 AND PREPARED BY TAUPER LAND SURVEY INC.
2. LAYOUT OF SOLAR ARRAY, INCLUDING SPACING, RACKING ARRANGEMENT, SIZE, ROAD LOCATION, AND FENCE LOCATION PROVIDED BY INDUSTRIA ENGINEERING.
3. WETLAND SERIES A1 TO A60 AND B1 TO B4 WERE DELINEATED BY ECOTECH, INC. IN OCTOBER 2018.
4. PROJECT WILL BE SUBJECT TO AN ORDER OF CONDITIONS ISSUED BY THE FRANKLIN CONSERVATION COMMISSION.
5. ELECTRICAL DESIGN AND DETAILS TO BE PROVIDED BY OTHERS DURING FINAL DESIGN.
6. FEMA ZONE X AREA CONSTITUTES AREAS OF 0.2% ANNUAL CHANCE FLOOD, PER FLOOD INSURANCE RATE MAP (FIRM) OF NORFOLK COUNTY, MAP NUMBER 25021C0317E DATED JULY 17,2012.

EROSION CONTROL NOTES:

1. INSTALL ALL EROSION CONTROL MEASURES SHOWN, SPECIFIED AND REQUIRED BY THE ENGINEER PRIOR TO ANY CONSTRUCTION OR IMMEDIATELY UPON REQUEST. MAINTAIN ALL SUCH CONTROL MEASURES UNTIL FINAL SURFACE TREATMENTS ARE IN PLACE AND/OR UNTIL PERMANENT VEGETATION IS ESTABLISHED.
2. MARK WORK LIMIT LINE(S) PRIOR TO STARTING WORK. DO NOT DISTURB VEGETATION AND TOPSOIL BEYOND THE PROPOSED LIMIT LINE. COORDINATE WITH THE ENGINEER FOR THE LOCATIONS FOR THE TEMPORARY STOCKPILING OF TOPSOIL DURING CONSTRUCTION.
3. FINE GRADE AND IMMEDIATELY SEED ALL SIDE SLOPES, SHOULDER AREAS, AND DISTURBED VEGETATED AREAS, ALL GRADING TO BE A MAXIMUM SLOPE OF 3:1 UNLESS OTHERWISE SHOWN, COMPACTED, AND STABILIZED.
4. REMOVE AND DISPOSE OF ALL SILT TRAPPED AT BARRIERS IN UPLAND AREAS OUTSIDE BUFFER ZONES. REMOVE MATERIALS DEPOSITED IN ANY TEMPORARY SETTLING BASIN AT THE COMPLETION OF THE PROJECT. RESTORE ALL DISTURBED AREAS TO PRE-CONSTRUCTION CONDITIONS.
5. REMOVE ALL SEDIMENTS FROM SILT LADEN WATER PRIOR TO RELEASE DOWNSTREAM OF THE DEWATERED AREAS.
6. REMOVE ALL SEDIMENT TRACKED ON PUBLIC RIGHT-OF-WAYS AT THE END OF EACH DAY.
7. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DURING CONSTRUCTION OF THE PROJECT. CONTRACTOR TO INSTALL ADEQUATE EROSION CONTROL TO ENSURE SITE STABILIZATION THROUGHOUT THE DURATION OF CONSTRUCTION.



12/28/18

PERMIT DRAWINGS- NOT FOR CONSTRUCTION

Franklin Solar Project

Franklin Kearsarge, LLC

Franklin, Massachusetts

VERIFY SCALE
BAR IS 1 INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

MARK	DATE	DESCRIPTION
PROJECT NO:	K-0092	
DATE:	2018/12/27	
FILE:	Franklin_Site.dwg	
DRAWN BY:	ELD	
CHECKED:	BSH/JEC	
APPROVED:	FJH	

EXISTING CONDITIONS - OVERALL

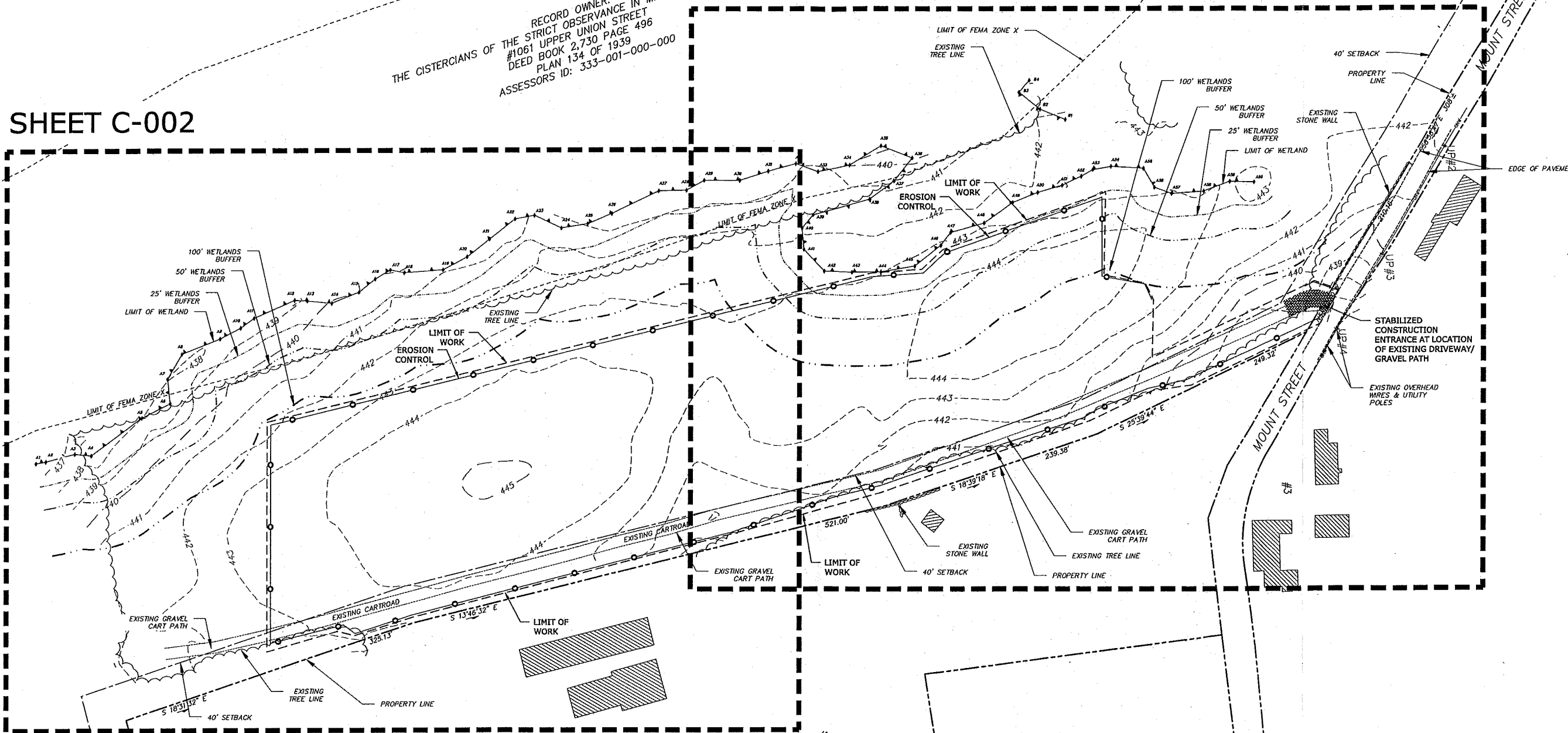
SCALE: 1" = 60'

C-001

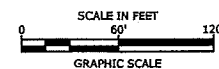
SHEET C-003

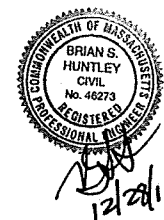
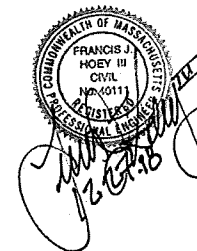
RECORD OWNER:
THE CISTERCIANS OF THE STRICT OBSERVANCE IN MASSACHUSETTS
#1061 UPPER UNION STREET
DEED BOOK 2,730 PAGE 496
PLAN 134 OF 1939
ASSESSORS ID: 333-001-000-000

SHEET C-002



n/f
KERRY B. & ELENA HEARN
DEED BOOK 35,109 PAGE 120
PLAN BOOK 658 PAGE 2
PARCEL ID: 330-012-002-000
#4





PERMIT DRAWINGS- NOT FOR CONSTRUCTION

Franklin Solar Project

Franklin Kearsarge, LLC

Franklin, Massachusetts

VERIFY SCALE
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MARK	DATE	DESCRIPTION
PROJECT NO: K-0092		
DATE: 2018/12/27		
FILE: Franklin_Site.dwg		
DRAWN BY: ELD		
CHECKED BY: BSH/JEC		
APPROVED BY: FJH		

EXISTING CONDITIONS - SOUTH

SCALE: 1" = 30'

C-002

RECORD OWNER:
THE CISTERCIANS OF THE STRICT OBSERVANCE IN MASSACHUSETTS, INC.
#1061 UPPER UNION STREET
DEED BOOK 2,730 PAGE 496
PLAN 134 OF 1939
ASSESSORS ID: 333-001-000-000

100' WETLANDS BUFFER
50' WETLANDS BUFFER
25' WETLANDS BUFFER
LIMIT OF WETLAND

EXISTING TREE LINE

LIMIT OF WORK

EROSION CONTROL

LIMIT OF FEMA ZONE X

445

EXISTING CARTROAD

EXISTING GRAVEL CART PATH

EXISTING GRAVEL CART PATH

EXISTING CARTROAD

LIMIT OF WORK

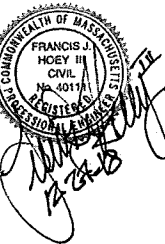
40' SETBACK

EXISTING TREE LINE

PROPERTY LINE

n/f
KERRY B. & ELENA HEARN
DEED BOOK 35,109 PAGE 120
PLAN BOOK 658 PAGE 2
PARCEL ID: 330-012-002-000

SCALE IN FEET
30' 60'
GRAPHIC SCALE



PERMIT DRAWINGS- NOT FOR CONSTRUCTION

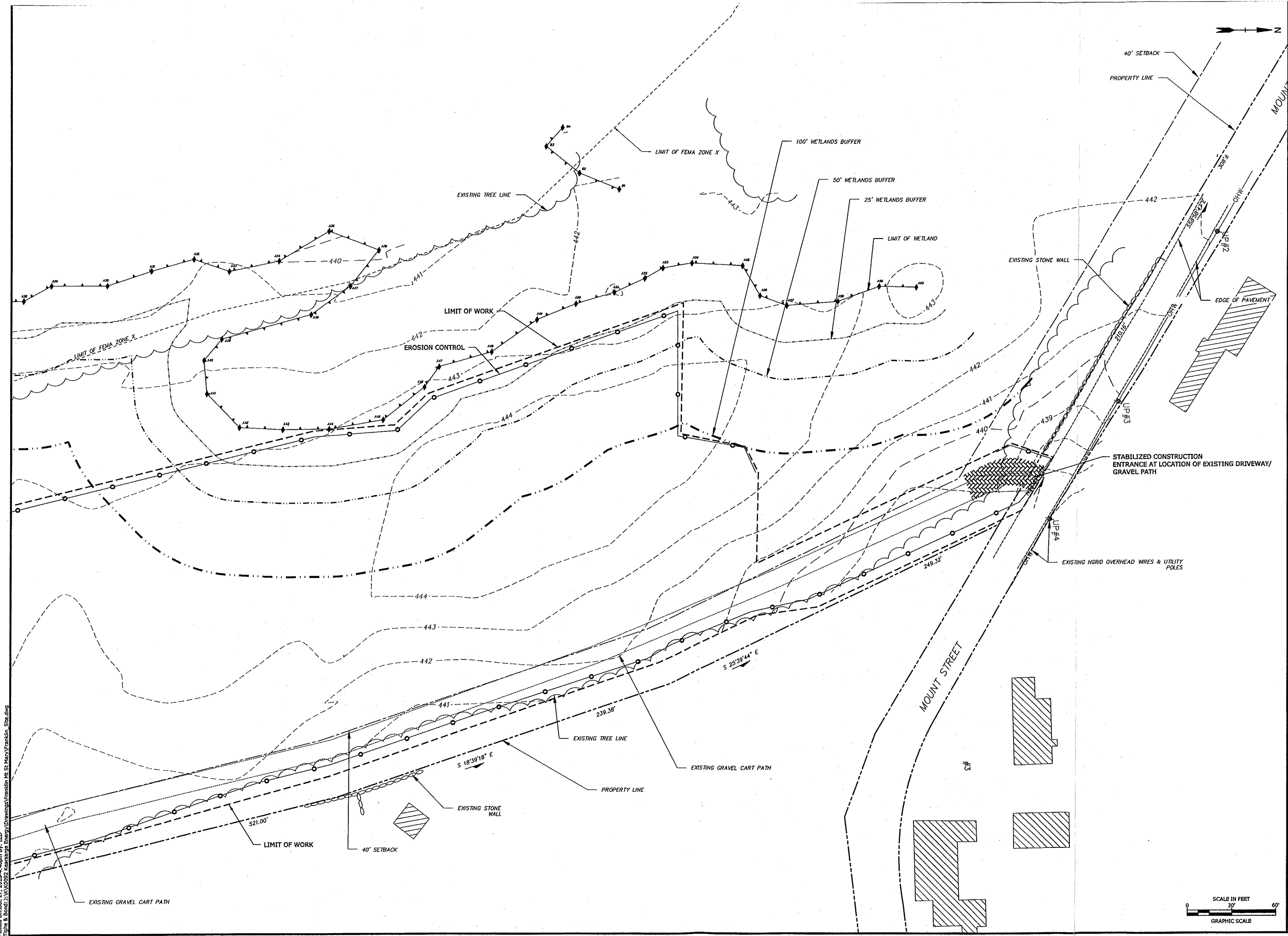
Franklin Solar Project

Franklin
Kearsarge, LLC

Franklin,
Massachusetts

VERIFY SCALE
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PROJECT NO:	K-0092	
DATE:	2018/12/27	
FILE:	Franklin_Site.dwg	
DRAWN BY:	ELD	
CHECKED:	BSH/JEC	
APPROVED:	FJH	
EXISTING CONDITIONS - NORTH		
SCALE:		1" = 30'
C-003		



Last Saved: 12/27/2018
Plotted On: Dec 27, 2018 4:46pm By: ELD
Tighe & Bond: 21/KV0092 Kearsarge Energy Drawings/Franklin Mt St Mary/Franklin_Site.dwg

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ORIGINAL DRAWING
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IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY

C-004

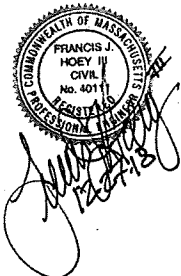
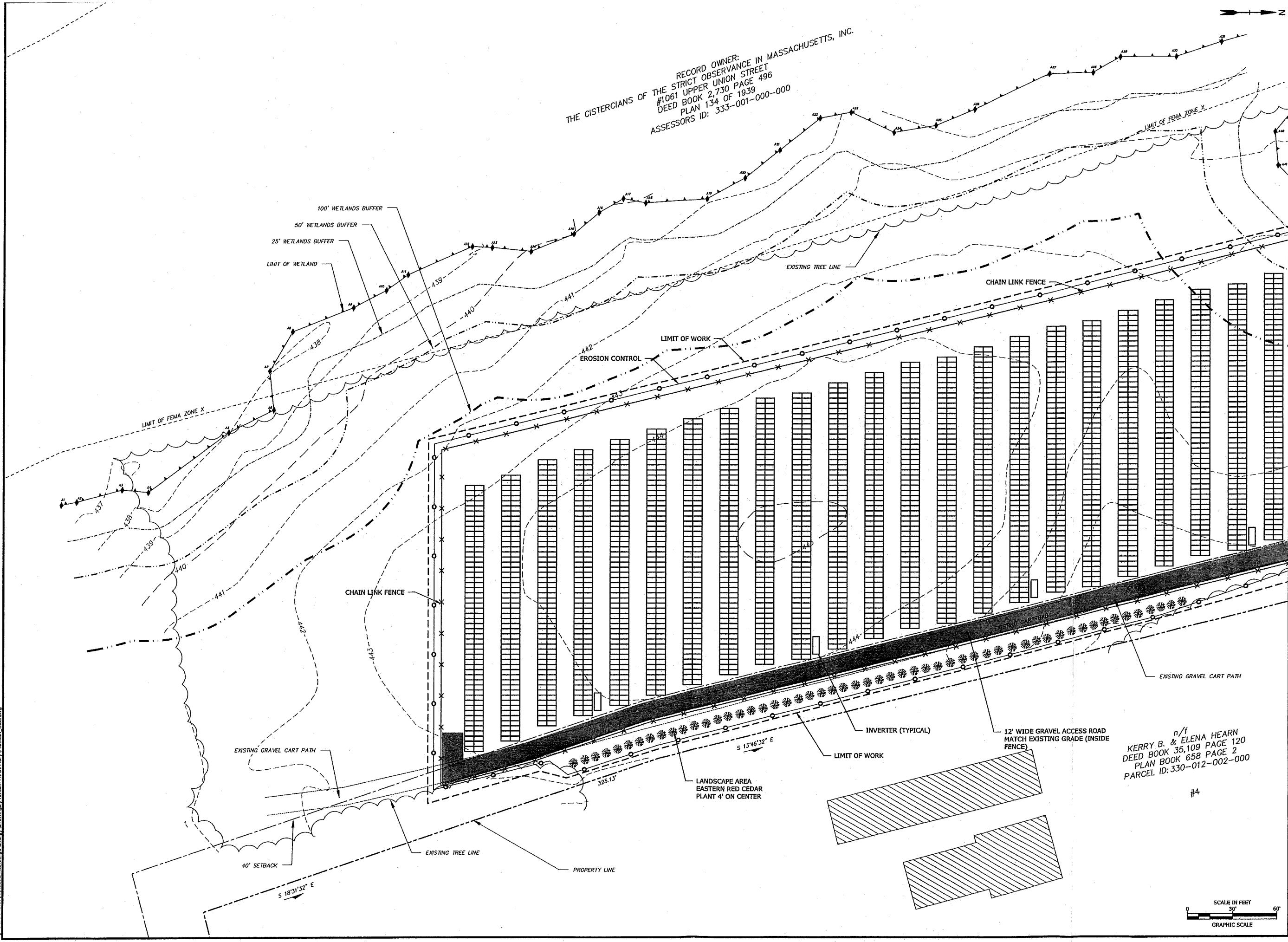
SCALE IN FEET

0 60' 120'

GRAPHIC SCALE



Let's Save 12/27/2018
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PERMIT DRAWINGS- NOT FOR CONSTRUCTION

Franklin Solar Project

Franklin Kearsarge, LLC

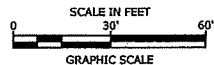
Franklin, Massachusetts

VERIFY SCALE
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IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

n/f
KERRY B. & ELENA HEARN
DEED BOOK 35,109 PAGE 120
PLAN BOOK 658 PAGE 2
PARCEL ID: 330-012-002-000

#4

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DATE:	2018/12/27	
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DRAWN BY:	ELD	
CHECKED:	BSH/JEC	
APPROVED:	FJH	
PROPOSED CONDITIONS - SOUTH		
SCALE:		1" = 30'
C-005		





12/28/18

PERMIT DRAWINGS- NOT FOR CONSTRUCTION

Franklin Solar Project

Franklin
Kearsarge, LLC

Franklin,
Massachusetts

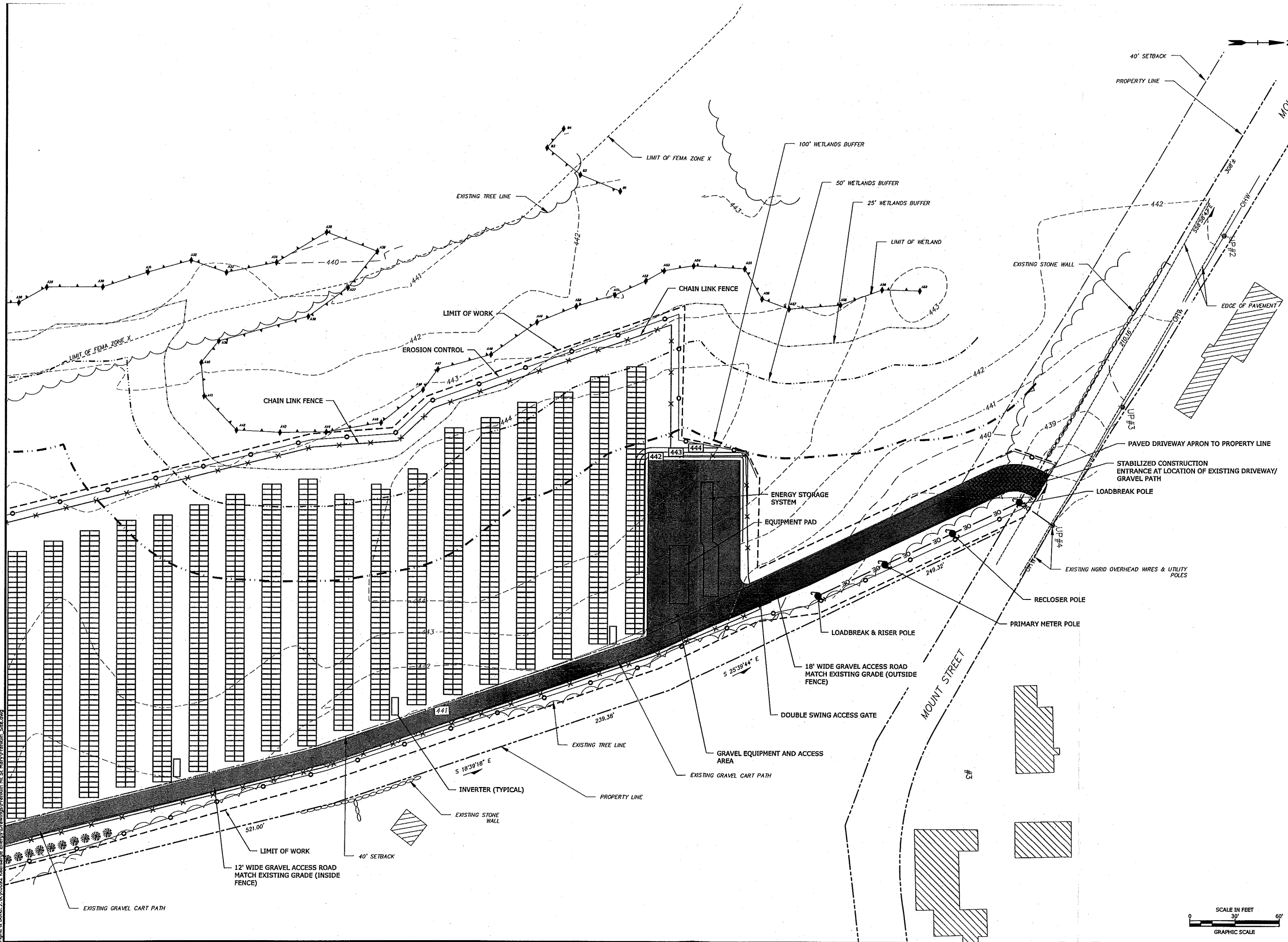
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ORIGINAL DRAWING
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THIS SHEET, ADJUST
SCALES ACCORDINGLY

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DATE:	2018/12/27	
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DRAWN BY:	ELD	
CHECKED:	BSH/JEC	
APPROVED:	FJH	

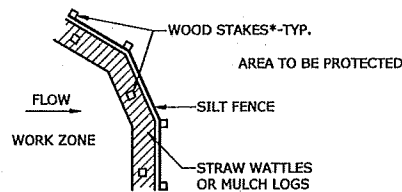
PROPOSED CONDITIONS -
NORTH

SCALE: 1" = 30'

C-006

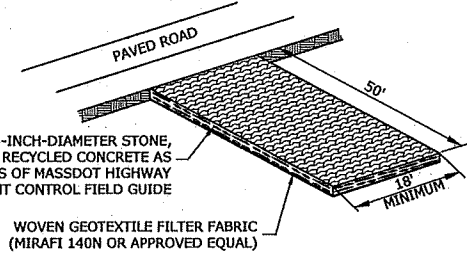


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Drawing: Erosion Control Barrier
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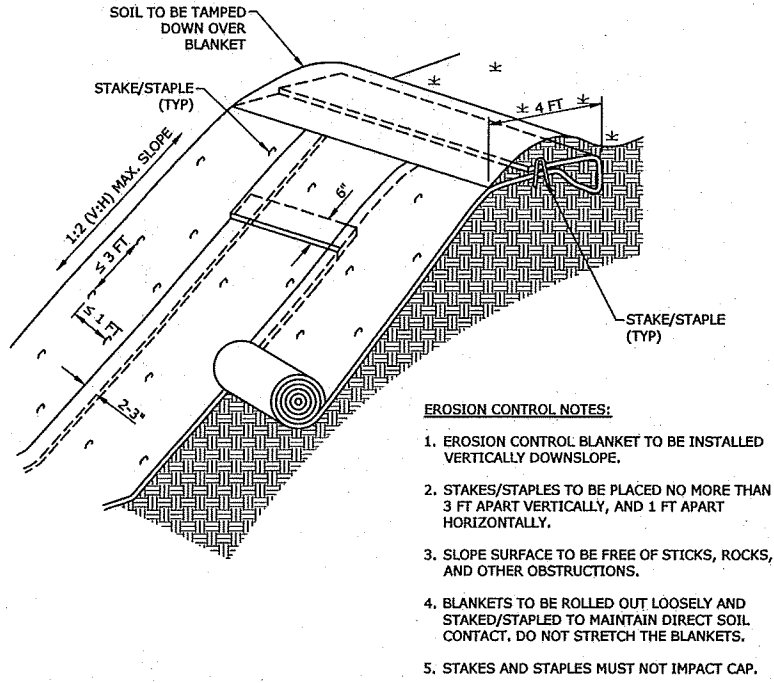


- NOTES:**
1. SILT SOCK SHALL BE FILLED WITH FILTERMEDIA BY FILTERREX OR APPROVED EQUAL.
 2. SILT SOCK SHALL BE FILLED WITH FILTERMEDIA BY FILTERREX OR APPROVED EQUAL.
 3. WHERE TWO SILT SOCKS ARE JOINED, A MINIMUM OF 2 FEET OF OVERLAP SHALL BE MAINTAINED.
 4. SILT SOCKS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

EROSION CONTROL BARRIER
NO SCALE

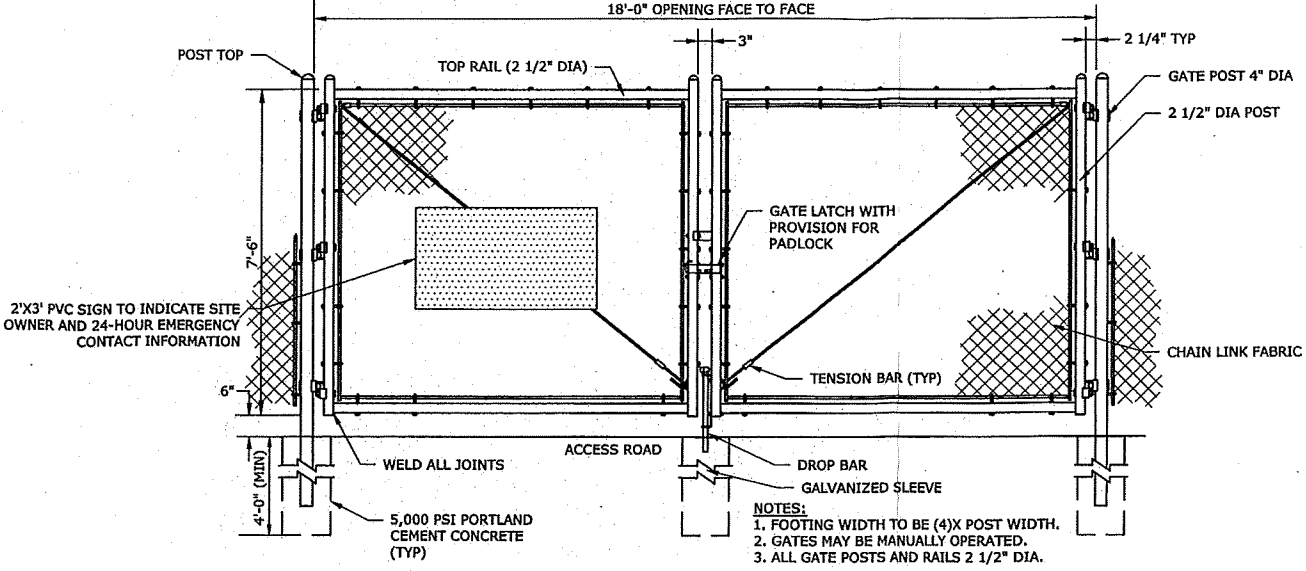


STABILIZED CONSTRUCTION ENTRANCE/EXIT
NO SCALE

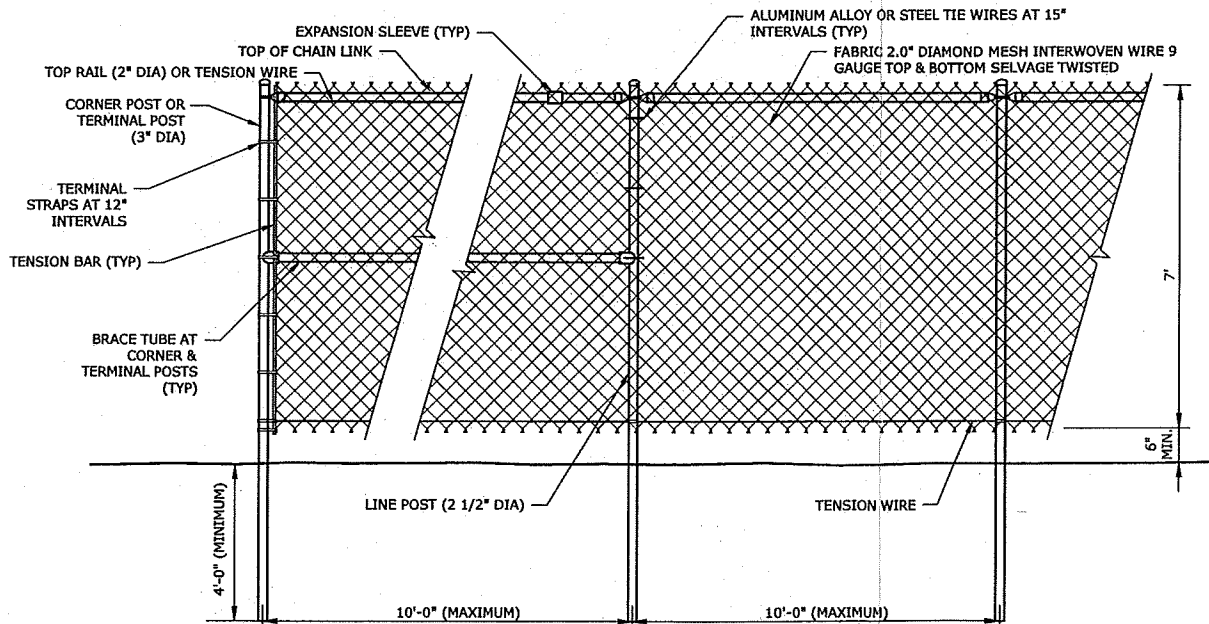


- EROSION CONTROL NOTES:**
1. EROSION CONTROL BLANKET TO BE INSTALLED VERTICALLY DOWNSLOPE.
 2. STAKES/STAPLES TO BE PLACED NO MORE THAN 3 FT APART VERTICALLY, AND 1 FT APART HORIZONTALLY.
 3. SLOPE SURFACE TO BE FREE OF STICKS, ROCKS, AND OTHER OBSTRUCTIONS.
 4. BLANKETS TO BE ROLLED OUT LOOSELY AND STAKED/STAPLED TO MAINTAIN DIRECT SOIL CONTACT. DO NOT STRETCH THE BLANKETS.
 5. STAKES AND STAPLES MUST NOT IMPACT CAP.

EROSION CONTROL BLANKET
NO SCALE

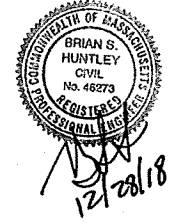


DOUBLE SWING GATE
NO SCALE



CHAIN LINK FENCE
NO SCALE

- CHAIN LINK FENCING NOTES:**
1. UNLESS OTHERWISE NOTED ON THE SITE PLANS, ALL CHAIN LINK FENCING COMPONENTS SHALL HAVE A HOT DIPPED GALVANIZED FINISH. ANY CHIPS IN THE GALVANIZED FINISH DUE TO SITE INSTALLATION SHOULD BE MINIMIZED AND REPAIRED WITH INDUSTRIAL GRADE GALVANIZED PAINT. ALL CUT ENDS ARE TO BE FINISHED WITH INDUSTRIAL GRADE PAINT-ON GALVANIZED FINISH.
 2. CHAIN LINK FABRIC SHALL BE MADE OF 9 GAUGE STEEL WIRE, 2\"/>
 3. ALL POSTS ARE TO BE PLUMB IN ALL DIRECTIONS.
 4. LINE POSTS TO BE HAMMER DRIVEN. POST END MUST BE CUT TO FINAL HEIGHT AFTER DRIVING IS COMPLETED. CUT END IS TO BE SQUARE AND FREE OF BENDS, MUSHROOMING, AND BURS. CUT END TO BE TREATED AS PER NOTE #1.
 5. LINE & TERMINAL POSTS, BRACE TUBES, TOP RAILS, & GATE POSTS SHALL ALL BE SCHEDULE 40 PIPE. REFERENCED DIAMETER IS NOMINAL.
 6. CHAIN LINK FENCE SHALL HAVE 1 NO TRESPASS SIGN & 1 DANGER HIGH VOLTAGE SIGN MOUNTED SIDE BY SIDE EVERY 100 FEET AROUND ENTIRE FENCE PERIMETER.



PERMIT DRAWINGS- NOT FOR CONSTRUCTION

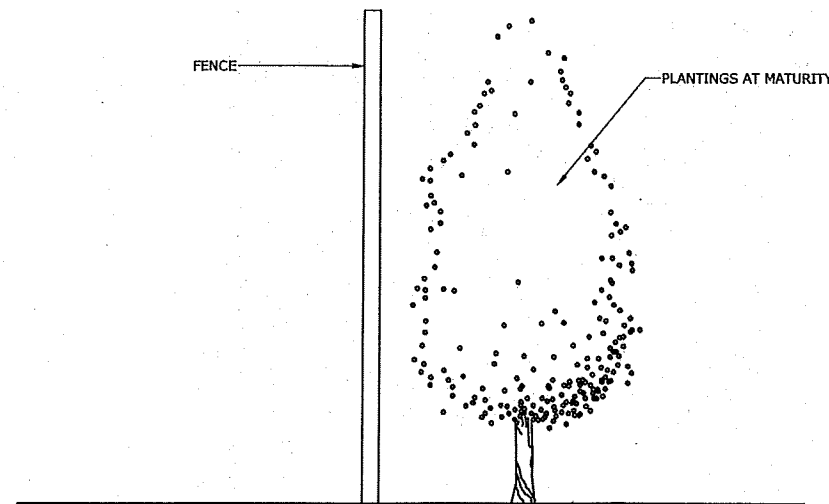
Franklin Solar Project

Franklin Kearsarge, LLC

Franklin, Massachusetts

VERIFY SCALE
BAR IS 1 INCH ON ORIGINAL DRAWING
0 = 1 INCH
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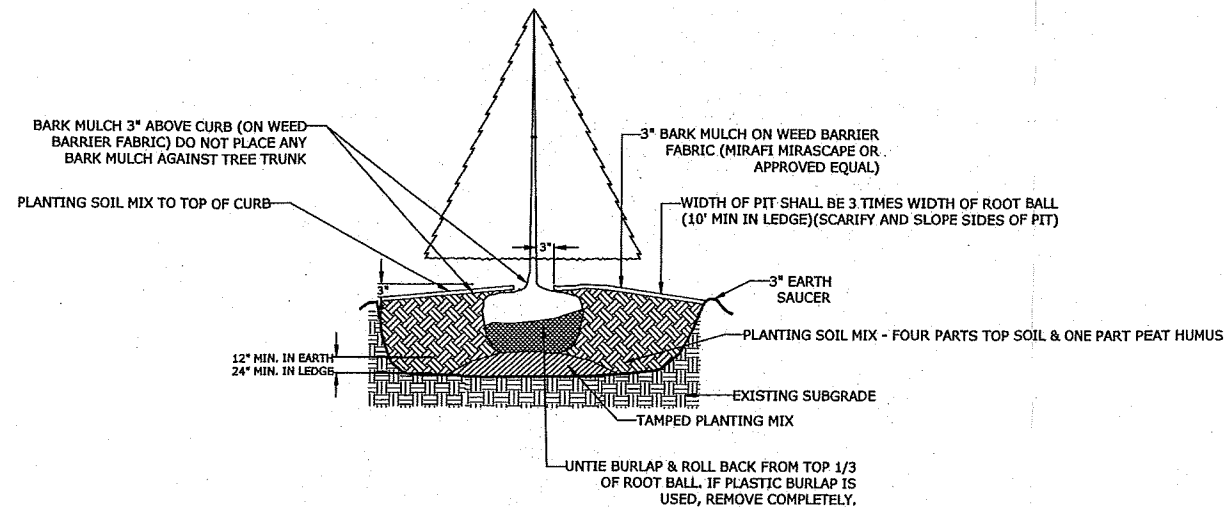
MARK	DATE	DESCRIPTION
PROJECT NO:	K-0092	
DATE:	2018/12/27	
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DRAWN BY:	ELD	
CHECKED:	BSH/JEC	
APPROVED:	FJH	
SITE DETAILS - 1		
SCALE: AS NOTED		
C-007		



PLANT LIST

BOTANICAL NAME	COMMON NAME	SIZE	SPACING
JUNIPERUS VIRGINIANA 'SKYROCKET'	EASTERN RED CEDAR	2-3' HT.	4' O.C.

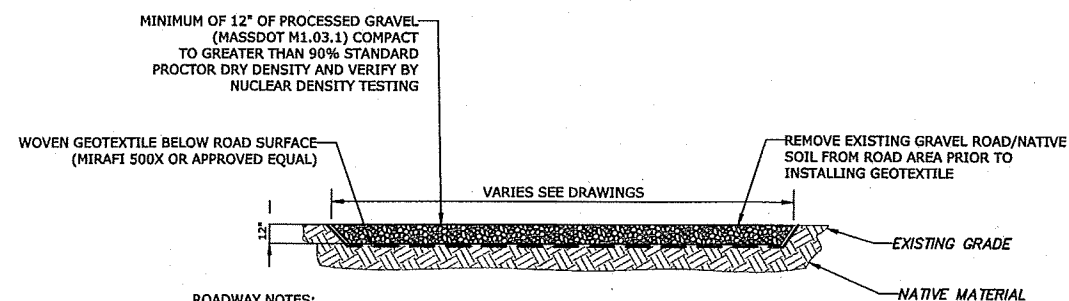
LANDSCAPE BUFFER - SECTION
NO SCALE



NOTE:

1. PLANT AT SAME DEPTH AS PREVIOUSLY PLANTED IN NURSERY, OR WITHIN 2" ABOVE.
2. TREEGATOR SLOW-RELEASE WATERING BAGS TO BE INSTALLED AT TIME OF PLANTING

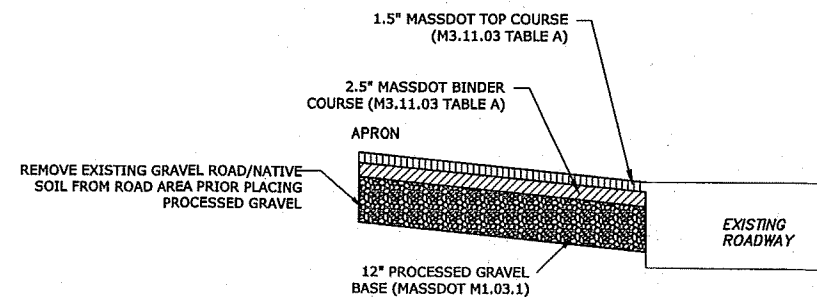
EVERGREEN TREE PLANTING
NO SCALE



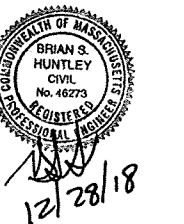
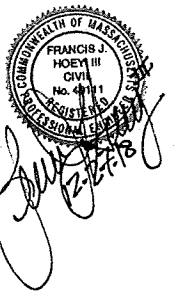
ROADWAY NOTES:

1. ROAD SURFACE IS TO BE GRADED SUCH THAT NO PONDING OF WATER OCCURS WITHIN THE LIMITS OF THE ROAD SURFACE.

TYPICAL ACCESS ROAD SECTION
NO SCALE



CURB CUT
NO SCALE



PERMIT DRAWINGS- NOT FOR CONSTRUCTION

Franklin Solar Project

Franklin Kearsarge, LLC

Franklin, Massachusetts

VERIFY SCALE

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PROJECT NO:	K-0092	
DATE:	2018/12/27	
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DRAWN BY:	ELD	
CHECKED:	BSH/JEC	
APPROVED:	FJH	

SITE DETAILS - 2

SCALE: AS NOTED

C-008