

LEGEND:

- PUBLIC TEMPORARY INTERSECTION DRIVE SURFACE
- INTERSECTION CLEAR ZONE
- OUT OF PROJECT BOUNDARY
- DELINEATED WETLAND
- PROPOSED EROSION/SEDIMENT CONTROL
- PROPOSED CULVERT
- EXISTING OVERHEAD POWER
- EXISTING TELEPHONE LINE
- EXISTING GAS LINE
- EXISTING CABLE LINE
- EXISTING RIGHT OF WAY
- EXISTING CULVERT
- EXISTING 10' CONTOURS
- EXISTING 2' CONTOURS
- DELIVERY DIRECTION

NOTE: 150' RADII IS A ASSUMED VALUE. DESIGN RADII MAY CHANGE BASED ON MANUFACTURER'S TURBINE DELIVERY SPECIFICATIONS.

Designed: KLG
Checked: SJB
Drawn: KLG
As-Built Drawing:

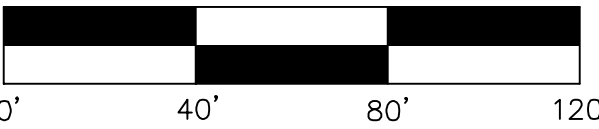
Revisions	DATE	DESCRIPTION
A	09/22/17	100% plans

Prepared for:



3900 E. White Ave
Clinton, IN 47842

Trishe Wind Ohio, LLC
c/o Starwood Energy Group, LLC
5 Greenwich Office Park, 2nd Floor
Greenwich, CT 06831



Northwest Ohio
Wind Project

Paulding, Ohio

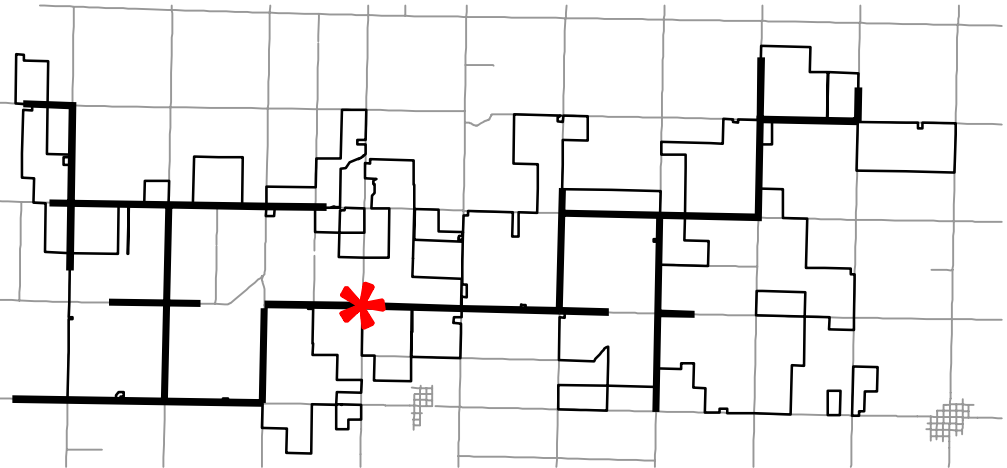
Temporary Intersection 18

100% Completion
Issued For Review

Array Updated: 09/18/2017

Date: 09/22/2017

Sheet: 19 OF 19



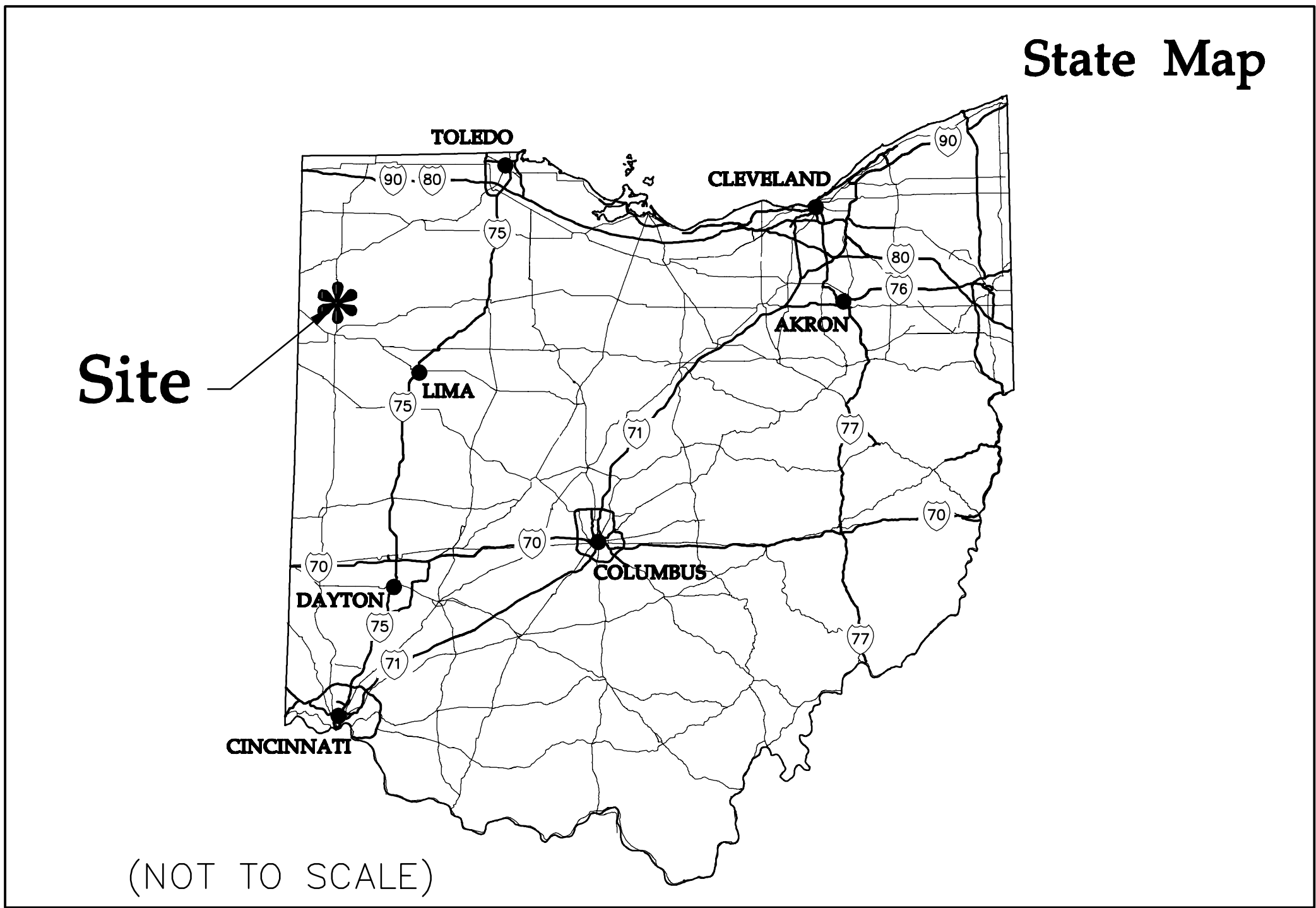
KEY MAP

100% Completion Civil Plans

for
Wind Turbine Generators,
Access Roads, Drainage and
Erosion Control

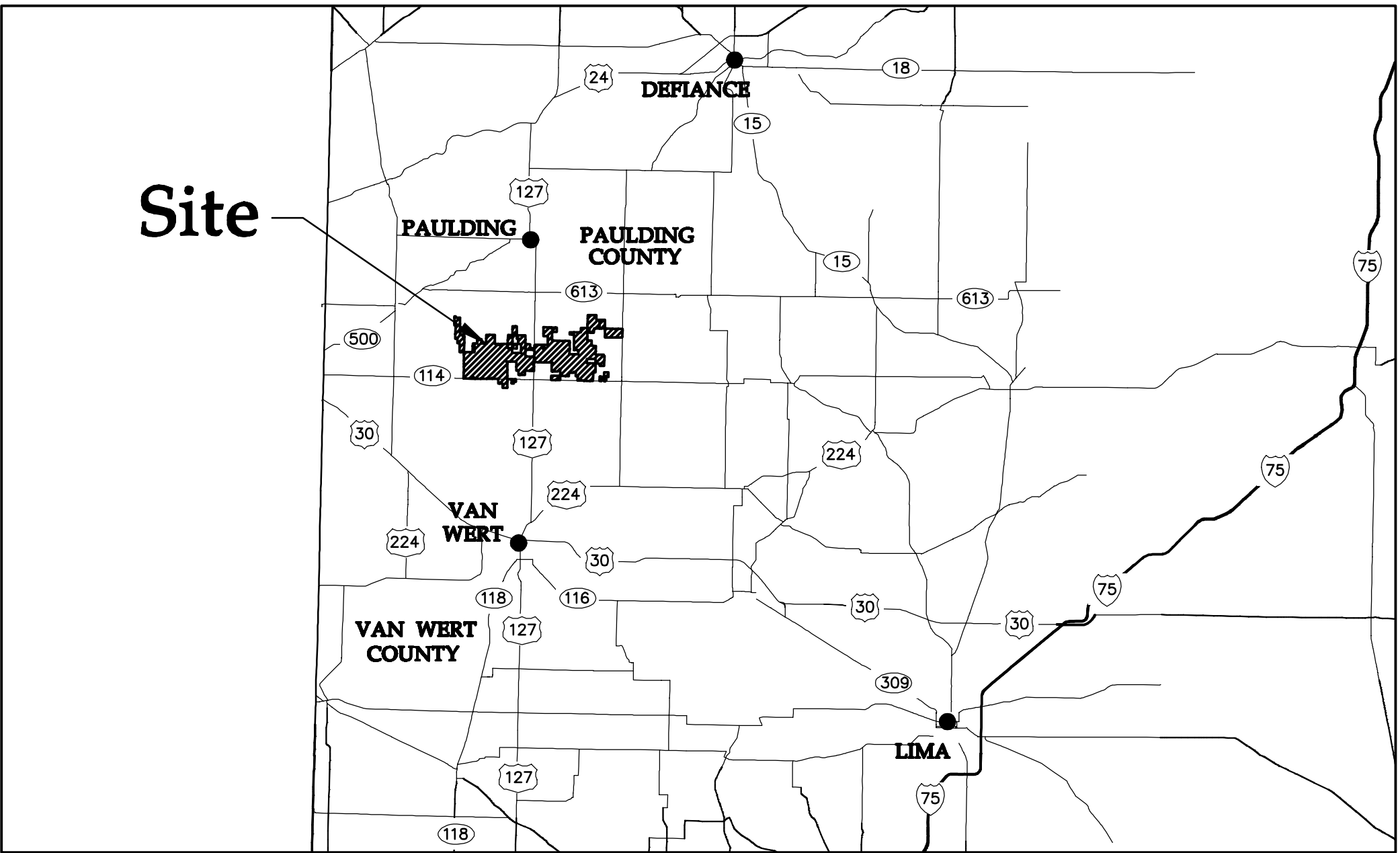
for
Northwest Ohio Wind Project
Paulding, Ohio

State Map



(NOT TO SCALE)

Vicinity Map



Sheet List Table	
Sheet Number	Sheet Title
1	Cover
2	Overall Civil Site Plan
3	Construction Details
4	Construction Details
5	Construction Details
6	Construction Details
7	Construction Details
8	Construction Details
9	Construction Notes
10	Civil Site Plan T01
11	Civil Site Plan T48 T49 T50
12	Civil Site Plan T2 T3 T4
13	Civil Site Plan T13 T14
14	Civil Site Plan T20
15	Civil Site Plan T31
16	Civil Site Plan
17	Civil Site Plan T41 T42 T43
18	Civil Site Plan T05
19	Civil Site Plan T06 T07 T08
20	Civil Site Plan T15 T16
21	Civil Site Plan T21 T22 T23
22	Civil Site Plan T26 T27 T28
23	Civil Site Plan T32 T33 T34
24	Civil Site Plan T36 T37
25	Civil Site Plan T44 T45
26	Civil Site Plan T09 T10
27	Civil Site Plan T17
28	Civil Site Plan T24 T25
29	Civil Site Plan T29
30	Civil Site Plan T39 T40
31	Civil Site Plan T46
32	Civil Site Plan
33	Turbine Delivery and Public Intersection Plan
34	Concrete Haul Route Plan
35	Aggregate Haul Route Plan

NO.	DATE	REVISION	SHEETS

DATA SET INFORMATION			
BASE FILE	FILE NAME / NOTES	PROVIDER	DATE
AERIAL IMAGE	Northwest_Ohio_Wind_Project.sid	ESRI	4/5/2013
ALTA SURVEY/LAND CONTROL	20101023.01SURV.dwg NWO.dwg	Westwood	ONGOING
TOPOGRAPHY	DTM-LIDAR-Thinned-dot10.xyz	State of Ohio	4/4/2013
TURBINE ARRAY	Aug_42xGE2.5-116_Trishe_Ohio_SPft_NAD83.shp	Starwood	8/11/2017
UNDERGROUND COLLECTION	0007186WINDCONNECT.dwg	Westwood	9/22/2017
STREAMS/WETLANDS	NW_Ohio_WTLD_GPS_May20Updated.shp	Westwood	5/20/2013

Westwood

Phone (952) 937-5150 7699 Anagram Drive
Fax (952) 937-5822 Eden Prairie, MN 55344
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

Designed: **KLG**

Checked: **SPB**

Drawn: **KLG**

As-Built Drawing:

Revisions	DATE	DESCRIPTION
A	09/01/17	60% plans
B	09/07/17	90% plans
C	09/11/17	90% plans
D	09/22/17	100% plans

Prepared for:



3900 E. White Ave
Clinton, IN 47842

Trishe Wind Ohio, LLC
c/o Starwood Energy Group, LLC
5 Greenwich Office Park, 2nd Floor
Greenwich, CT 06831

**Northwest
Ohio Wind
Project**
Paulding, Ohio

Cover

**100% Completion
Issued For Review**

Array Updated: 09/18/2017

Date: 09/22/2017

Sheet: 1 OF 35

Designed:	KLG
Checked:	SJB
Drawn:	KLG

As-Built Drawing:

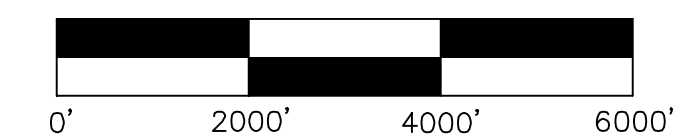
Revisions:		
#	DATE	DESCRIPTION
A	09/01/17	60% plans
B	09/07/17	90% plans
C	09/11/17	90% plans
D	09/22/17	100% plans

Prepared for:



3900 E. White Ave
Clinton, IN 47842

Trishe Wind Ohio, LLC
c/o Starwood Energy Group, LLC
5 Greenwich Office Park, 2nd Floor
Greenwich, CT 06831



Paulding, Ohio

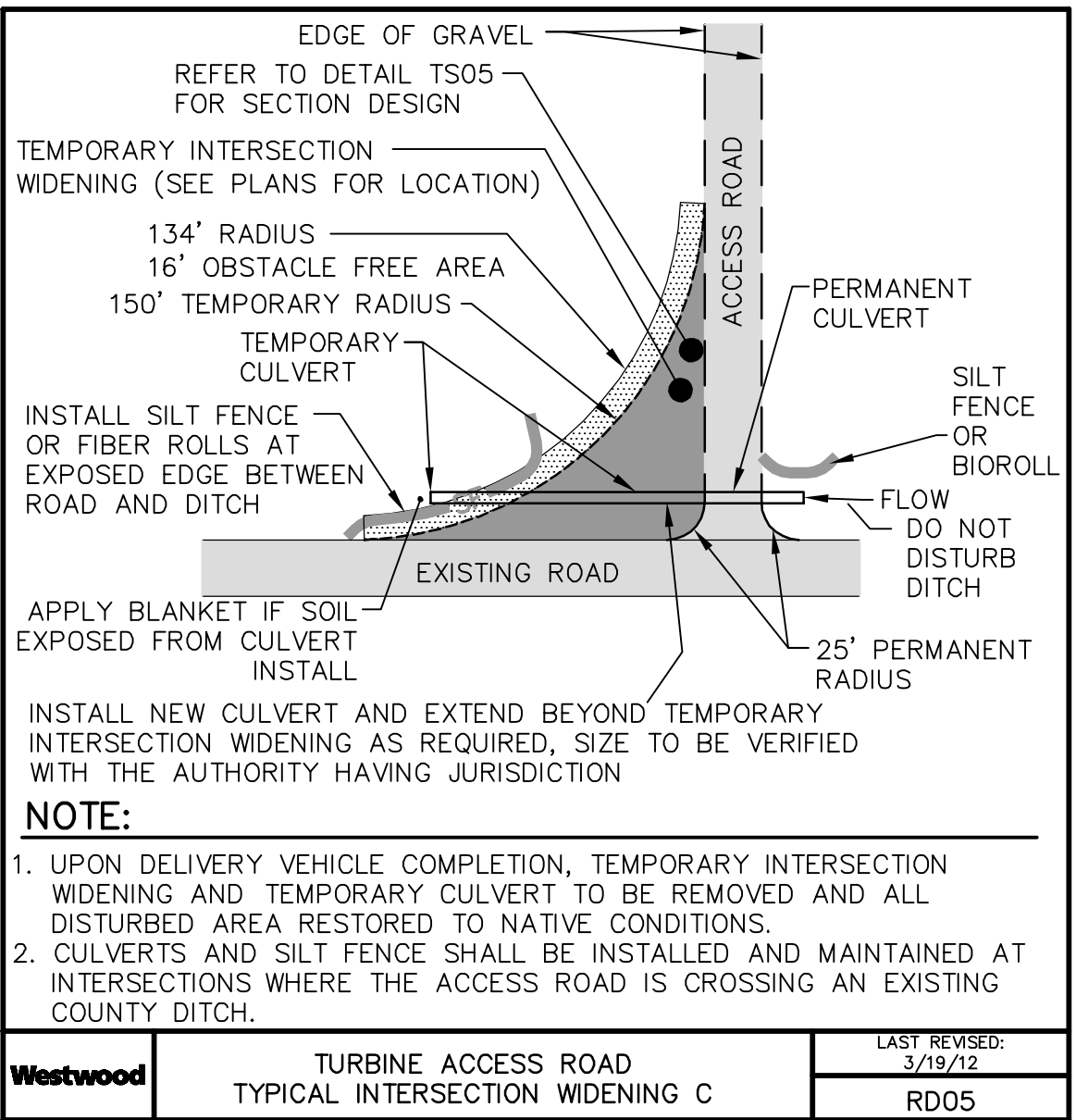
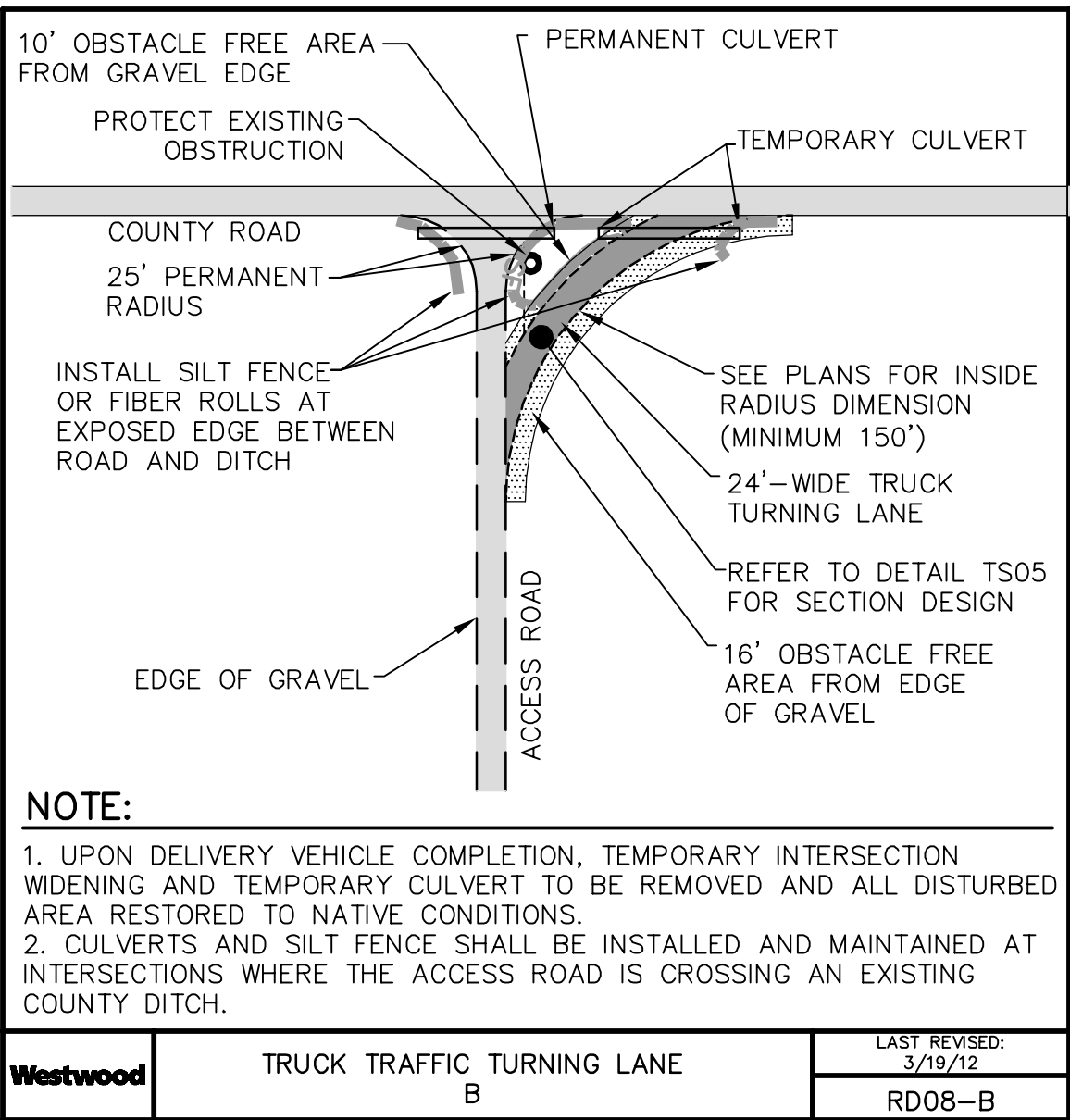
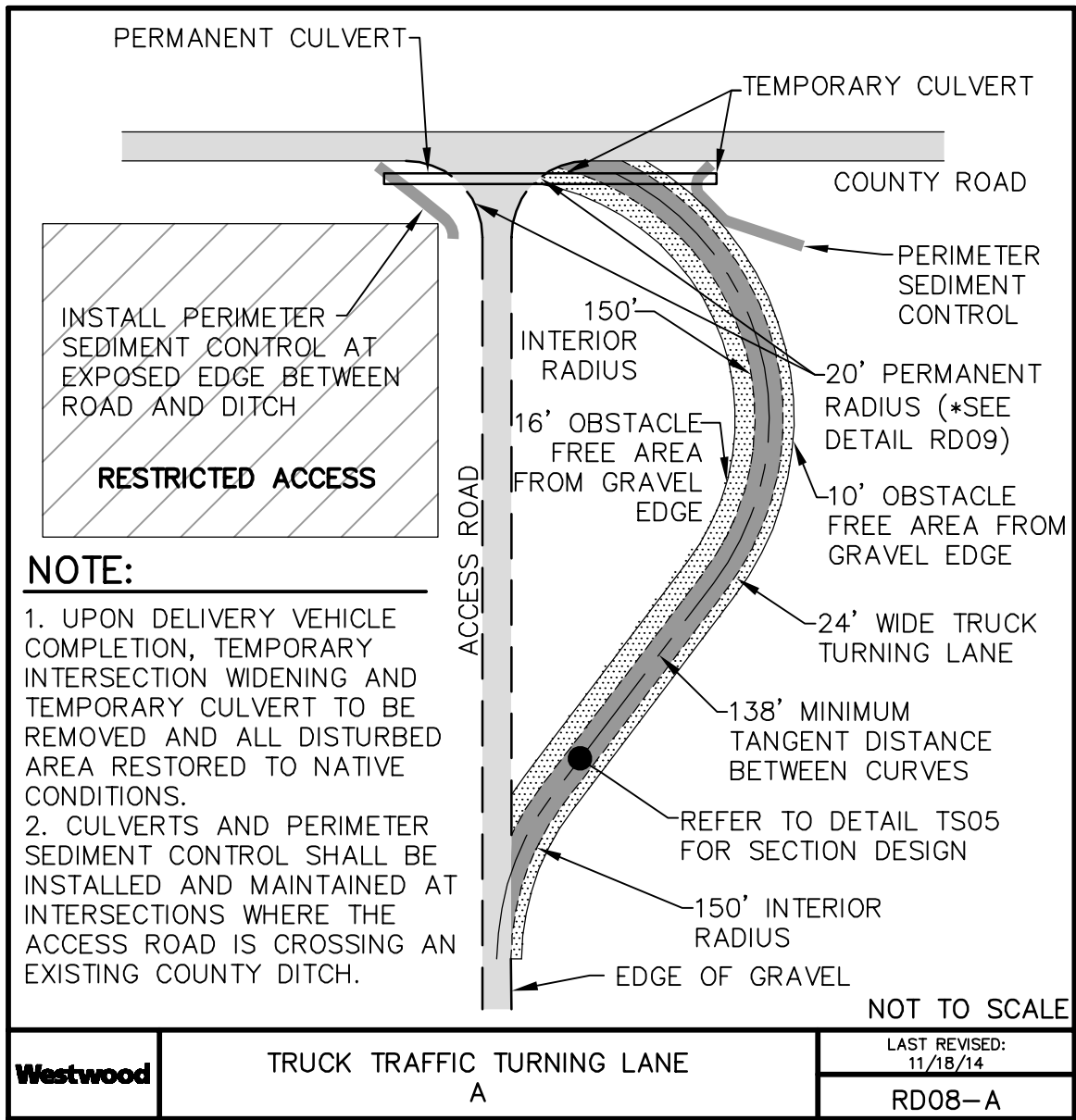
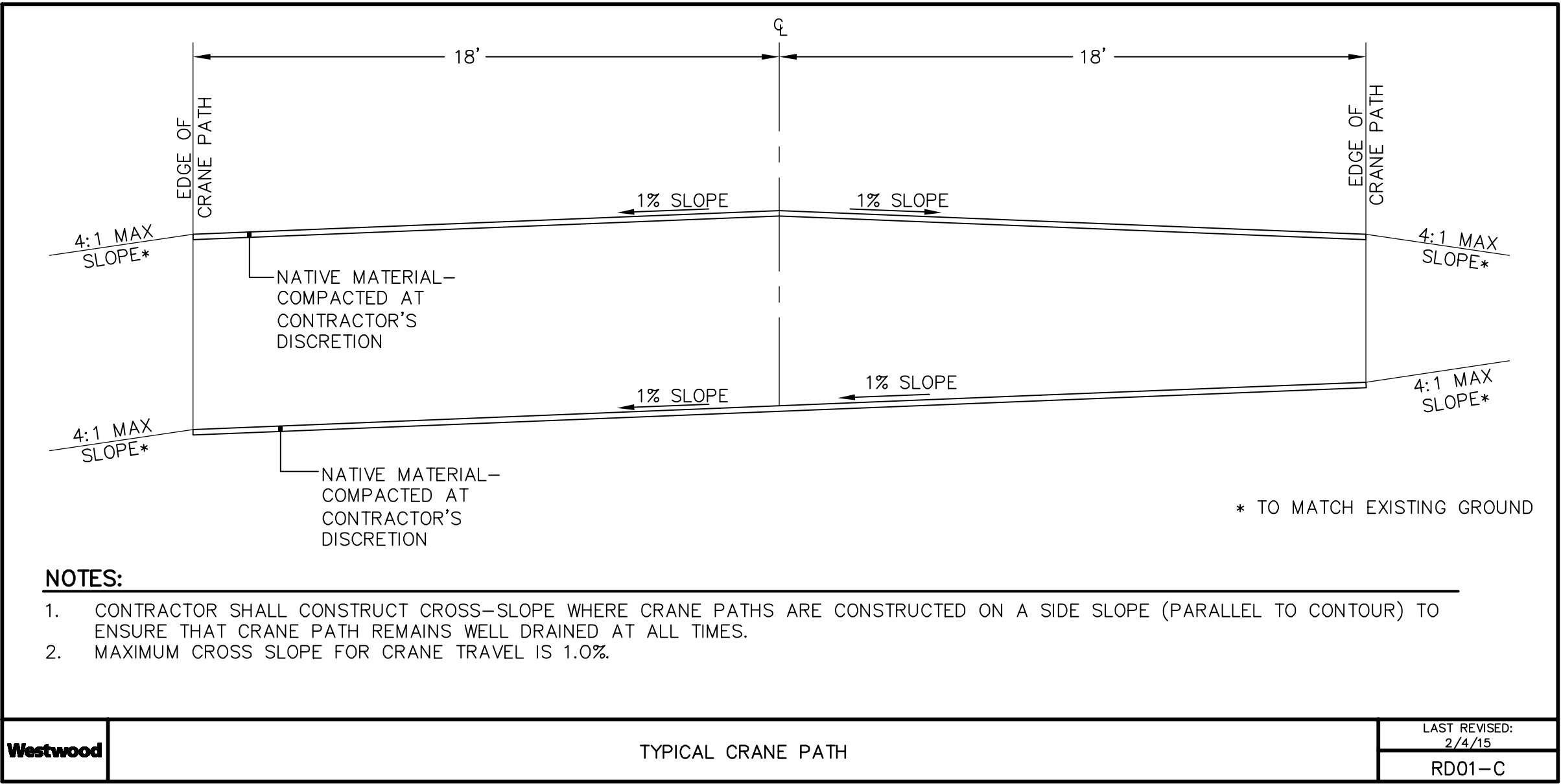
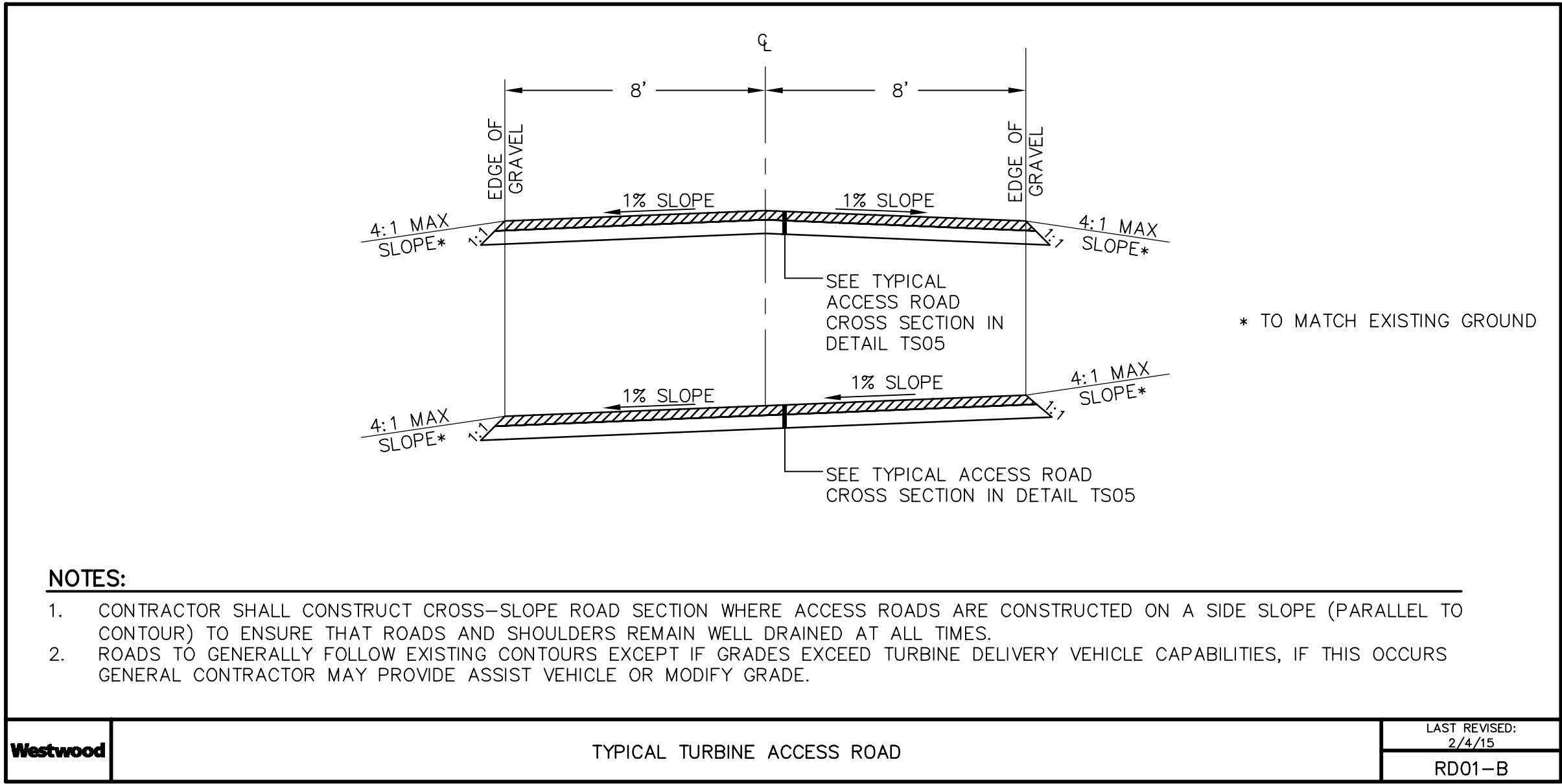
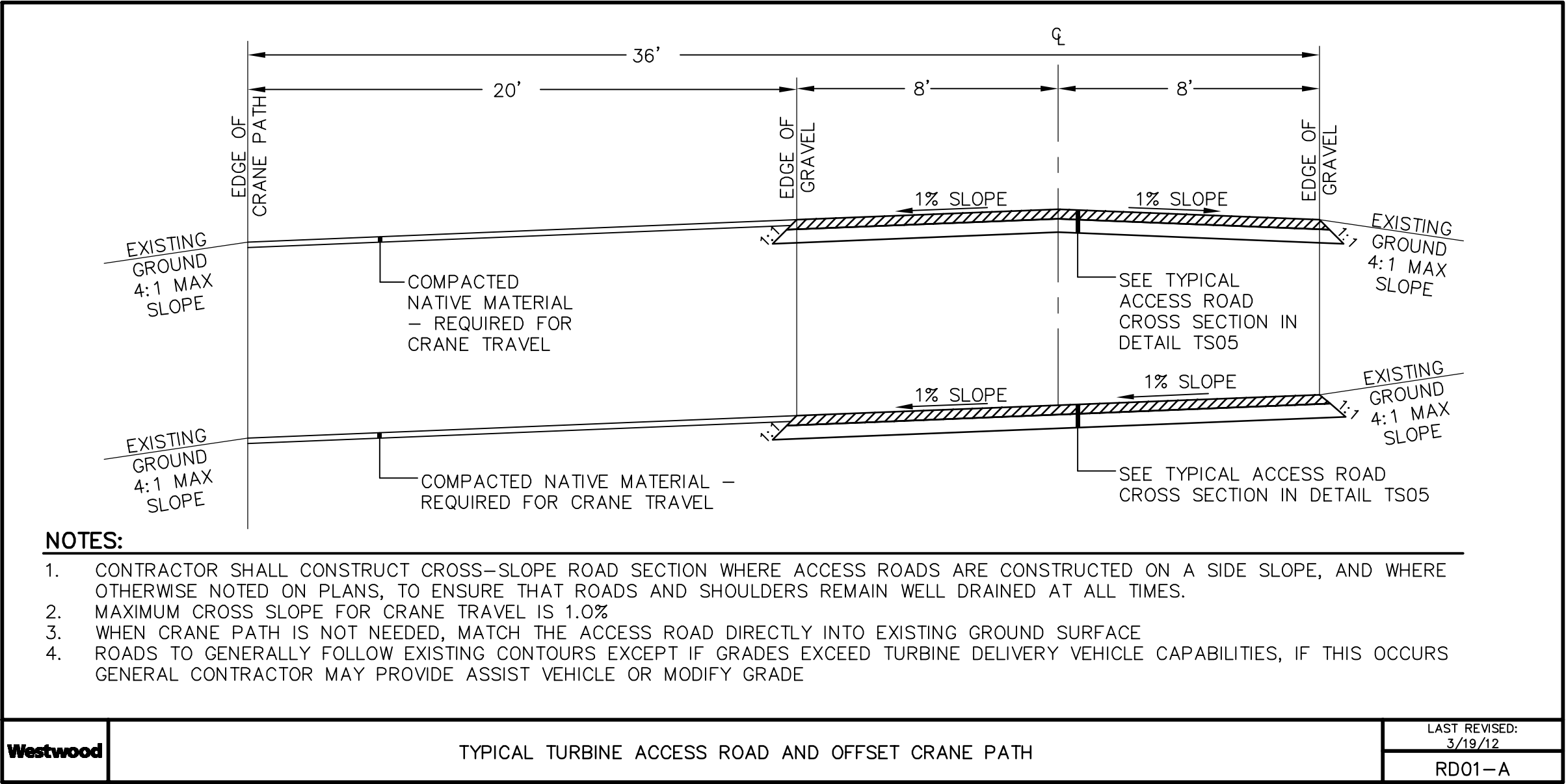
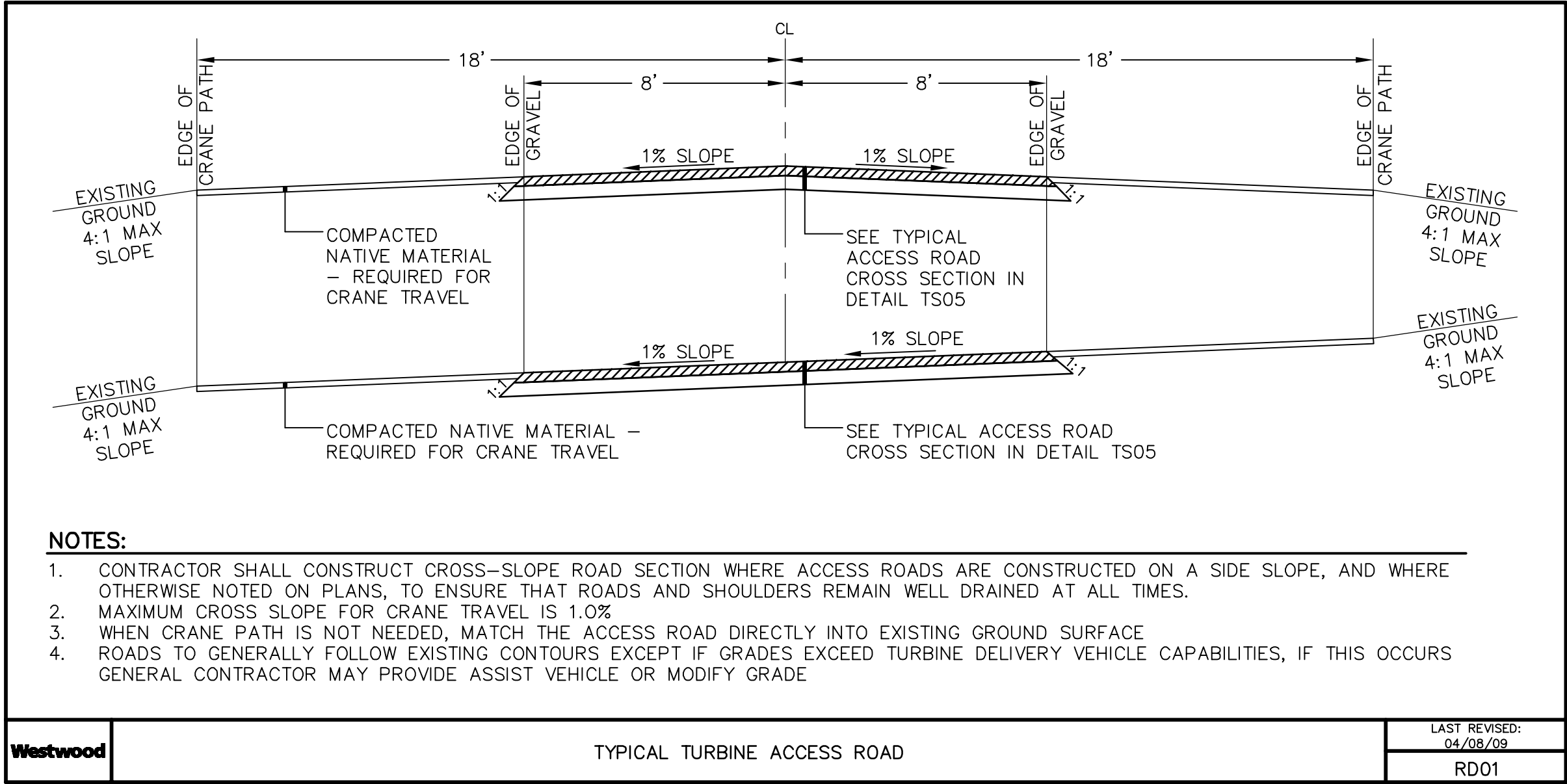
Overall Civil Site Plan

100% Completion
Issued For Review

Array Updated: 09/18/2017

Date: 09/22/2017

Sheet: 2 OF 35



Designed: KLG

Checked: SJB

Drawn: KLG

As-Built Drawing:

Revisions	DATE	DESCRIPTION
A	09/01/17	60% plans
B	09/07/17	90% plans
C	09/11/17	90% plans
D	09/22/17	100% plans

Prepared for:



3900 E. White Ave
Clinton, IN 47842

Trishe Wind Ohio, LLC
c/o Starwood Energy Group, LLC
5 Greenwich Office Park, 2nd Floor
Greenwich, CT 06831

Northwest Ohio Wind Project

Paulding, Ohio

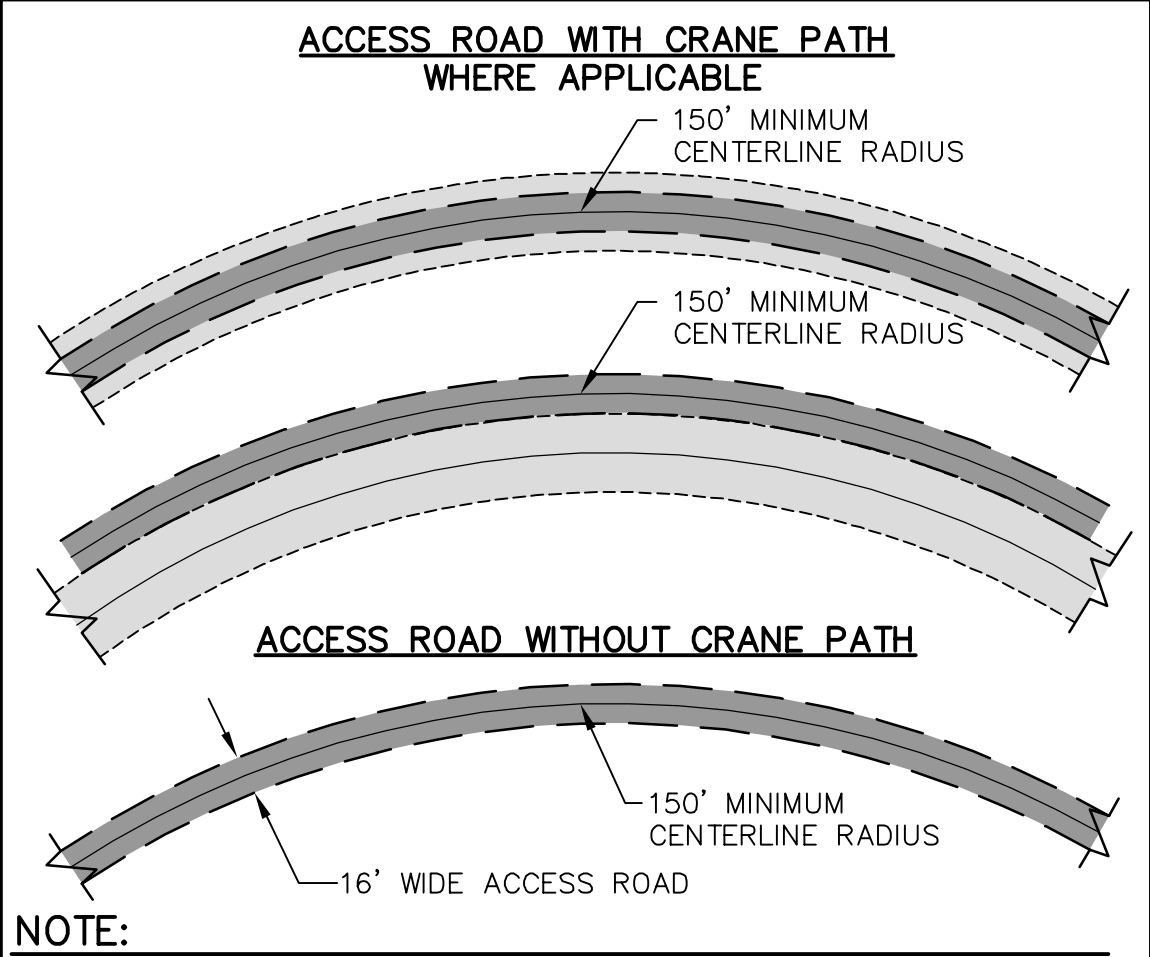
Construction Details

100% Completion
Issued For Review

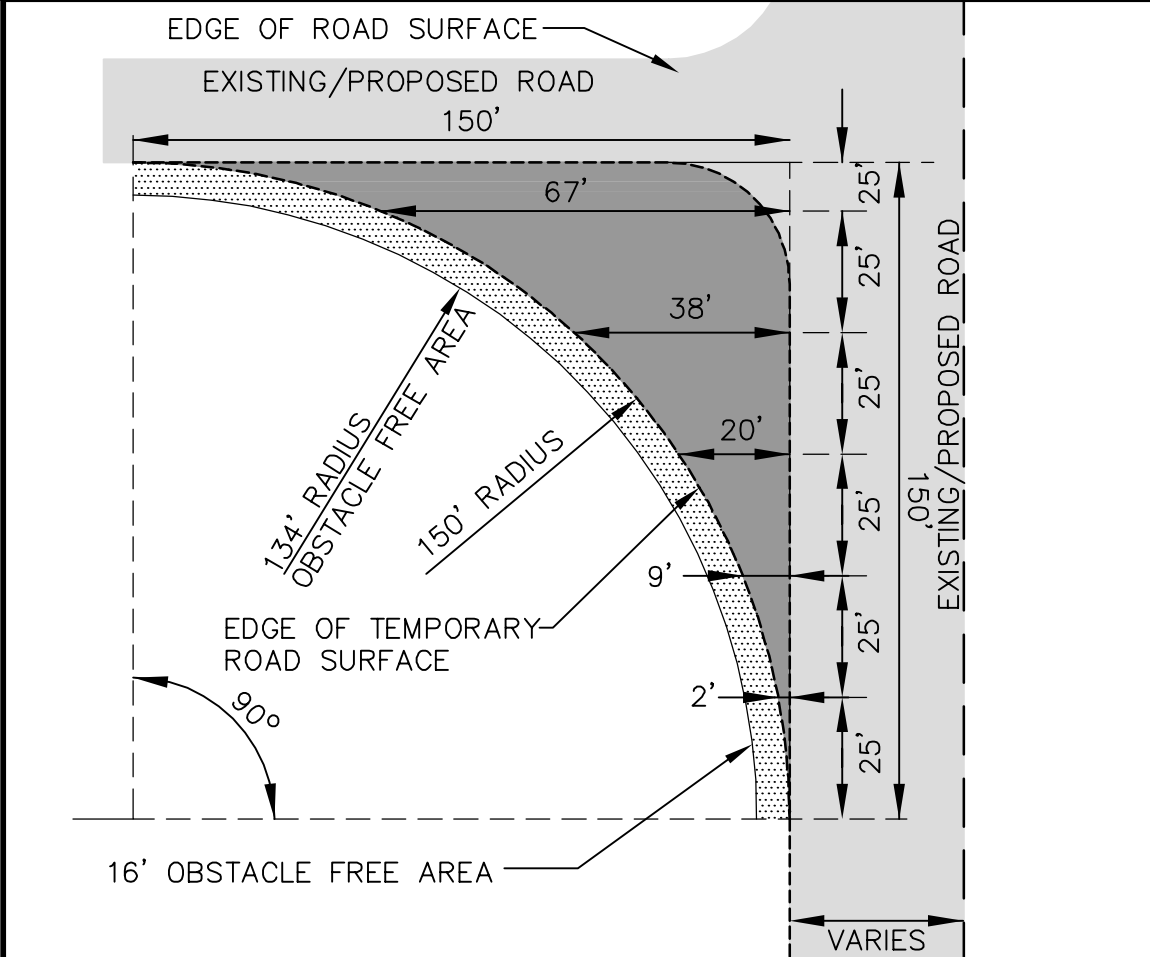
Array Updated: 09/18/2017

Date: 09/22/2017

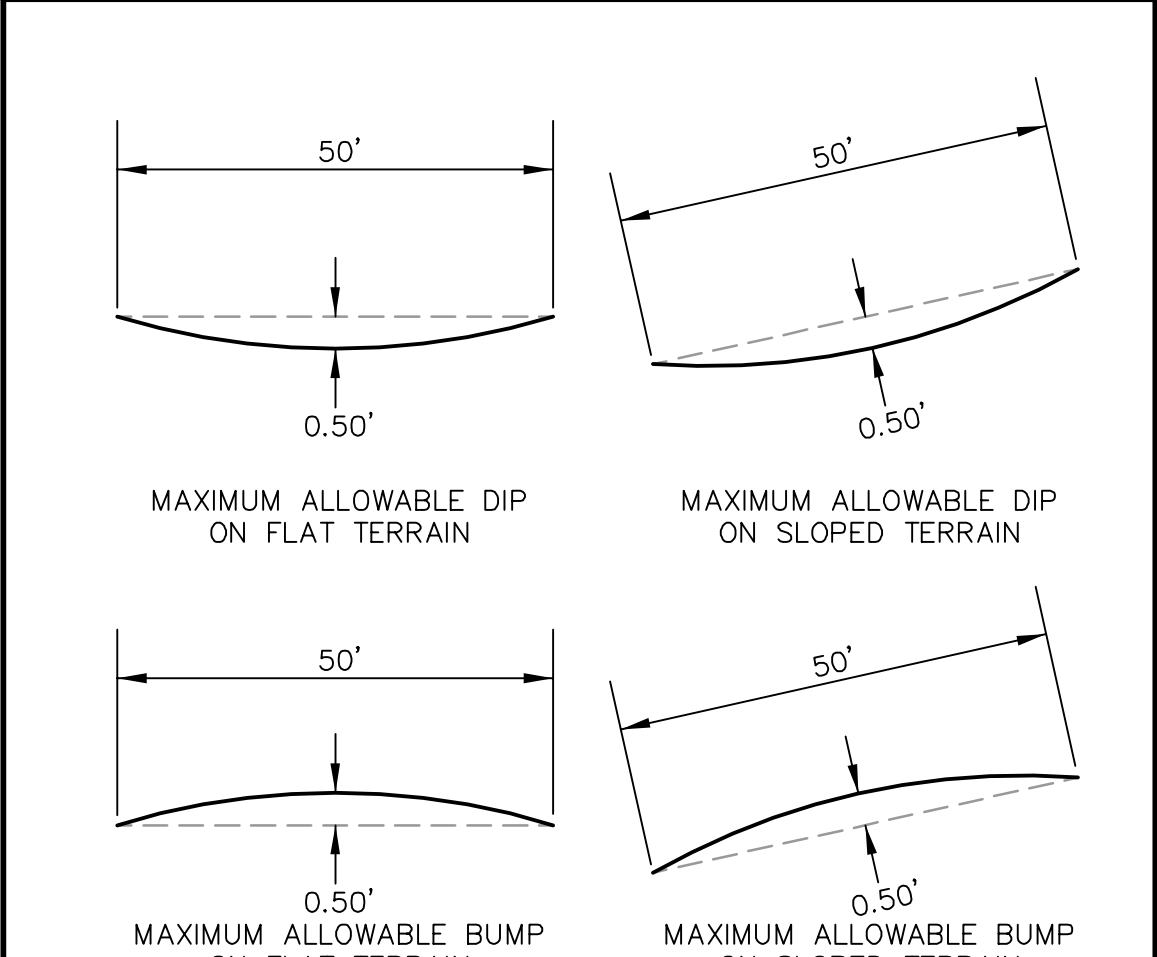
Sheet: 3 OF 35



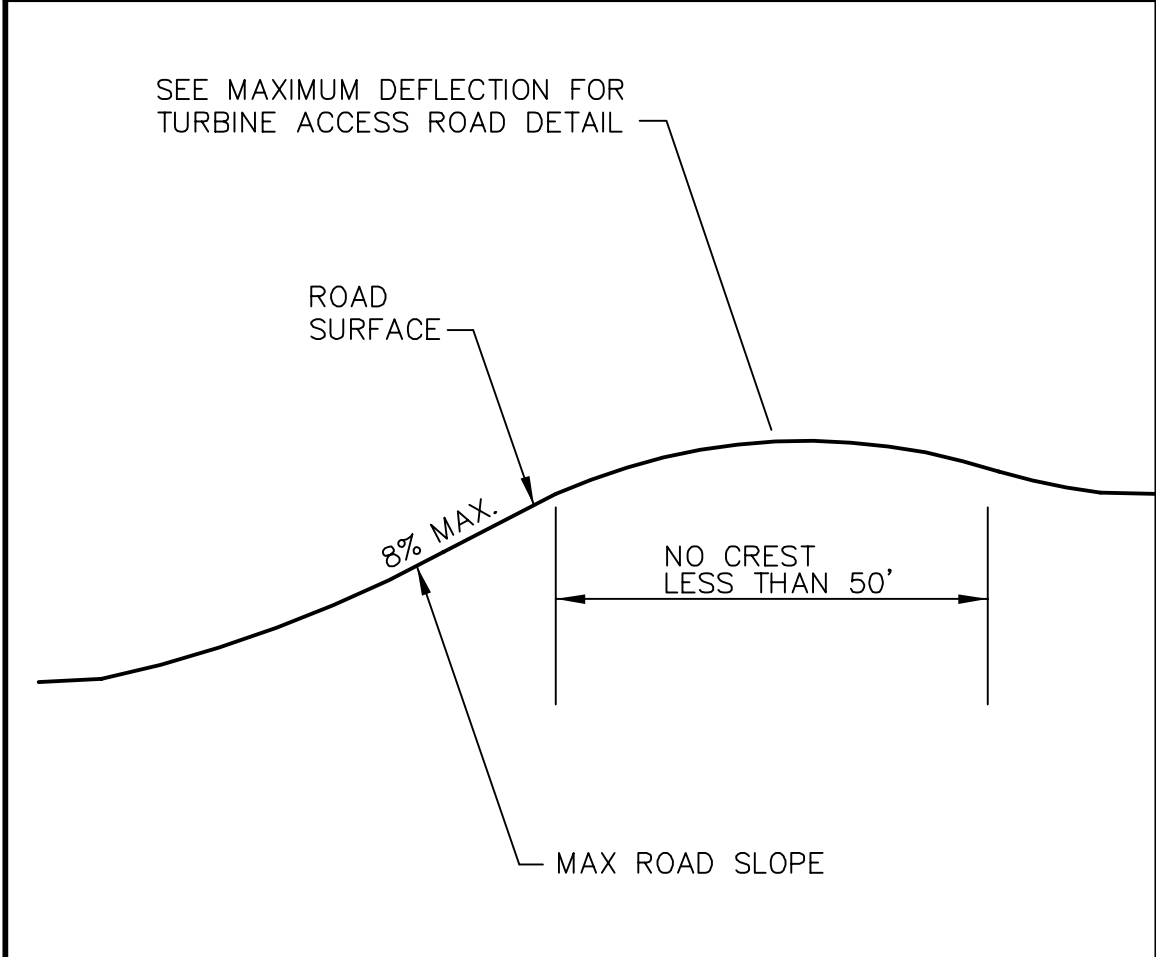
Westwood	MINIMUM RADIUS FOR TURBINE ACCESS ROAD	LAST REVISED: 01/02/08
		RD02



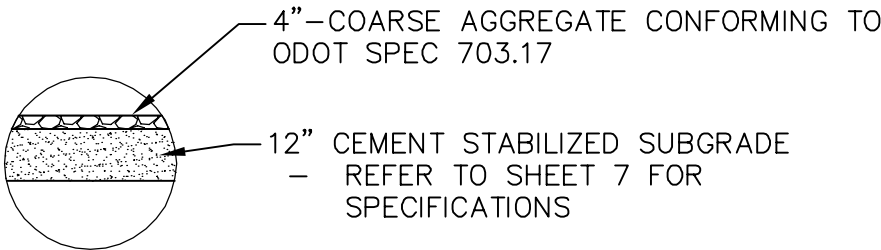
Westwood	INTERSECTION WIDENING DIMENSIONS	LAST REVISED: 3/19/12
		RD06



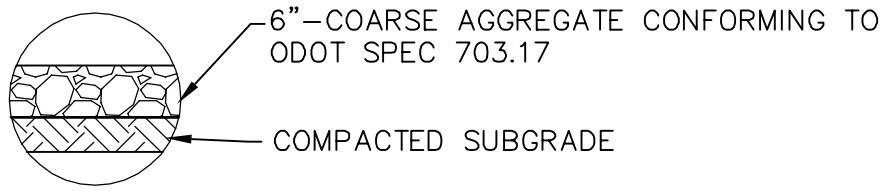
Westwood	MAXIMUM DEFLECTION FOR TURBINE ACCESS ROAD	LAST REVISED: 11/4/13
		RD04



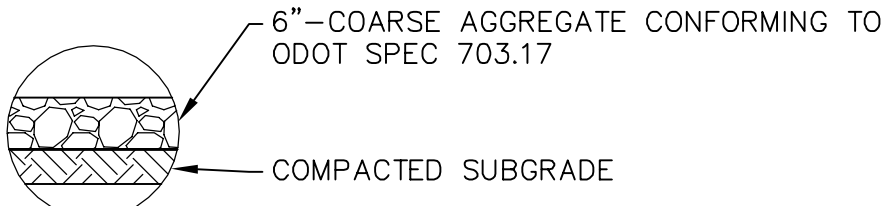
Westwood	MAXIMUM VERT. SLOPE FOR TURBINE ACCESS ROAD/CRANE TRAVEL PATH	LAST REVISED: 11/4/13
		RD03



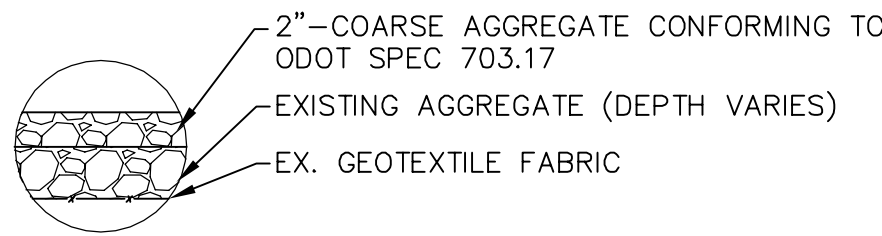
CEMENT STABILIZED ACCESS ROAD CROSS SECTION



MET TOWER AND SPUR ROAD CROSS SECTION



LAYDOWN YARD AND TEMPORARY INTERSECTION CROSS SECTION



EXISTING PTC ROAD CROSS SECTION

NOTE:

STRUCTURAL SECTIONS SHOWN ARE THE MINIMUM THICKNESS REQUIREMENTS DURING NORMAL FIELD CONDITIONS. THE SECTIONS MAY NEED TO BE INCREASED BASED ON ACTUAL FIELD CONDITIONS AT THE TIME OF CONSTRUCTION. CONDITIONS INCLUDE BUT ARE NOT LIMITED TO CONSTRUCTION DURING THE FREEZE/THAW CYCLE, UNUSUALLY WET PERIODS, OR IN LOW/WET AREAS.

Westwood	TYPICAL STRUCTURAL CROSS SECTIONS	LAST REVISED: 08/31/17
		TS05

Designed: KLK

Checked: SJB

Drawn: KLK

As-Built Drawing:

Revisions: #	DATE	DESCRIPTION
A	09/01/17	60% plans
B	09/07/17	90% plans
C	09/11/17	90% plans
D	09/22/17	100% plans

Prepared for:



3900 E. White Ave
Clinton, IN 47842

Trishe Wind Ohio, LLC
c/o Starwood Energy Group, LLC
5 Greenwich Office Park, 2nd Floor
Greenwich, CT 06831

**Northwest
Ohio Wind
Project**
Paulding, Ohio

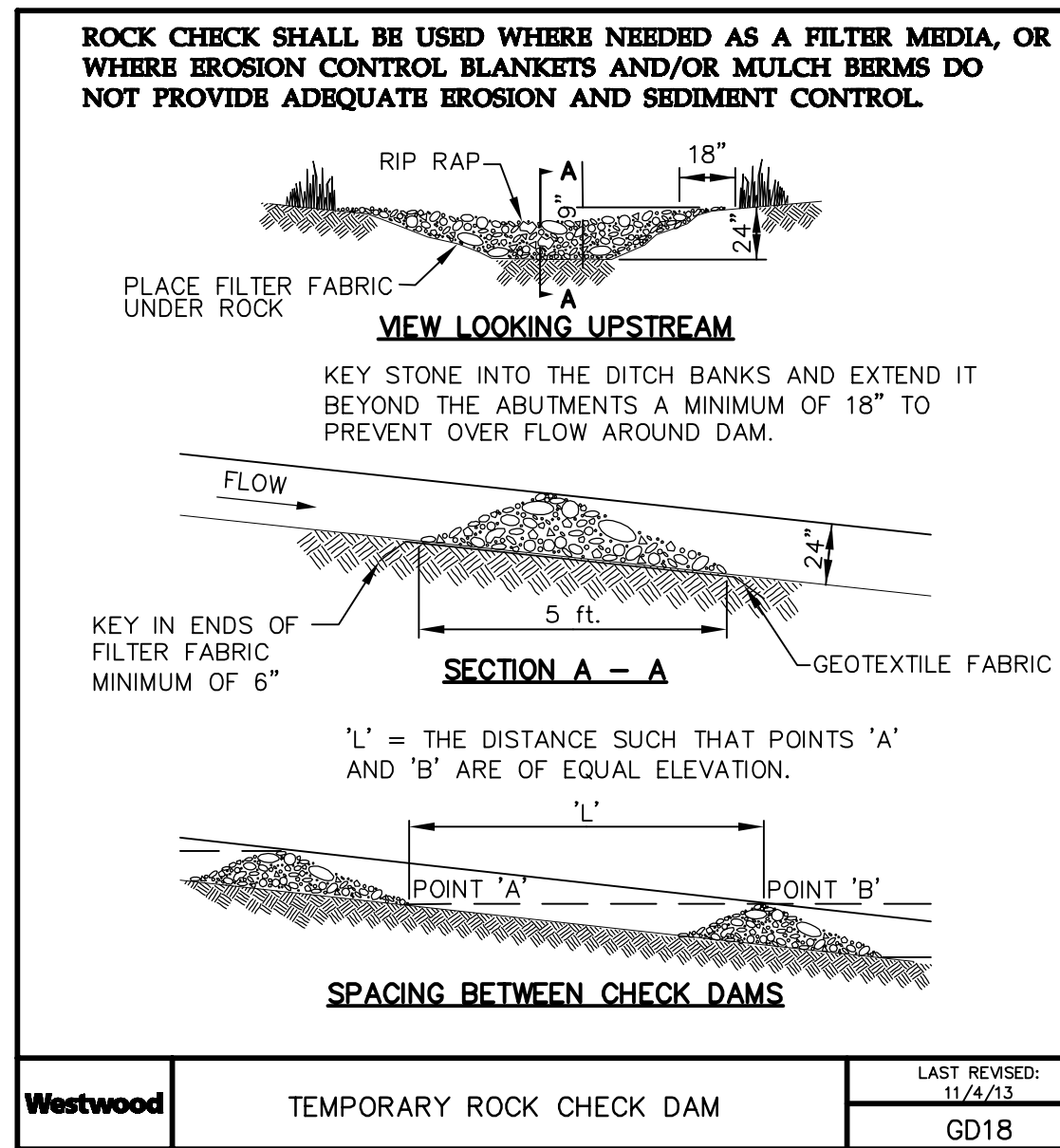
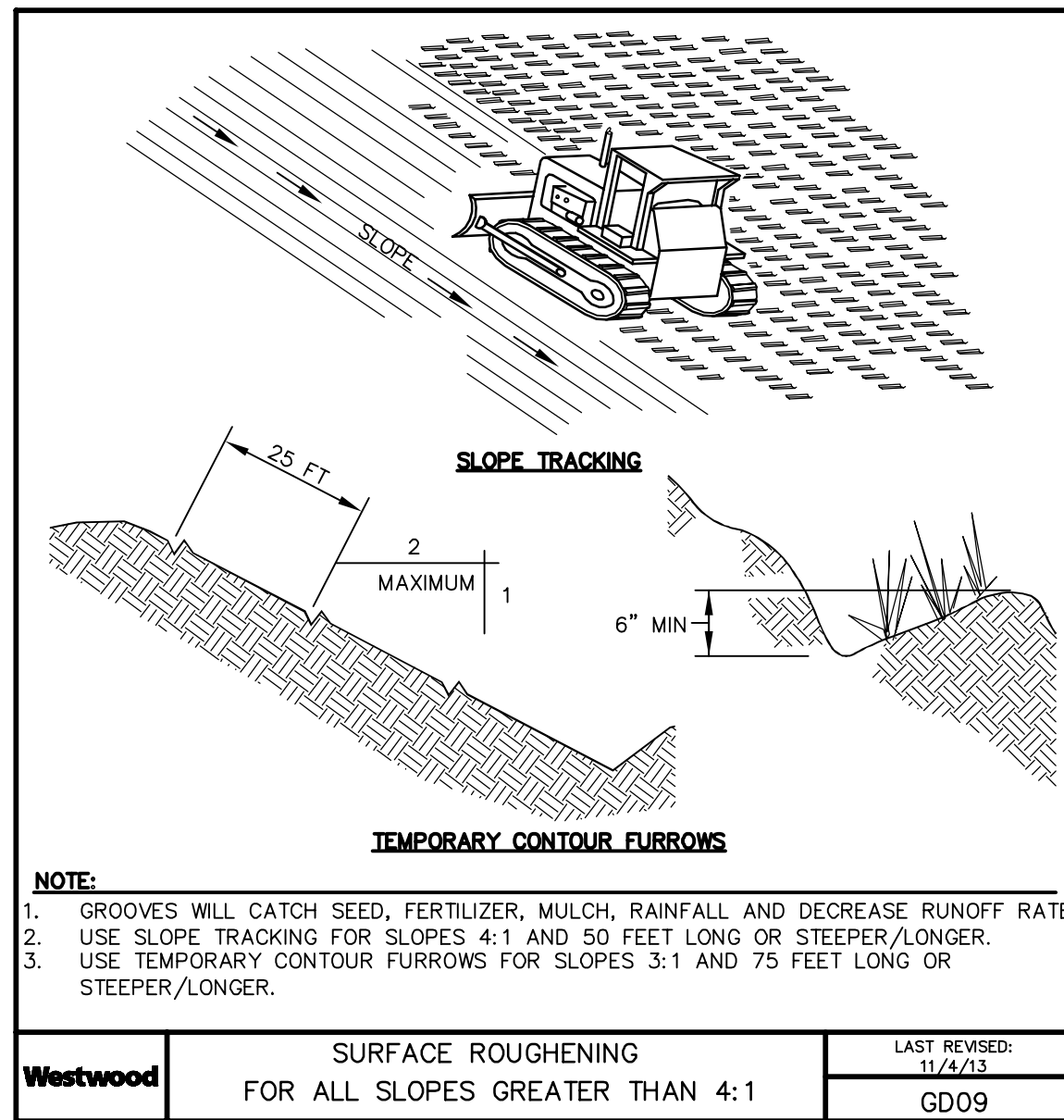
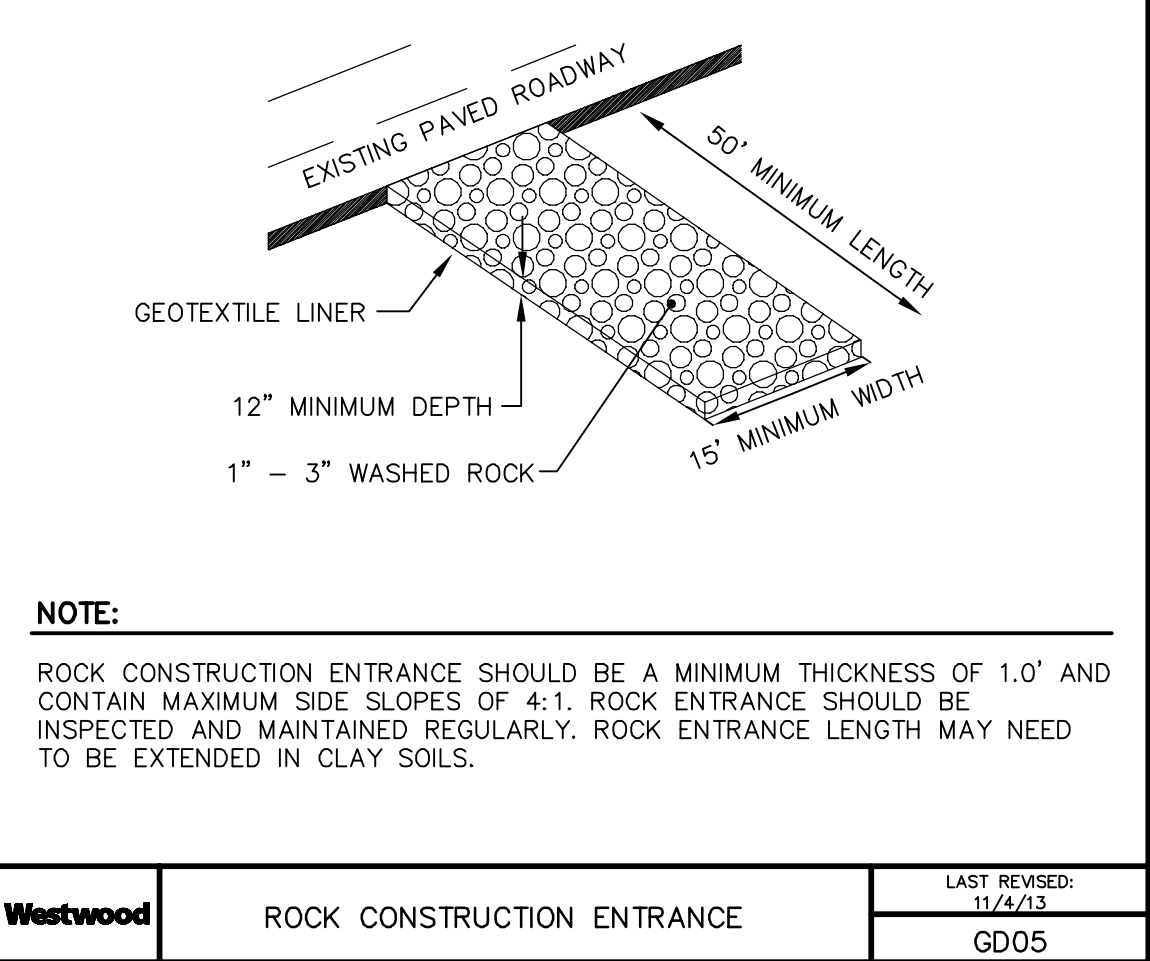
Construction Details

**100% Completion
Issued For Review**

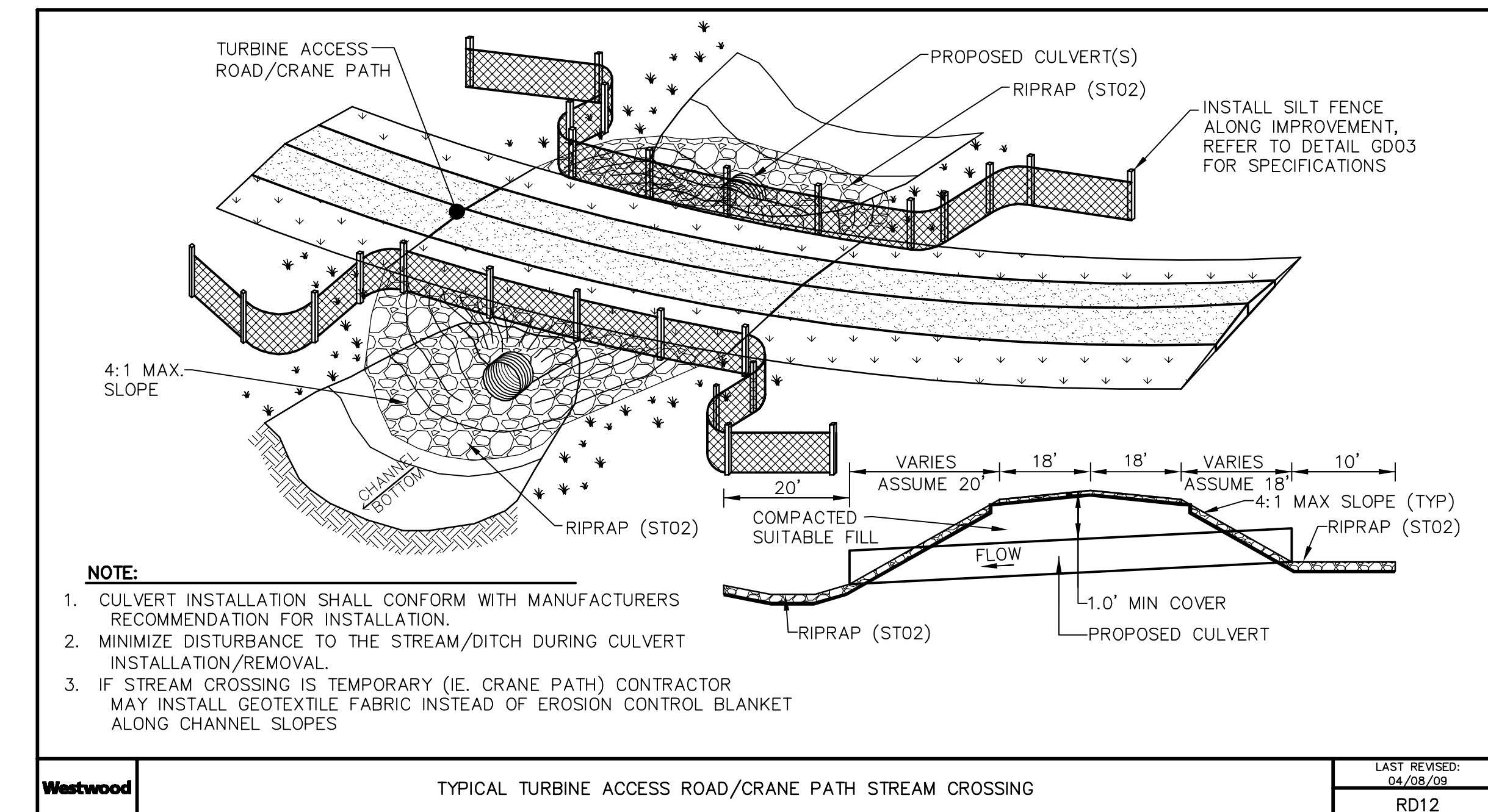
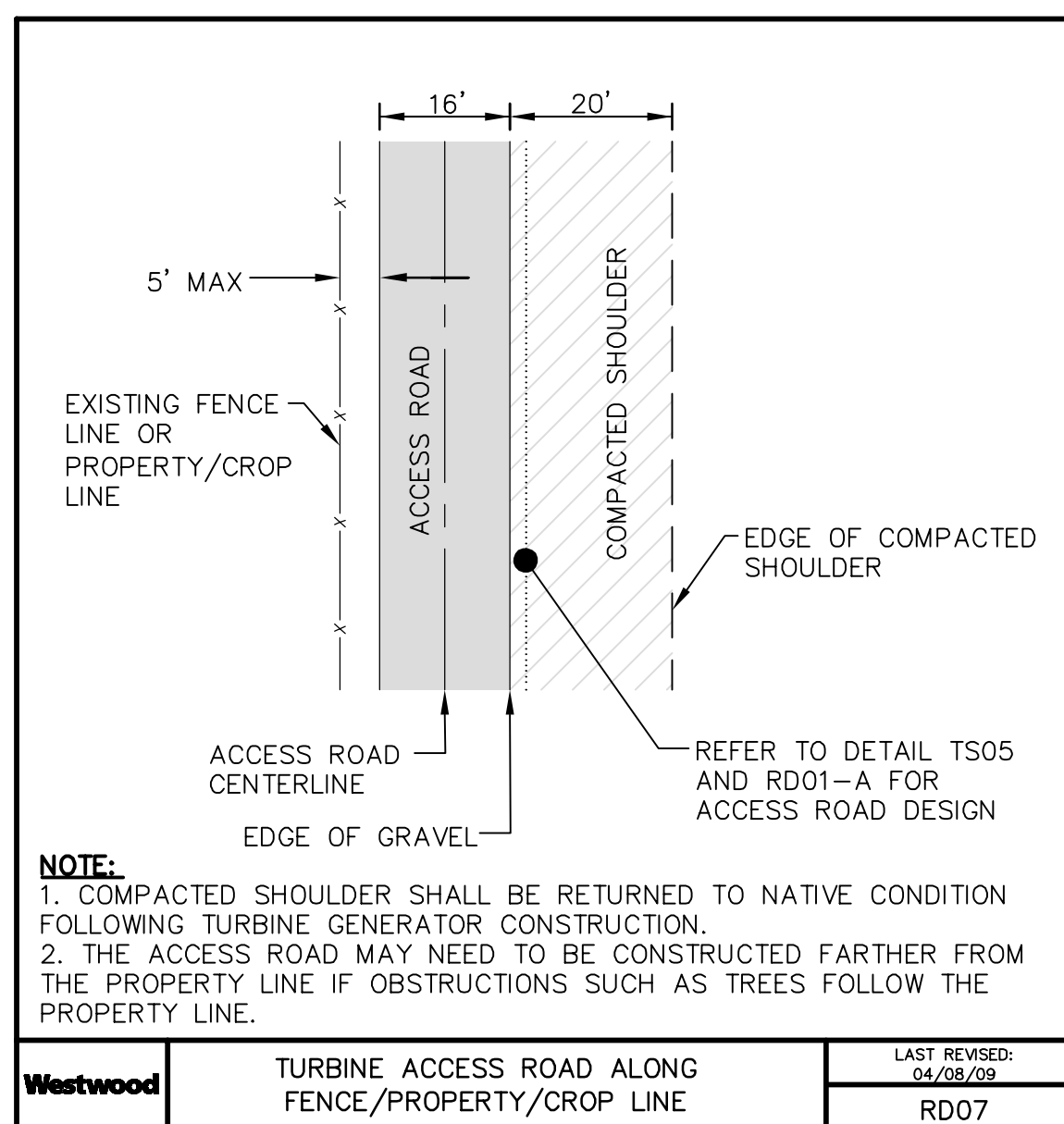
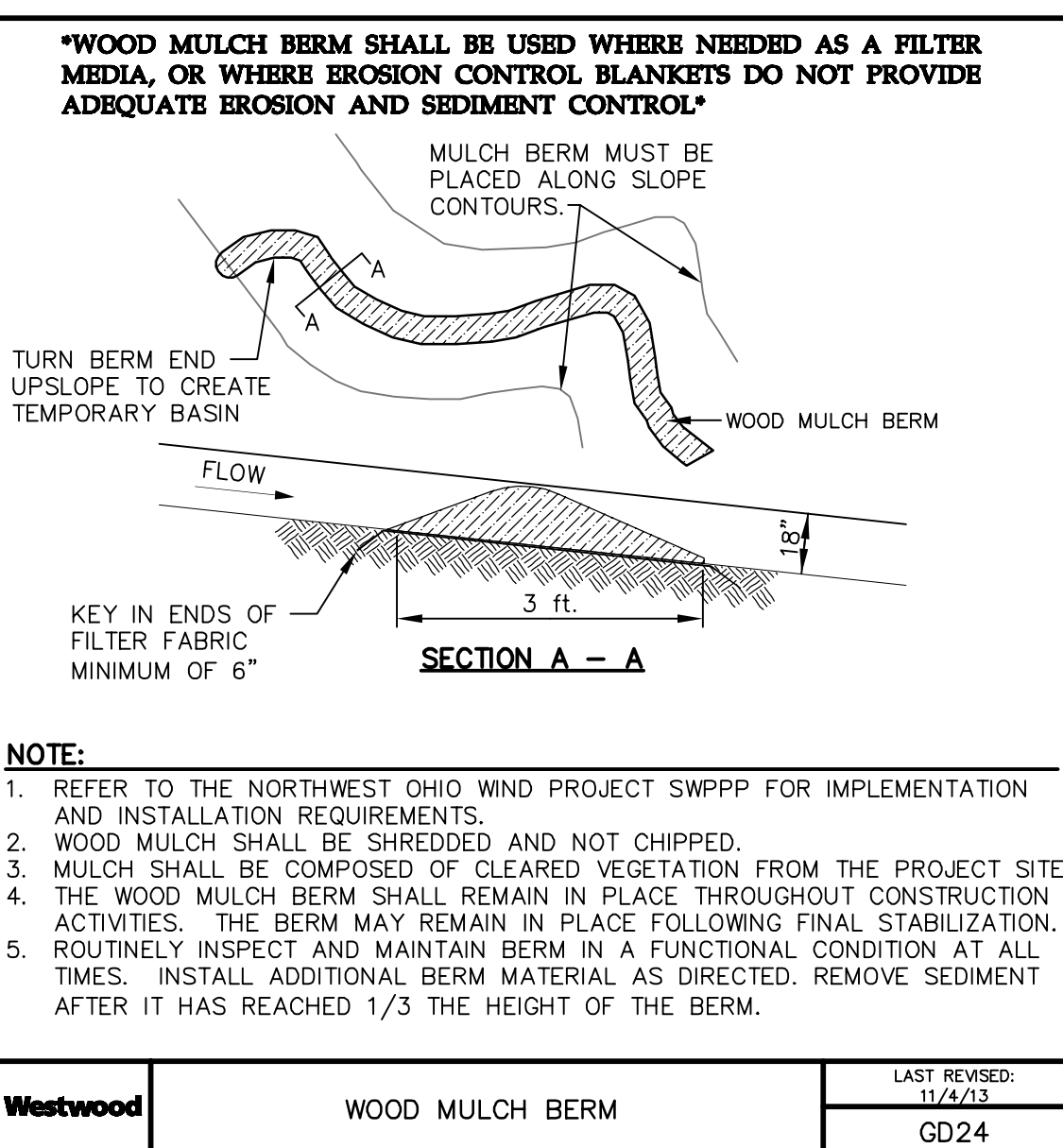
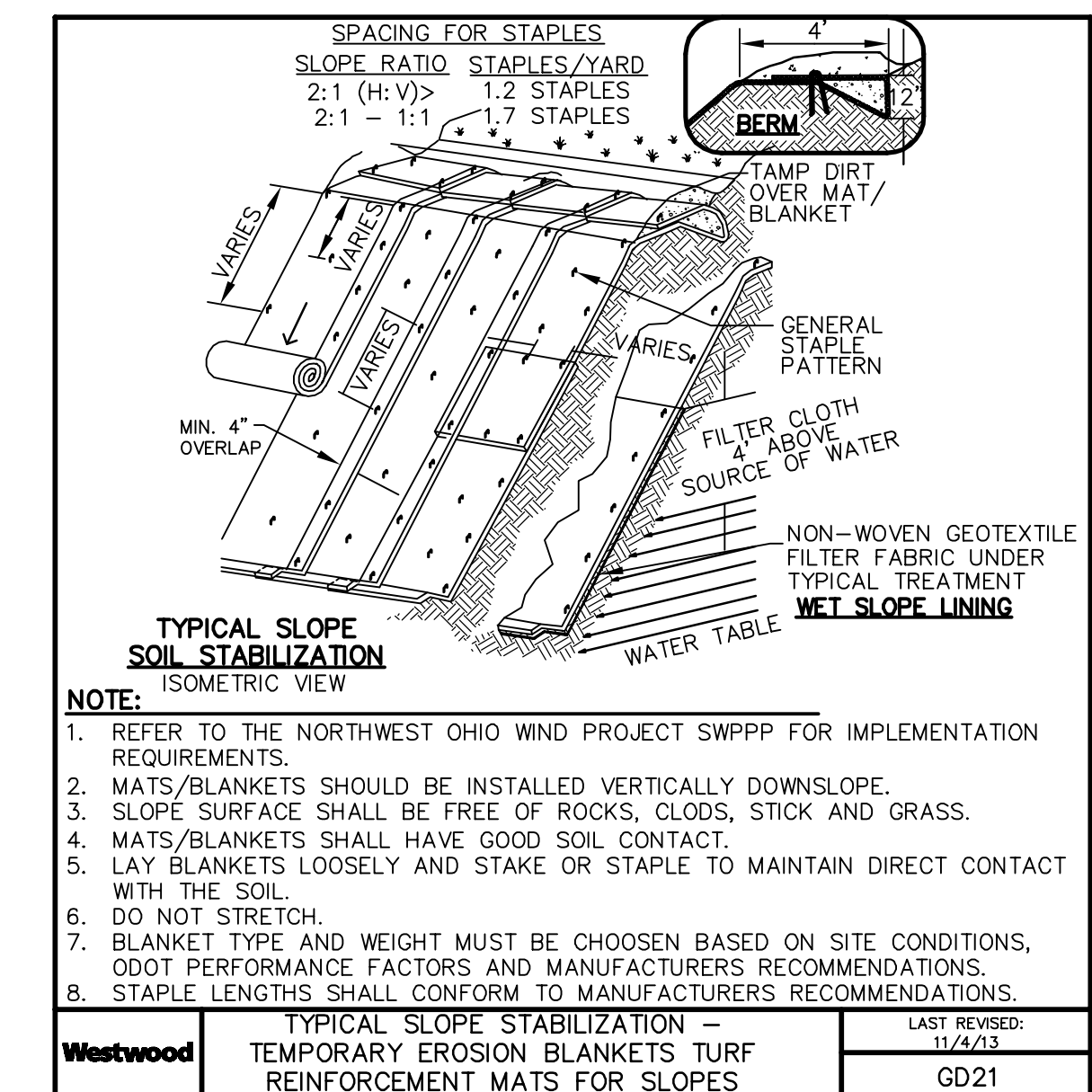
Array Updated: 09/18/2017

Date: 09/22/2017

Sheet: 4 OF 35



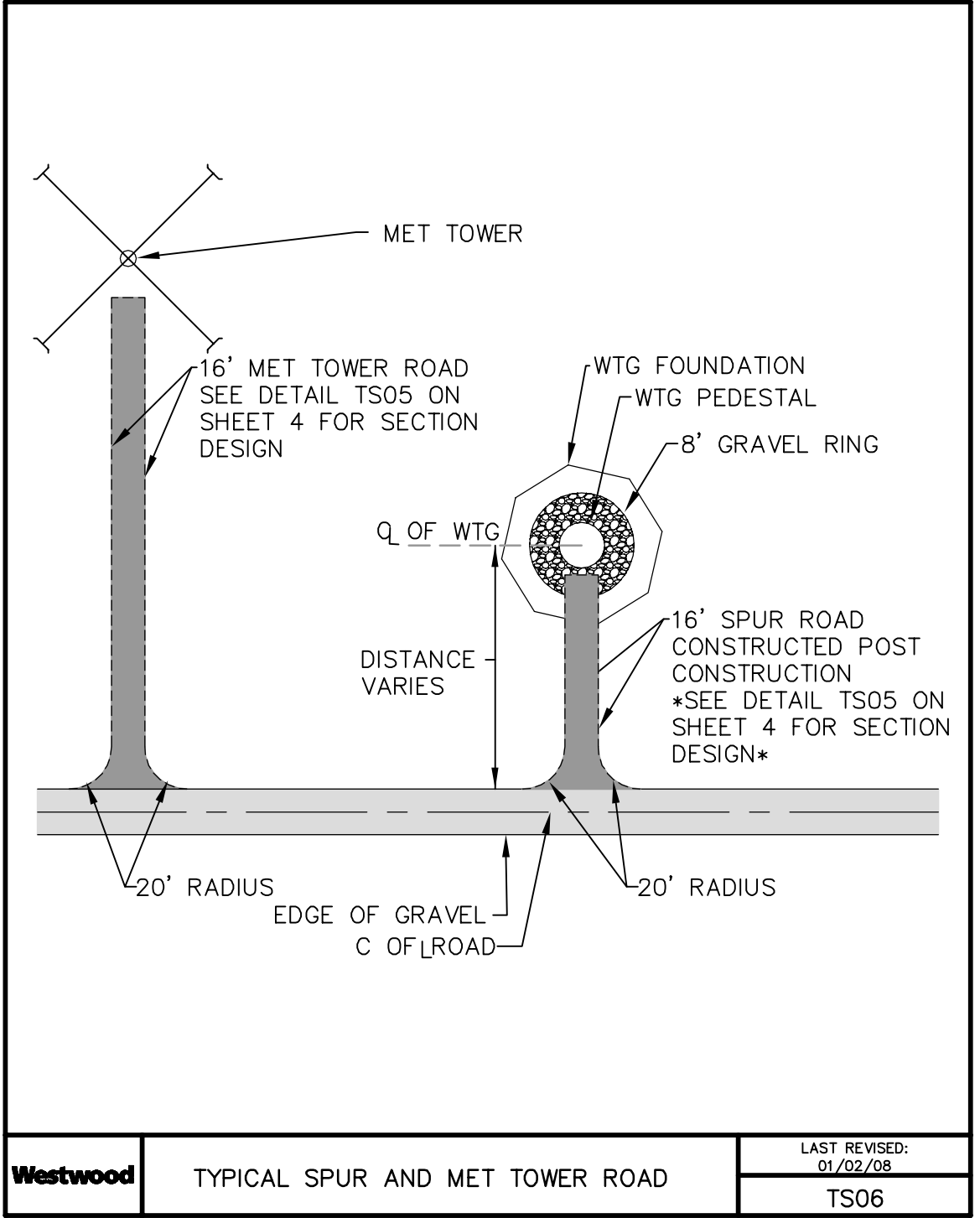
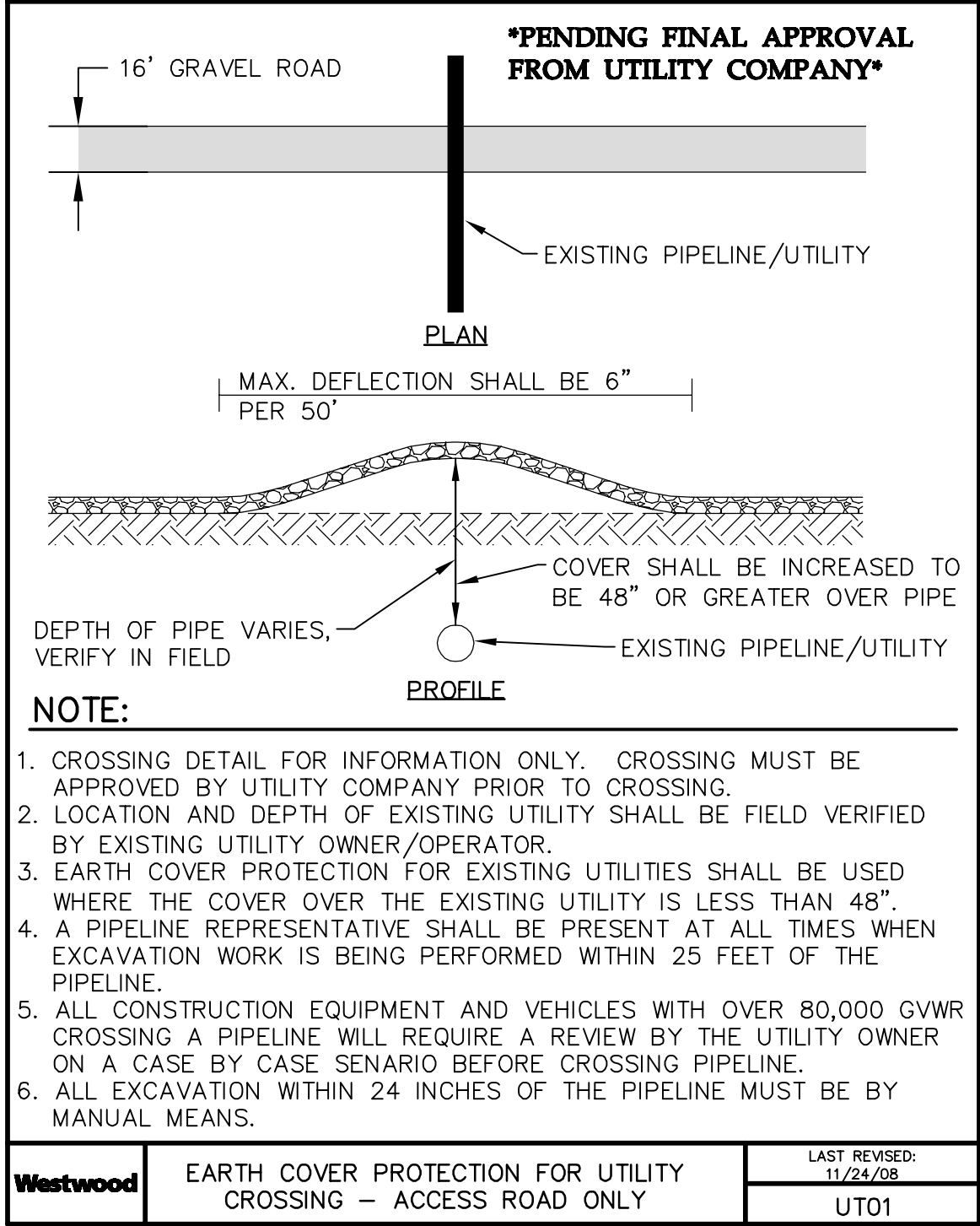
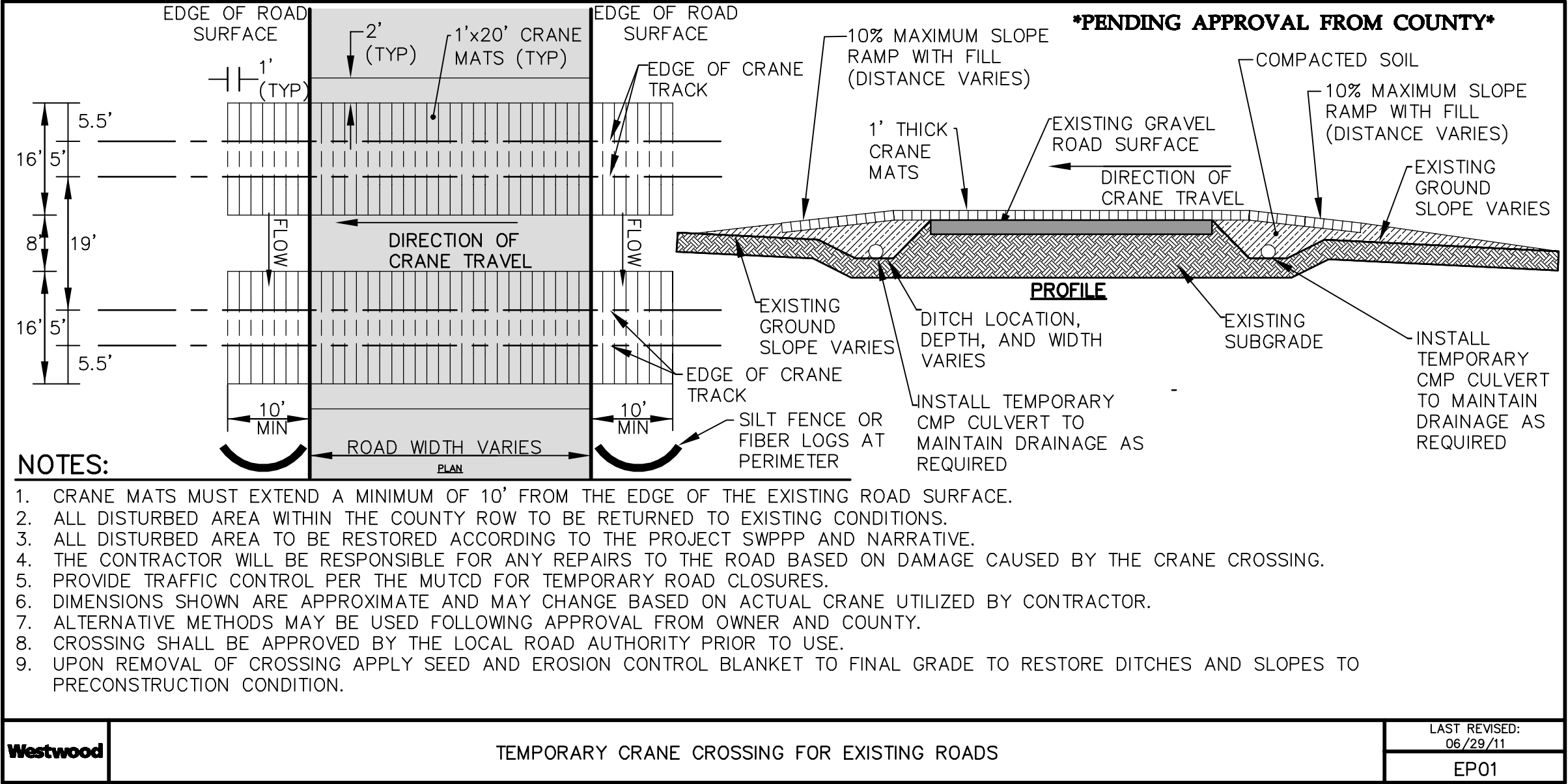
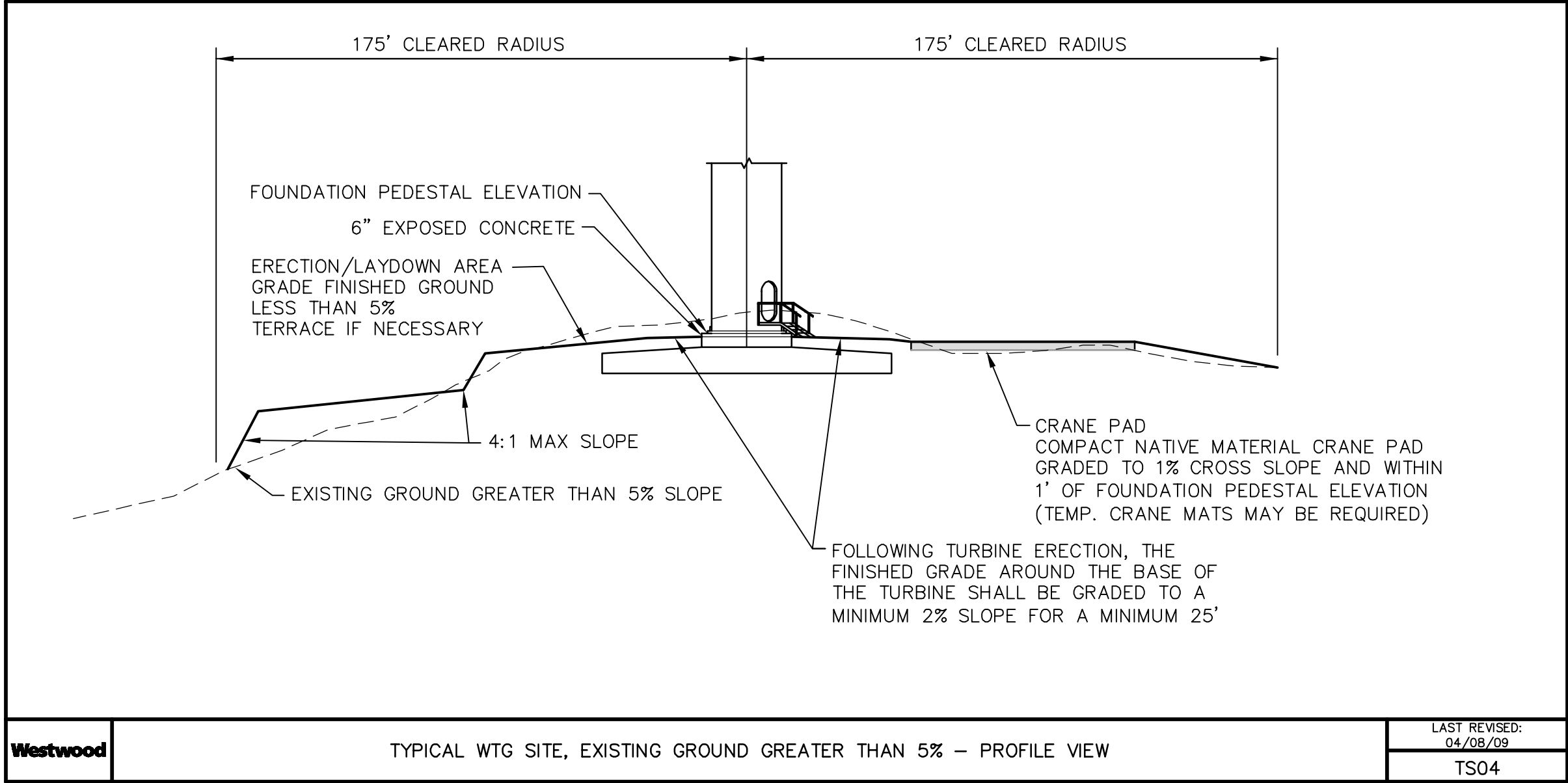
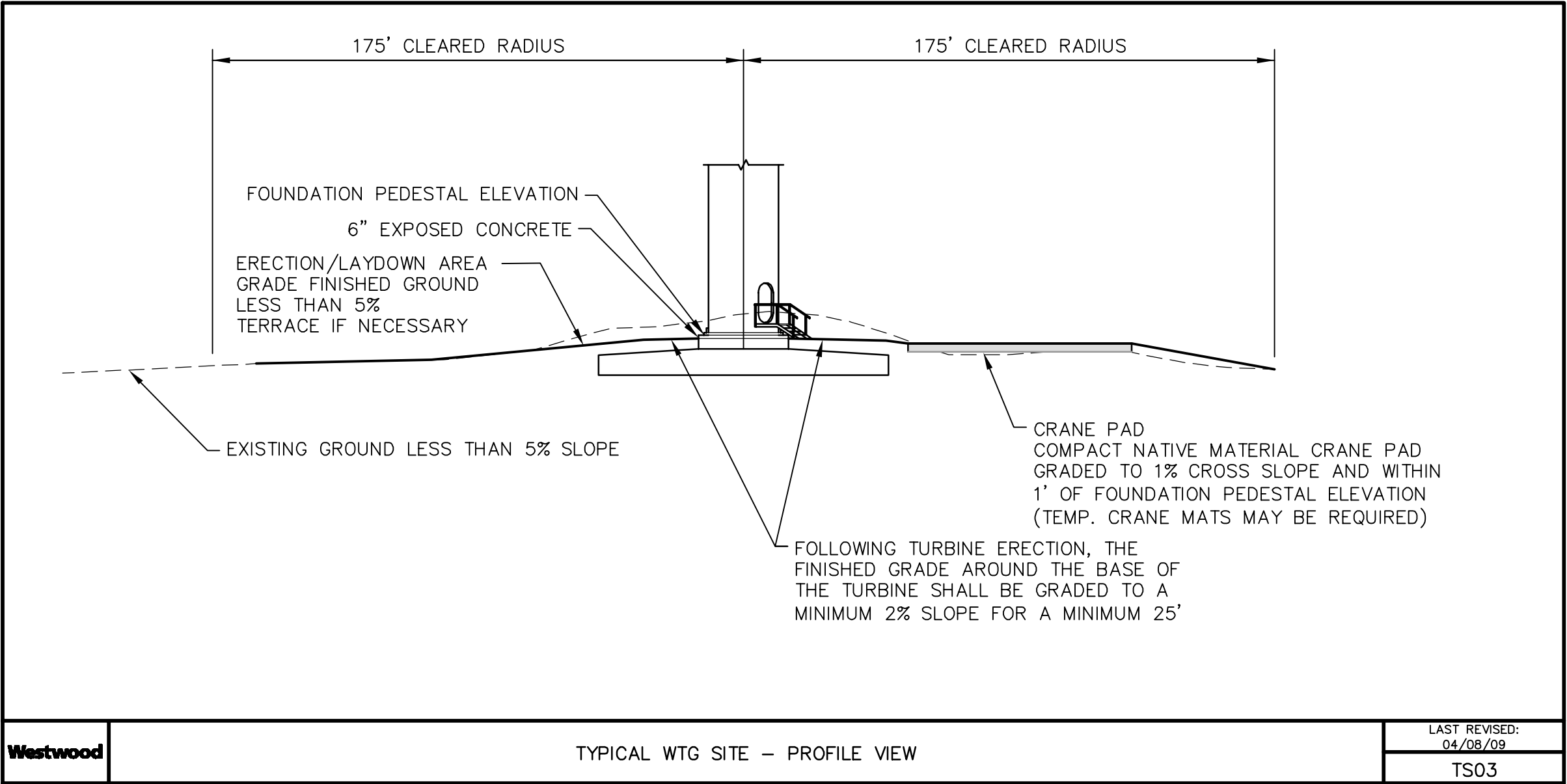
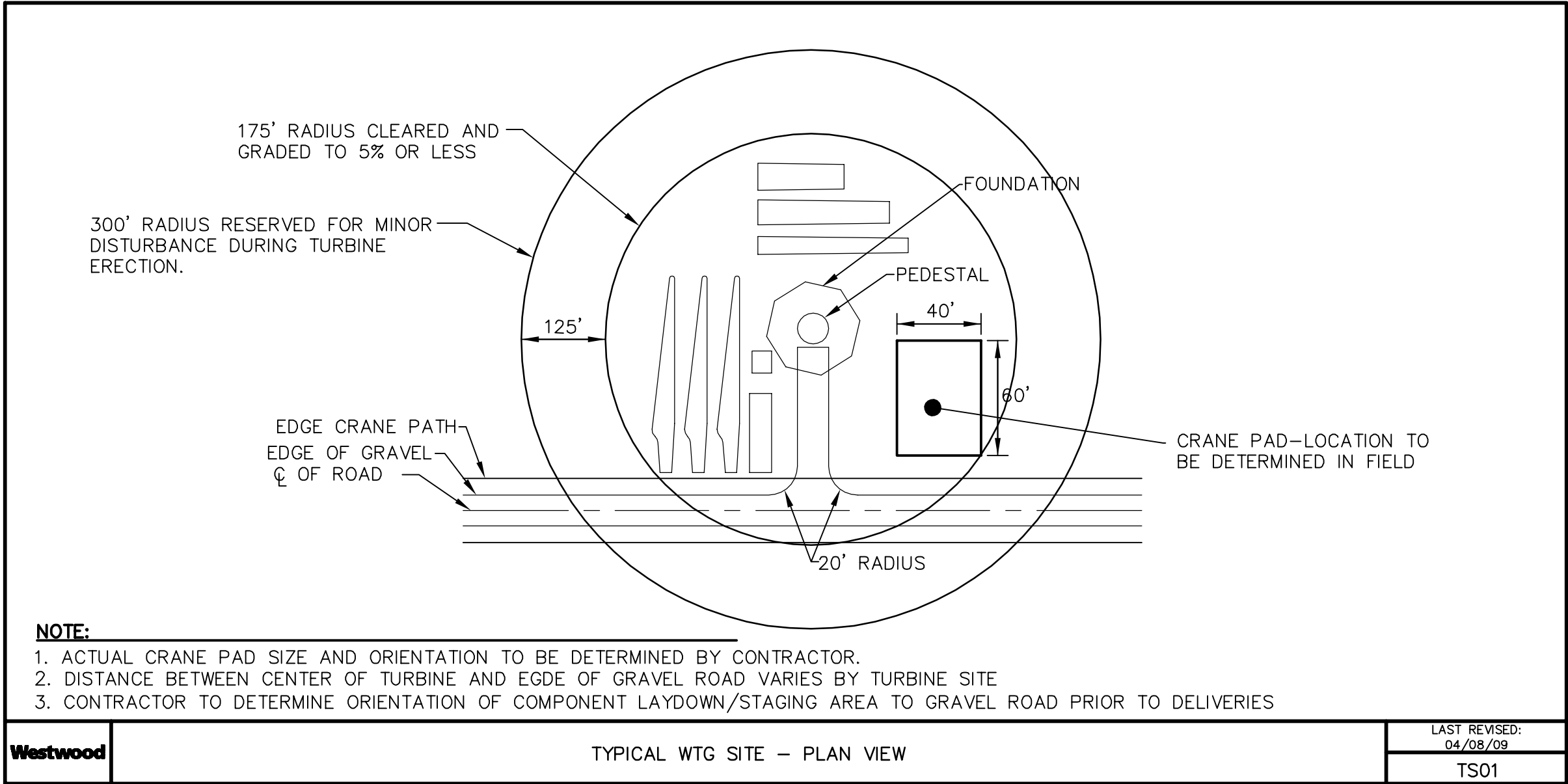
Westwood		
Phone	(952) 937-5150	7699 Anagram Drive
Fax	(952) 937-5822	Eden Prairie, MN 55344
Toll Free	(888) 937-5150	westwoodps.com
Westwood Professional Services, Inc.		
<hr/>		
<hr/>		
<hr/>		
Designed:		KLG
Checked:		SJB
Drawn:		KLG
As-Built Drawing:		
<hr/>		
Revisions:		
#	DATE	DESCRIPTION
A	09/01/17	60% plans
B	09/07/17	90% plans
C	09/11/17	90% plans
D	09/22/17	100% plans
<hr/>		
<hr/>		



		REPAIRED.	
Westwood		TYPICAL FIBER ROLLS FOR PERIMETER CONTROL OF CONSTRUCTION AREA LIMIT	LAST REVISED: 09/09/13
			GD42



0007186-00DTF01.dwg



Designed: KLG
Checked: SJB
Drawn: KLG

As-Built Drawing:

Revisions	DATE	DESCRIPTION
A	09/01/17	60% plans
B	09/07/17	90% plans
C	09/11/17	90% plans
D	09/22/17	100% plans

Prepared for:



3900 E. White Ave
Clinton, IN 47842

Trishe Wind Ohio, LLC
c/o Starwood Energy Group, LLC
5 Greenwich Office Park, 2nd Floor
Greenwich, CT 06831

Northwest
Ohio Wind
Project
Paulding, Ohio

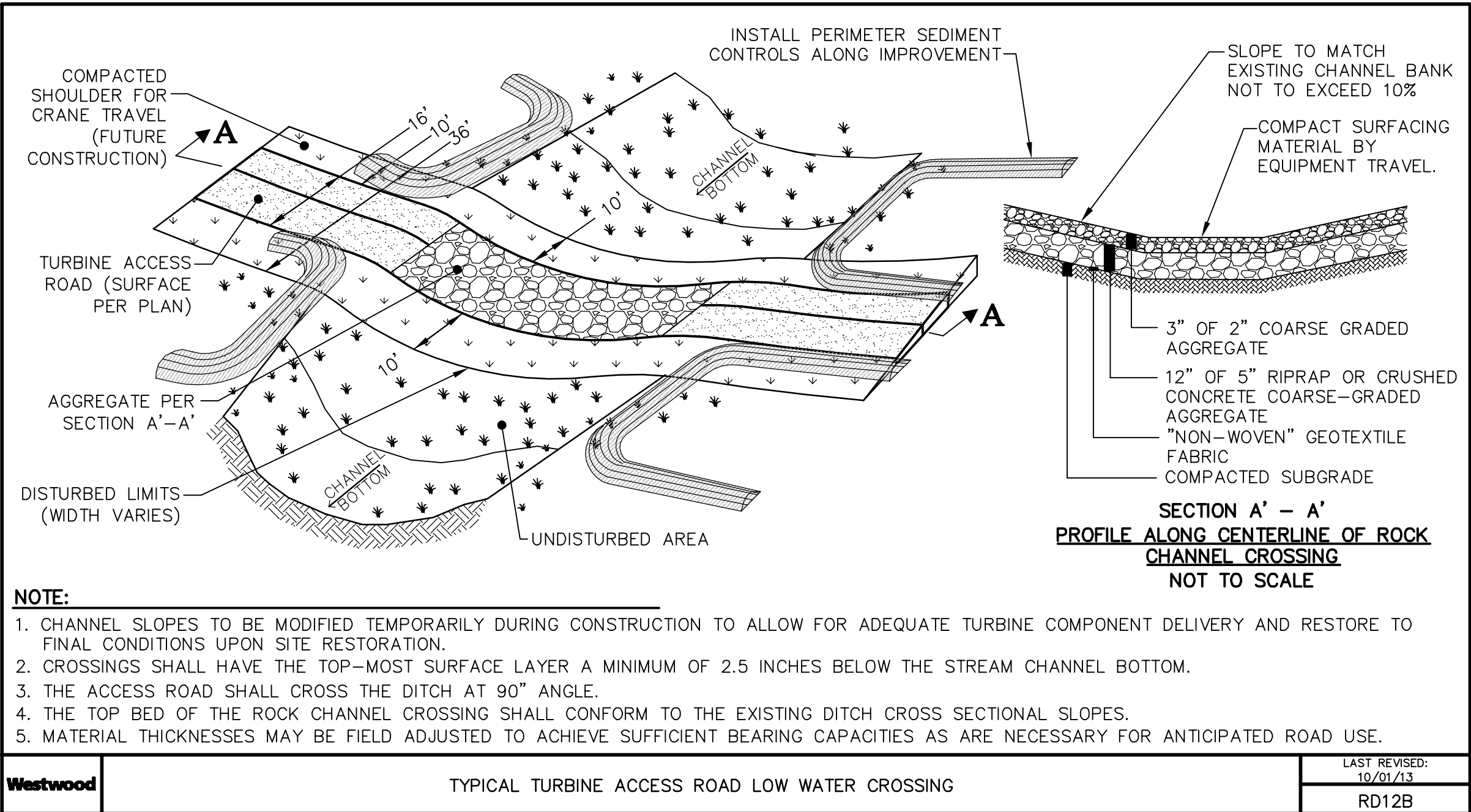
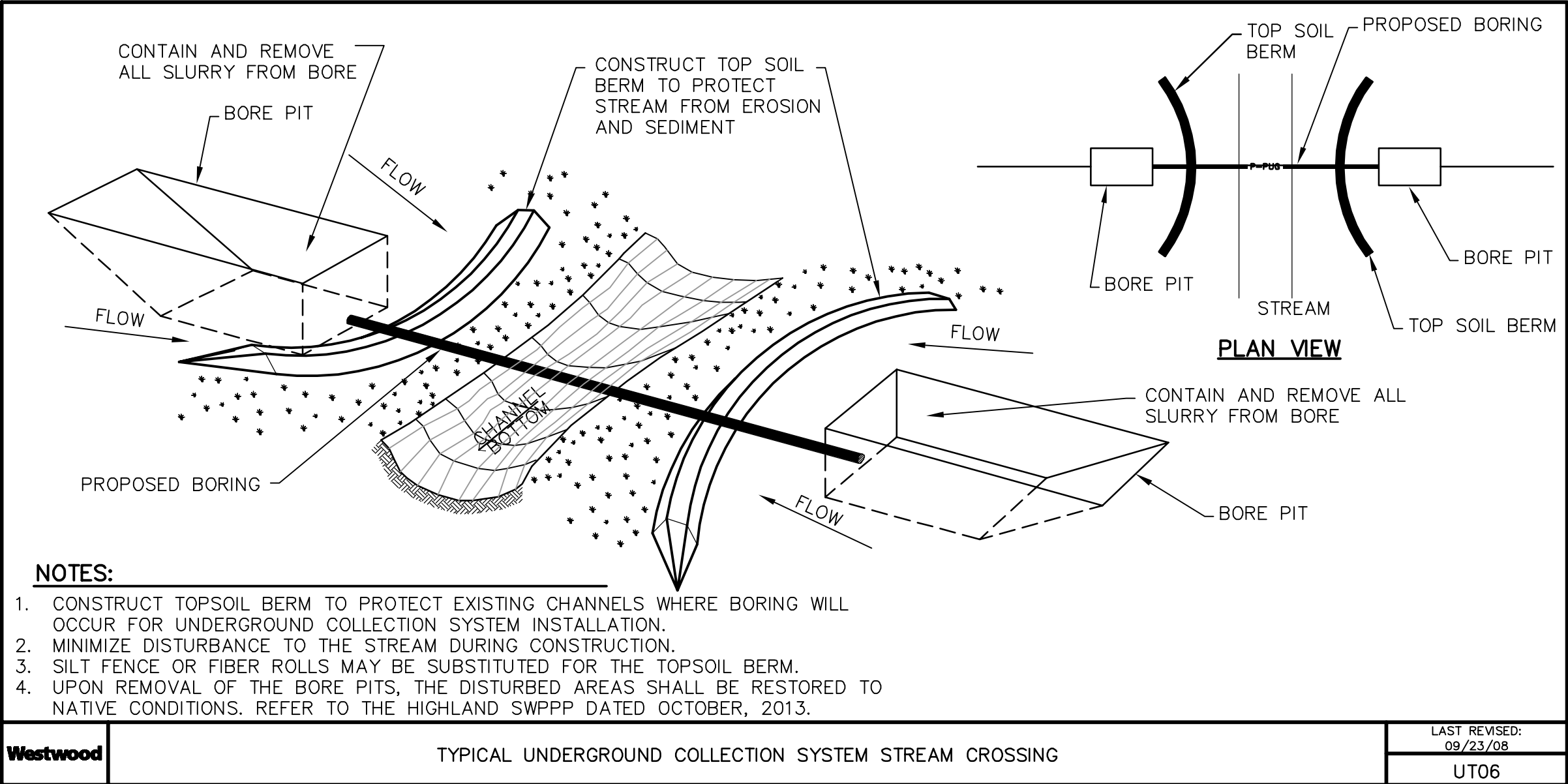
Construction Details

100% Completion
Issued For Review

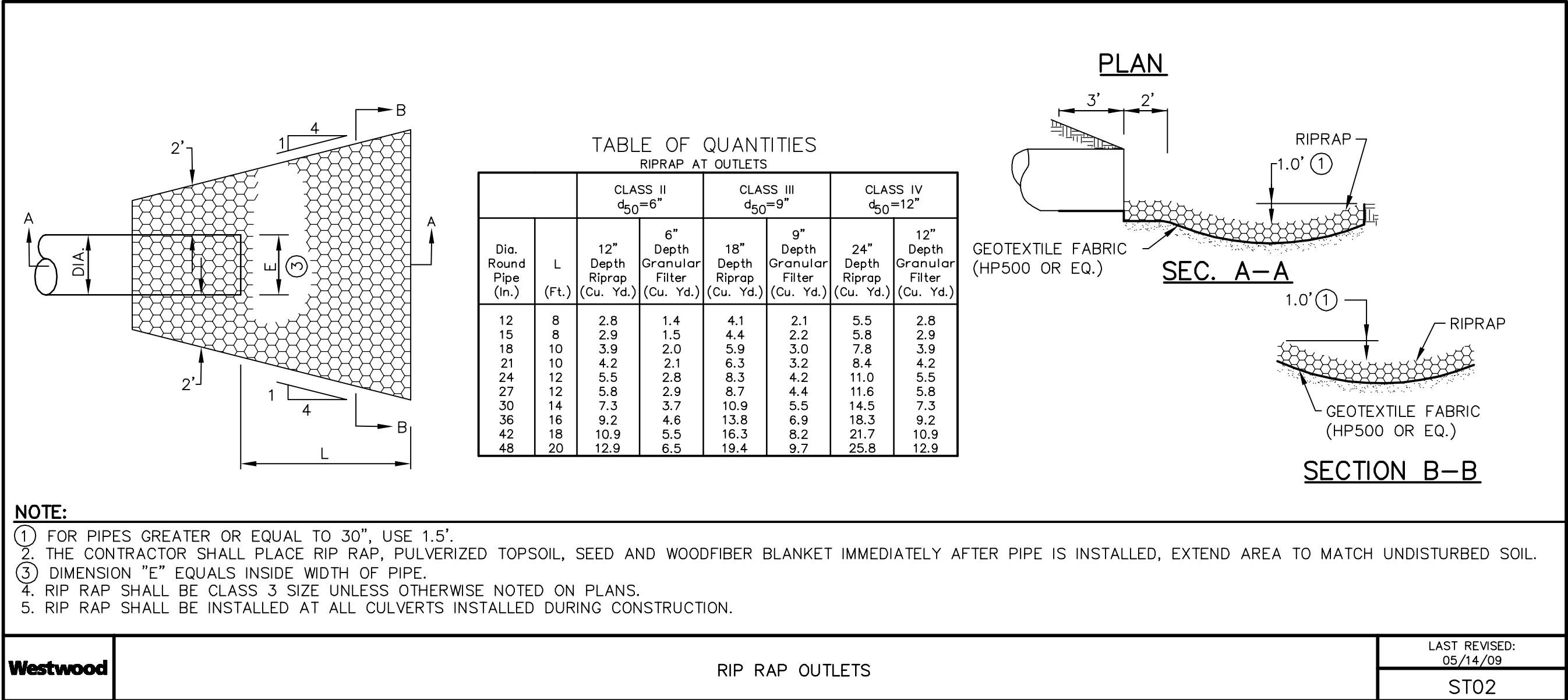
Array Updated: 09/18/2017

Date: 09/22/2017

Sheet: 6 OF 35



TURB_NUM	NORTHING	EASTING	TURB_NUM	NORTHING	EASTING
T-01	516779.99	1373133.70	T-26	509644.09	1393482.58
T-02	514638.90	1373513.70	T-28	506162.17	1393529.86
T-03	512788.06	1373833.48	T-31	511151.51	1401472.89
T-04	511147.56	1374516.73	T-32	507858.68	1398595.32
T-05	509179.48	1374818.93	T-33	506780.21	1399346.33
T-06	508918.10	1379532.21	T-34	505852.96	1400740.25
T-07	507702.14	1380202.15	T-36	506715.06	1403938.29
T-08	506885.88	1376190.57	T-37	505617.10	1404636.14
T-09	503908.07	1377589.54	T-39	502832.93	1405543.41
T-10	503006.39	1379553.18	T-40	501814.28	1406507.33
T-13	512438.29	1382804.20	T-41	513133.24	1410018.00
T-14	511990.53	1384253.76	T-42	512346.88	1411135.15
T-15	508508.89	1382840.40	T-43	511289.04	1412005.43
T-16	506040.37	1382593.18	T-44	508839.49	1410911.21
T-17	504627.52	1385099.80	T-45	506100.19	1410018.49
T-20	511132.16	1389423.77	T-46	502646.83	1408950.18
T-21	508189.95	1389363.01	T-48	518385.39	1413527.31
T-22	506851.45	1389828.80	T-49	517441.01	1414961.38
T-23	505843.11	1390681.84	T-50	516834.32	1416508.03
T-24	503031.96	1387571.50	ALT-35	510690.21	1404428.78
T-25	501657.09	1388454.13	ALT-51	515877.37	1417574.09
WIND TURBINE GENERATOR COORDINATES		DATE 08/15/2017			



SPECIFICATIONS FOR CEMENT STABILIZED ACCESS ROADS

SPECIFICATIONS BELOW ARE GENERAL RECOMMENDATIONS/GUIDELINES FOR CEMENT STABILIZATION OF ALL PROPOSED TURBINE ACCESS ROADS WITHIN THE PROJECT. ACTUAL FIELD CONDITIONS MAY ALTER APPLICATION RATE, CONSULT PROJECT GEOTECHNICAL ENGINEER FOR FURTHER RECOMMENDATIONS.

1. STRIP THE TOPSOIL TO A DEPTH OF ±4 INCHES TO MATCH ACCESS ROAD GRAVEL SECTION.
2. DETERMINE THE MOISTURE CONTENT OF THE IN-SITU SOILS USING A SPEEDY MOISTURE METER OR OTHER SUITABLE DEVICE. EXISTING SOILS SHALL BE MOISTURE CONDITIONED TO WITHIN ±3% OF OPTIMUM MOISTURE CONTENT. IF MOISTURE CONTENTS WITHIN ±3% OF OPTIMUM CANNOT BE ACHIEVED THE CONTRACTOR SHALL CONSULT WITH THE GEOTECHNICAL AND CIVIL ENGINEER PRIOR TO PROCEEDING.
3. A 12 INCH THICKNESS OF IN-SITU SOILS SHALL BE STRENGTHENED BY ADDING A PORTLAND CEMENT ADMIXTURE. THE PORTLAND CEMENT SHALL BE EVENLY DISTRIBUTED THROUGHOUT THE SOIL COLUMN.
4. EQUIPMENT AND PROCEDURES USED FOR SUBGRADE SCARIFICATION, CEMENT APPLICATION, MOISTURE CONTROL, SOIL/CEMENT BLENDING, AND FINAL MIXTURE COMPACTION SHALL BE SELECTED BY THE CONTRACTOR SUCH THAT THE SPECIFIED FINAL SUBGRADE CONDITION IS ACHIEVED. PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A LIST OF EQUIPMENT AND CONSTRUCTION PROCEDURE TO THE GEOTECHNICAL ENGINEER FOR REVIEW. DISCING IS NOT CONSIDERED AN ADEQUATE BLENDING METHOD. A RECLAIMER, WHEN UTILIZED PROPERLY, IS CONSIDERED AN ADEQUATE BLENDING METHOD.
5. CEMENT SHALL BE INTRODUCED INTO THE IN-SITU SOILS AT THE AGREED UPON PERCENTAGE RATE BY WEIGHT. TEST STRIPS SHALL BE CONSTRUCTED TO DETERMINE IF THE INITIAL AGREED UPON RATE OF CEMENT IS ADEQUATE. DEPENDING ON RESULTS OF THE FIELD STRENGTH TESTS FOR THE INITIAL CONSTRUCTION, THE CEMENT CONTENT MAY BE MODIFIED, AS DETERMINED BY THE GEOTECHNICAL ENGINEER. DO NOT CONTINUE TO STABILIZE THE SUBGRADE IF THE PERFORMANCE REQUIREMENTS ARE NOT BEING MET. CONSULT THE ENGINEER FOR MODIFIED CEMENT RATE RECOMMENDATIONS.
6. COMPACTION SHOULD BE BY "ORDINARY COMPACTION METHOD". ORDINARY COMPACTION IS DEFINED AS THE LEVEL OF COMPACTION AT WHICH NO NOTICEABLE INCREASE IN DENSITY CAN BE SEEN VISUALLY OR MEASURED BY A NUCLEAR DENSITY GAUGE. A ROLLING PATTERN SHOULD BE ESTABLISHED USING A NUCLEAR DENSITY GAUGE. THE ROLLING PATTERN SHOULD ESTABLISH THE "BREAK POINT" AFTER WHICH ADDITIONAL PASSES WITH A PAD FOOT OR SHEEPS FOOT ROLLER RESULTS IN A LOSS OF DENSITY OF THE STABILIZED SOILS. THIS NUMBER OF PASSES SHOULD BE THE NUMBER USED FOR ALL COMPACTION AT A GIVEN MOISTURE CONTENT, SOIL TYPE AND CEMENT RATE. A NEW ROLLING PATTERN SHALL BE ESTABLISHED EACH TIME THE APPARENT MOISTURE CONTENT CHANGES BY MORE THAN 2%, OR THE SOIL TYPE CHANGES, OR THE CEMENT RATE IS MODIFIED.
7. SUBGRADE STRENGTH TESTING OF THE STABILIZED SUBGRADE SHALL BE DONE USING DCP OR OTHER SUITABLE TEST METHOD THROUGHOUT THE FULL DEPTH OF THE STABILIZED SECTION. TEST RESULTS SHALL BE PROVIDED IN MAXIMUM 3" INCREMENTS. THE TEST METHOD SHALL BE ABLE TO CONFIRM A FIELD CBR VALUE, USING ESTABLISHED CORRELATIONS BETWEEN THE TEST METHOD AND CBR. THE TEST PROCEDURE SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER. DCP RESULTS ARE NOT AN ACCEPTANCE TEST. DCP RESULTS ARE A MEANS OF MONITORING CEMENT HYDRATION IN THE STABILIZE SECTION. FINAL ACCEPTANCE OF THE CEMENT STABILIZED ROAD SHALL BE BY PROOF ROLL.
8. SUBGRADE STRENGTH TESTING SHALL BE DONE AT 24 HOURS (+/- 4 HOURS) FROM THE TIME OF FINAL COMPACTION OF THE SOIL/CEMENT BLEND. A MINIMUM CBR OF 20 IS REQUIRED PRIOR TO PROOF ROLLING. IF A CBR OF 20 IS NOT ACHIEVED, THEN ADDITIONAL TESTING SHOULD BE DONE EVERY 24 HOURS UNTIL A MINIMUM CBR OF 20 IS CONFIRMED. IF THE SUBGRADE STRENGTH DOES NOT ACHIEVE A CBR OF 20 WITHIN 72 HOURS AFTER COMPACTION, THEN THE CONTRACTOR SHALL TAKE CORRECTIVE ACTION. CORRECTIVE ACTION PROCEDURES OF AREAS NOT ACHIEVING A CBR OF 20 SHALL BE APPROVED BY THE CIVIL AND GEOTECHNICAL ENGINEER PRIOR TO PROCEEDING.
9. SUBGRADE STRENGTH TESTING SHALL BE DONE EVERY 100 LINEAL FEET OF PRODUCTION (RANDOM HORIZONTAL & LONGITUDINAL LOCATIONS) FOR THE FIRST TWO DAYS OF PRODUCTION. ONCE THE PROCEDURE IS DEEMED SATISFACTORY BY THE GEOTECHNICAL ENGINEER, THE TEST SPACING MAY BE INCREASED TO 500 LINEAL FEET RANDOM SPACING THEREAFTER.
10. ADDITIONAL SUBGRADE STRENGTH TESTING SHALL BE DONE AT 7 DAYS FROM TIME OF FINAL COMPACTION ON A 500 LINEAL FEET RANDOM SPACING. THE TESTS MUST CONFIRM THAT A CBR OF 25 IS ACHIEVED THROUGHOUT THE DEPTH OF THE STABILIZED SECTION. IF A CBR OF 25 IS NOT CONFIRMED, THEN THE CONTRACTOR SHALL REVIEW THE STABILIZATION PROCEDURE WITH THE GEOTECHNICAL ENGINEER TO MONITOR AND MODIFY THE PROCEDURE PRIOR TO PROCEEDING.
11. A 4 INCH MINIMUM THICKNESS OF AGGREGATE SURFACING SHALL BE PLACED OVER THE STABILIZED SUBGRADE BEFORE ANY TRAFFIC IS ALLOWED. PRIOR TO PLACING THE AGGREGATE, THE SUBGRADE SHALL BE PROOF-ROLLED. PROOF-ROLLING SHALL BE DONE IN THE PRESENCE OF THE GEOTECHNICAL ENGINEER. ANY AREAS THAT FAIL THE PROOF ROLL SHALL BE RE-STABILIZED WITH A METHOD APPROVED BY THE GEOTECHNICAL ENGINEER.
12. FINAL ACCEPTANCE OF THE STABILIZED ROADWAY SHALL BE BASED ON A PROOF ROLL.
13. PROOF ROLLING SHALL BE DONE WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK OR WATER TRUCK WITH A MINIMUM GROSS WEIGHT OF 25 TONS OR A FULLY LOADED BELLY DUMP WITH AN EQUIVALENT AXLE LOADING. PROOF ROLLING ACCEPTANCE STANDARD INCLUDES NO RUTTING GREATER THAN 1.5 INCHES AND NO "PUMPING" OF THE SOIL BEHIND THE LOADED TRUCK. PUMPING IS DEFINED AS THE MIXING OF UNSTABILIZED SUBGRADE SOILS WITH STABILIZED SUBGRADE SOILS.
14. CEMENT STABILIZATION SHALL ONLY BE PERFORMED WHEN THE AVERAGE AIR TEMPERATURE REMAINS ABOVE 40° F. CONSULT ENGINEER PRIOR TO PLACEMENT OF CEMENT IF THIS CANNOT BE ACHIEVED.

Westwood

Phone (952) 937-5150 7699 Anagram Drive
Fax (952) 937-5822 Eden Prairie, MN 55344
Toll Free (888) 937-5150 westwoods.com

Westwood Professional Services, Inc.

Designed: KLG

Checked: SJB

Drawn: KLG

As-Built Drawing:

Revisions	DATE	DESCRIPTION
A	09/01/17	60% plans
B	09/07/17	90% plans
C	09/11/17	90% plans
D	09/22/17	100% plans

Prepared for:

WHITE
an **IDEA** company

3900 E. White Ave
Clinton, IN 47842

Trishe Wind Ohio, LLC
c/o Starwood Energy Group, LLC
5 Greenwich Office Park, 2nd Floor
Greenwich, CT 06831

**Northwest
Ohio Wind
Project**
Paulding, Ohio

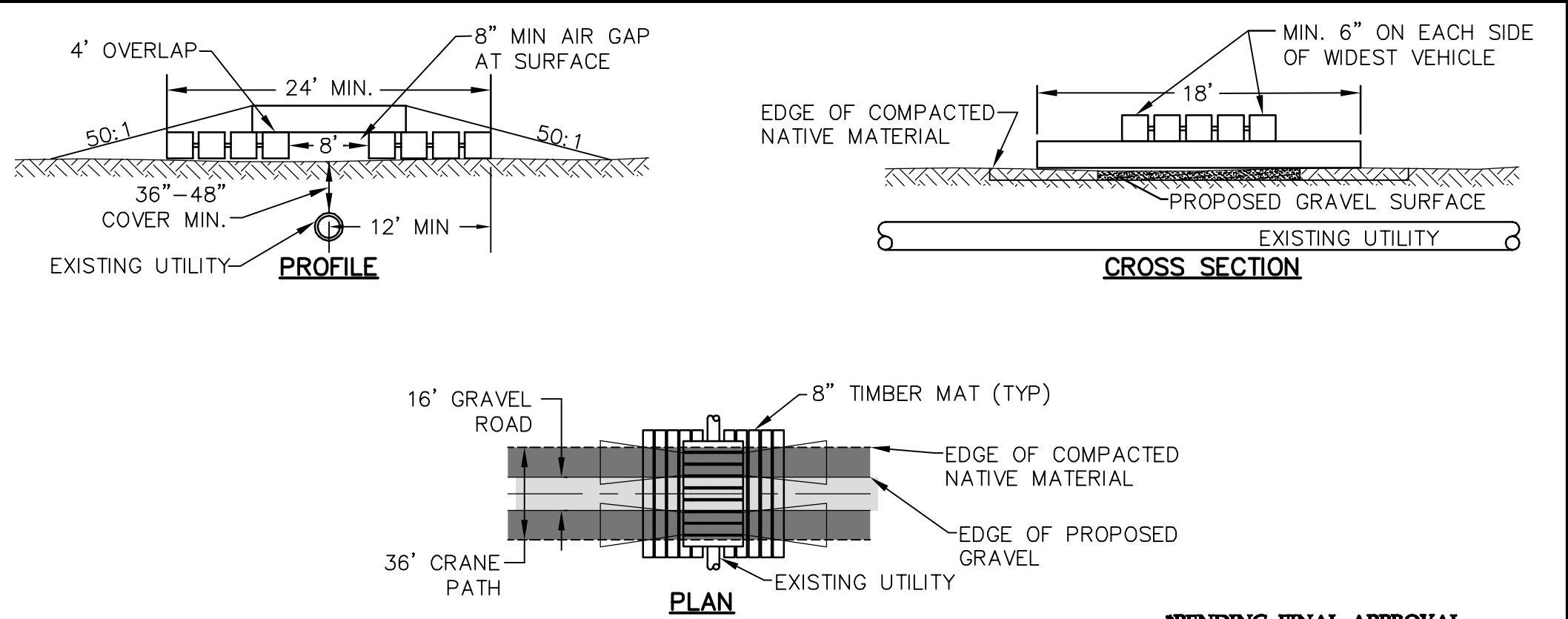
Construction Details

**100% Completion
Issued For Review**

Array Updated: 09/18/2017

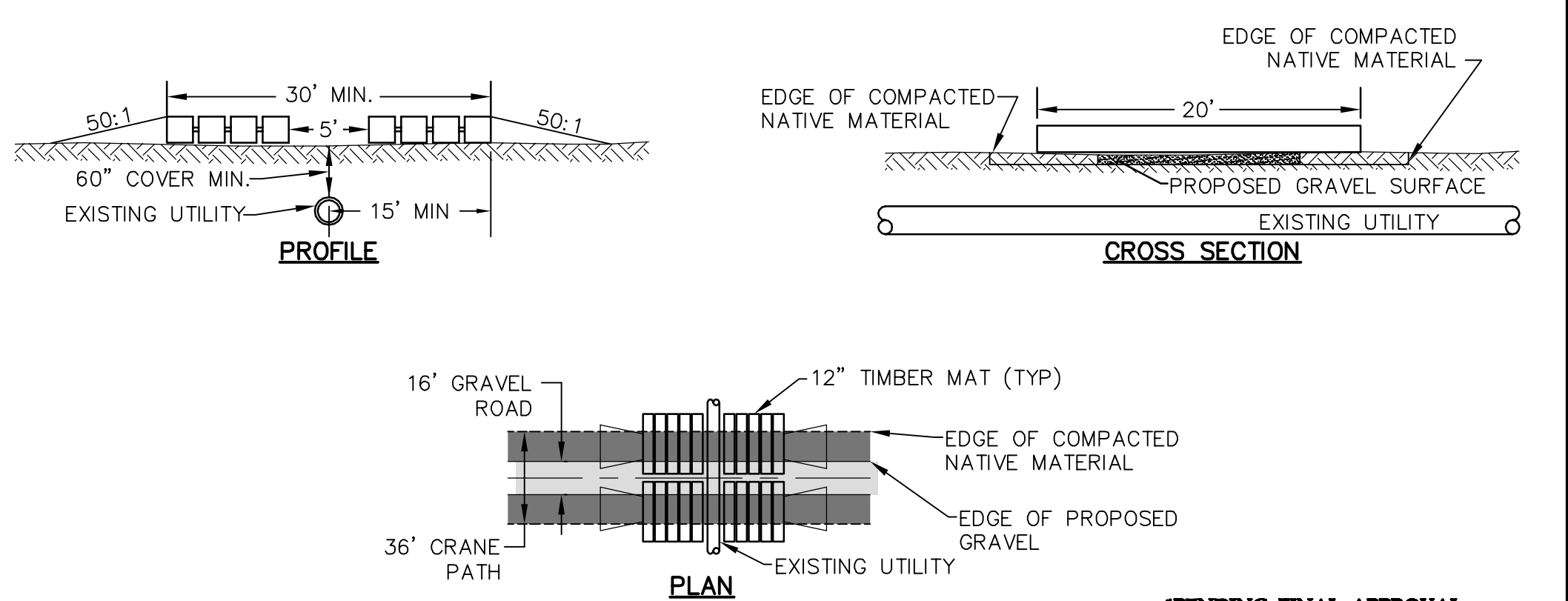
Date: 09/22/2017

Sheet: 7 OF 35



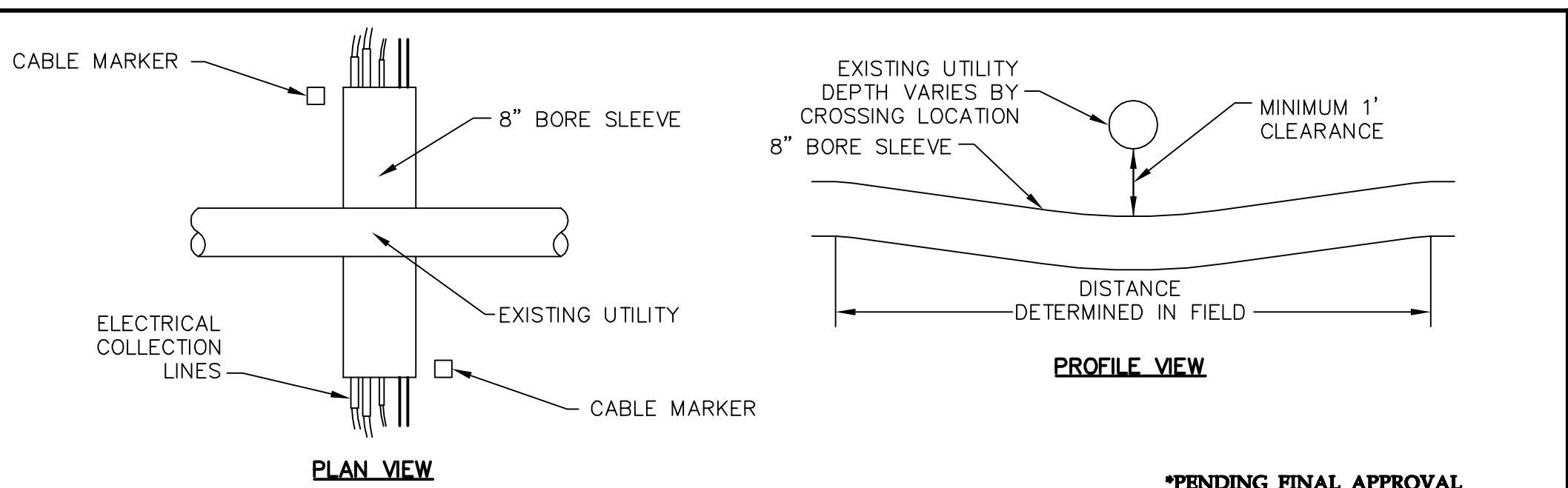
- NOTE:**
- CROSSING DETAIL FOR INFORMATION ONLY. CROSSING MUST BE APPROVED BY UTILITY COMPANY PRIOR TO CROSSING.
 - DEPTH AND LENGTH OF FILL VARIES PER PIPELINE/UTILITY COMPANIES' RECOMMENDATION
 - CRANE MAT PROTECTION FOR UTILITY CROSSING SHALL BE USED WHERE THE COVER OVER THE EXISTING UTILITY IS 36" OR GREATER.
 - A UTILITY COMPANY REPRESENTATIVE SHALL BE PRESENT AT ALL TIMES WHEN EXCAVATION WORK IS BEING PERFORMED WITHIN 25 FEET OF THE PIPELINE.
 - ALL CONSTRUCTION EQUIPMENT AND VEHICLES OVER 80,000 GVWR CROSSING A PIPELINE WILL REQUIRE A REVIEW BY THE UTILITY OWNER ON A CASE BY CASE SCENARIO BEFORE CROSSING PIPELINE.
 - ALL EXCAVATION WITHIN 24 INCHES OF THE PIPELINE MUST BE BY MANUAL MEANS.

	CRANE MAT PROTECTION FOR UTILITY CROSSING (DOMINION)	LAST REVISED: 09/21/17
		UT02-1a



- NOTE:**
- CROSSING DETAIL FOR INFORMATION ONLY. CROSSING MUST BE APPROVED BY UTILITY COMPANY PRIOR TO CROSSING.
 - DEPTH AND LENGTH OF FILL VARIES PER PIPELINE/UTILITY COMPANIES' RECOMMENDATION
 - CRANE MAT PROTECTION FOR UTILITY CROSSING SHALL BE USED WHERE THE COVER OVER THE EXISTING UTILITY IS 36" OR GREATER.
 - NO GROUND DISTURBANCE SHALL BE MADE WITHIN TRANSCANADA RIGHT OF WAY OR WITHIN 25 FEET, MEASURED AT RIGHT ANGLES, EXCEPT IN THE PRESENCE OF TRANSCANADA REPRESENTATIVE. TRANSCANADA WILL ARRANGE FOR A REPRESENTATIVE TO BE ONSITE WHEN WORK IS OCCURRING ON OR NEAR RIGHT OF WAY OR WITHIN 25 FEET OF PIPELINES. AFTER HOURS CALL 800-447-8066.
 - NOTICE OF AT LEAST 72 HOURS IN ADVANCE OF CONSTRUCTION MUST BE PROVIDED. NORTHWEST OHIO WIND PROJECT MUST CONTACT TRANSCANADA REPRESENTATIVE TODD FLORY 419-438-0208.

	CRANE MAT PROTECTION FOR UTILITY CROSSING (TRANSCANADA)	LAST REVISED: 09/21/17
		UT02-1b

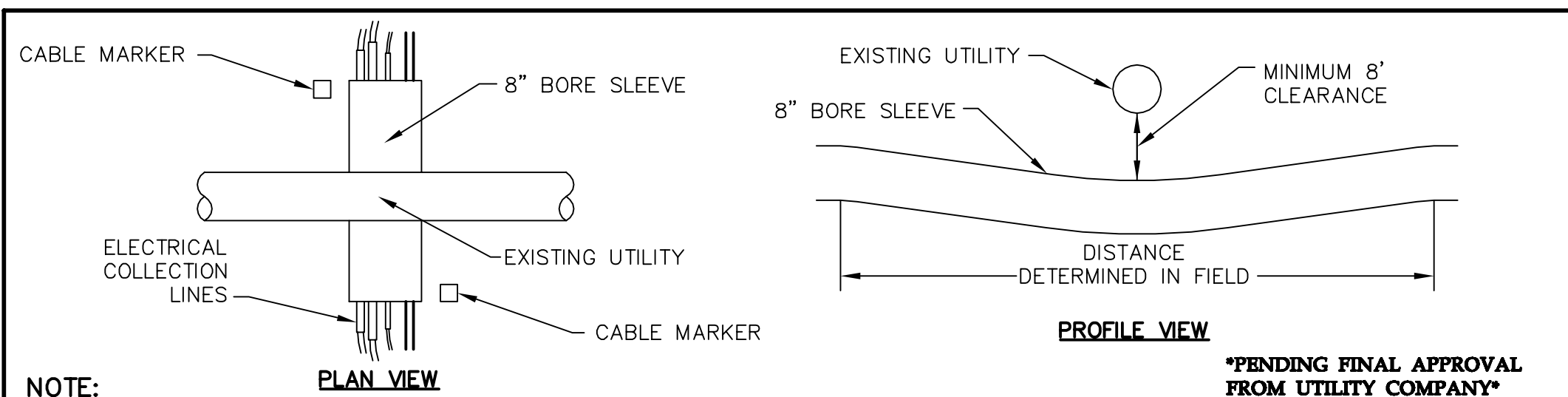


- NOTE:**
- ALL BORING MUST MAINTAIN A MIN. OF 1 FOOT CLEARANCE AND POTHOLED.

	ELECTRICAL COLLECTION/PIPELINE CROSSING (DOMINION)	LAST REVISED: 09/21/17
		UT04g

Material	Diameter	Location	Length	Perm. Temp	Sizing Method
CMP	12"	Entrance to T-04	40	Permanent	Installed
CMP	24"	Entrance to T-05	40	Permanent	2-year 24 hour storm event
CMP	36"	Entrance to T-06	40	Permanent	Match Downstream Culvert
CMP	36"	Entrance to T-07	40	Permanent	Match Downstream Culvert
CMP	18"	Entrance to T-09	40	Permanent	2-year 24 hour storm event
CMP	15"	Entrance to T-10	40	Permanent	2-year 24 hour storm event
CMP	24"	Entrance to T-14	60	Permanent	2-year 24 hour storm event
CMP	15"	Entrance to T-20	40	Permanent	2-year 24 hour storm event
CMP	15"	Entrance to T-39	40	Permanent	Match Downstream Culvert
CMP	15"	Entrance to T-40	40	Permanent	Minimum Size
CMP	18"	Entrance to T-42	40	Permanent	Match Existing
CMP	18"	Entrance to T-43	40	Permanent	Match Existing
CMP	15"	Entrance to T-46	50	Permanent	Match Existing
CMP	18"	Entrance to T-49	40	Permanent	Match Existing
CMP	48"	Entrance to T-50	40	Permanent	Match Upstream Culvert
TBD	Match Existing	T-17 Access Road	20	Permanent (Extend Existing)	Match Existing
TBD	Match Existing	T-22 Access Road	30	Permanent (Extend Existing)	Match Existing
CMP	Match Existing	T-49 Access Road	20	Permanent (Extend Existing)	Match Existing
CMP	60"	Crane walk between T-02 and T-03	70	Temporary	Match Downstream Culvert
CMP	54"	Crane walk between T-04 and T-05	71	Temporary	Match Downstream Culvert
CMP	15"	Crane walk east of T-10 at Co Rd 87	70	Temporary	1-year 24 hour storm event
CMP	24"	Crane walk west of T-14 entrance	60	Temporary	Match Downstream Culvert
CMP	66"	Crane walk between T-15 and T-16	75	Temporary	1-year 24 hour storm event
CMP	30"	Crane walk south of T-16	65	Temporary	1-year 24 hour storm event
CMP	48"	Crane walk between T-22 and T-24 (Southwest of T-22)	62	Temporary	Match Upstream Culvert
CMP	54"	Crane walk between T-23 and T-28	60	Temporary	Match Downstream Culvert
CMP	15"	Crane walk north of T-24	60	Temporary	Minimum Size
CMP	36"	Crane walk between T-28 and T-33 (East of T-28)	65	Temporary	Match Downstream Culvert
CMP	42"	Crane walk between T-28 and T-33 (West of T-33)	65	Temporary	Match Downstream Culvert
CMP	42"	Crane walk west of T-31	60	Temporary	Match Downstream Culvert
CMP	54"	Crane Walk between T-31 and T-32	70	Temporary	Match Downstream Size
CMP	54"	Crane walk between T-37 and T-39	85	Temporary	Upsize from Upstream Culvert
CMP	114"	Crane walk northwest of T-39	100	Temporary	1-year 24 hour storm event
CMP	15"	Crane walk between T-43 and T-44	50	Temporary	Minimum Size
HDPE	15"	Entrance to T-44 Co Rd 60 Extension	10	Temporary	Match Existing
CMP	15"	Crane walk east of T-46 entrance	60	Temporary	Match Upstream Culvert
CMP	12"	Entrance to T-04	75	Temporary	Match Installed Culvert
CMP	24"	Entrance to T-05	80	Temporary	2-year 24 hour storm event
CMP	36"	Entrance to T-06	40	Temporary	Match Downstream Culvert
CMP	36"	Entrance to T-07	80	Temporary	Match Downstream Culvert
CMP	18"	Entrance to T-09	75	Temporary	2-year 24 hour storm event
CMP	15"	Entrance to T-10	90	Temporary	2-year 24 hour storm event
CMP	24"	Entrance to T-14	85	Temporary	2-year 24 hour storm event
CMP	15"	Entrance to T-20	85	Temporary	2-year 24 hour storm event
CMP	42"	Entrance to T-31	55	Temporary	Match Upstream Culvert
CMP	15"	Entrance to T-39	85	Temporary	Match Downstream Culvert
CMP	15"	Entrance to T-40	75	Temporary	Minimum Size
CMP	18"	Entrance to T-42	75	Temporary	Match Existing
CMP	18"	Entrance to T-43	75	Temporary	Match Existing
CMP	15"	Entrance to T-46	75	Temporary	Match Existing
CMP	18"	Entrance to T-49	80	Temporary	Match Existing
CMP	48"	Entrance to T-50	75	Temporary	Match Upstream Culvert
CMP	48"	Entrance to T-02	85	Temporary (Extend Existing)	Match Existing
HDPE	12"	Entrance to T-15	10	Temporary (Extend Existing)	Match Existing
CMP	30"	Entrance to T-15 (East/West Ditch)	85	Temporary (Extend Existing)	Match Existing
CMP	60"	Entrance to T-17 (South)	90	Temporary (Extend Existing)	Match Existing
CMP	Match Existing	Entrance to T-28	75	Temporary (Extend Existing)	Match Existing
CMP	12"	Entrance to T-33	85	Temporary (Extend Existing)	Match Existing
HDPE	18"	Entrance to T-49	10	Temporary (Extend Existing)	Match Existing

CULVERT TABLE					DATE 09/19/2017
---------------	--	--	--	--	--------------------



- NOTE:**
- THE TOP SIDE OF ALL TRANSCANADA PIPELINES OR BURIED FACILITIES MUST BE EXPOSED BY HAND DIGGING OR HYDROVAC.
 - SIGHT HOLES MUST BE EXCAVATED AT A MIN. OF 5 FEET AND A MAX. OF 10 FEET FROM THE SIDE (NEAREST TO THE DRILL) OF EACH BURIED FACILITY, AND PARALLEL TO THE EXISTING TRANSCANADA BURIED FACILITY.
 - BORE PITS REQUIRING SETUP AND STAGING OF EQUIPMENT SHALL BE OUTSIDE OF TRANSCANADA BURIED FACILITY RIGHT OF WAY.
 - THE NEW CROSSING FACILITY SHOULD MAINTAIN A CONTINUOUS DEPTH OR CONSISTENT PROFILE AND STRAIGHT HORIZONTAL ALIGNMENT ACROSS THE FULL LENGTH OF THE RIGHT OF WAY.
 - CROSSING MUST PASS TRANSCANADA FACILITY WITH A MIN. CLEARANCE OF 8 FEET.
 - CABLE CROSSING SHOULD BE CLEARLY AND PERMANENTLY MARKED ON EACH SIDE OF THE RIGHT OF WAY.
 - NO GROUND DISTURBANCE SHALL BE MADE WITHIN TRANSCANADA RIGHT OF WAY OR WITHIN 25 FEET, MEASURED AT RIGHT ANGLES, EXCEPT IN THE PRESENCE OF TRANSCANADA REPRESENTATIVE. TRANSCANADA WILL ARRANGE FOR A REPRESENTATIVE TO BE ONSITE WHEN WORK IS OCCURRING ON OR NEAR RIGHT OF WAY OR WITHIN 25 FEET OF PIPELINES. AFTER HOURS CALL 800-447-8066.
 - NOTICE OF AT LEAST 72 HOURS IN ADVANCE OF CONSTRUCTION MUST BE PROVIDED. NORTHWEST OHIO WIND PROJECT MUST CONTACT TRANSCANADA REPRESENTATIVE TODD FLORY 419-438-0208.

	ELECTRICAL COLLECTION/PIPELINE CROSSING (TRANSCANADA)	LAST REVISED: 09/21/17
		UT04b

Designed: KLK

Checked: SJB

Drawn: KLK

As-Built Drawing:

Revisions	DATE	DESCRIPTION
A	09/01/17	60% plans
B	09/07/17	90% plans
C	09/11/17	90% plans
D	09/22/17	100% plans

Prepared for:



3900 E. White Ave
Clinton, IN 47842

Trishe Wind Ohio, LLC
c/o Starwood Energy Group, LLC
5 Greenwich Office Park, 2nd Floor
Greenwich, CT 06831

Northwest
Ohio Wind
Project
Paulding, Ohio

Construction Details

**100% Completion
Issued For Review**

Array Updated: 09/18/2017

Date: 09/22/2017

Sheet: 8 OF 35

ROAD DESIGN PARAMETERS

- ACCESS ROADS HAVE BEEN DESIGNED TO ACCOMMODATE LIGHT DUTY TRUCKS FOR LOW VOLUME USE IN NORMAL OPERATING CONDITIONS. THE ROAD DESIGN IS NOT INTENDED FOR ALL WEATHER USE FOR HEAVY DUTY, HIGH VOLUME, CONSTRUCTION LOADS.
- ROAD MAINTENANCE CAN BE EXPECTED OVER THE LIFE OF THE PERMANENT FACILITY AND MAY INCLUDE BLADING AND REPLACEMENT OF AGGREGATE MATERIAL.
- PLANS ARE INTENDED FOR PRIVATE ACCESS ROAD DESIGN AND NOT INTENDED FOR PUBLIC ROAD IMPROVEMENTS.
- CONTRACTOR SHALL CONFIRM ROAD SECTIONS REQUIRED FOR TURBINE COMPONENT DELIVERY WITH THE FINAL GEOTECHNICAL REPORT.

EXECUTION

- CLEARING AND GRUBBING
 - THE CONTRACTOR SHALL BE REQUIRED TO GRUB/MULCH ALL TREES, STUMPS, BRUSH, AND DEBRIS WITHIN THE GRADING AREAS SHOWN ON THE PLANS. THE CONTRACTOR IS TO REMOVE ONLY THOSE TREES WHICH ARE DESIGNATED BY THE OWNER'S REPRESENTATIVE FOR REMOVAL, AND SHALL EXERCISE EXTREME CARE AROUND EXISTING TREES TO BE SAVED.
- TOPSOIL STRIPPING
 - TOPSOIL SHALL BE STRIPPED FROM ALL ROADWAY AREAS THROUGH THE ROOT ZONE (TYPICAL 6" TO 12"). TOPSOIL SHALL NOT BE STRIPPED OUTSIDE OF THE DESIGNATED DISTURBANCE AREAS.
 - ANY TOPSOIL, THAT HAS BEEN STRIPPED, SHALL BE RE-SPREAD OR STOCKPILED WITHIN GRADING AREAS AND/OR USED AS FILL OUTSIDE OF THE DISTURBANCE AREAS, AS DIRECTED BY THE ENGINEER. ALL TOPSOIL SHALL BE REDISTRIBUTED TO THE LAND OWNER'S PROPERTY OF WHERE IT ORIGINATED FROM.
- EMBANKMENT CONSTRUCTION
 - EMBANKMENT CONSTRUCTION SHALL CONSIST OF THE PLACING OF SUITABLE FILL MATERIAL, AFTER TOPSOIL STRIPPING, ABOVE THE EXISTING GRADE. GENERALLY, EMBANKMENTS SHALL HAVE COMPACTED SUPPORT SLOPES OF FOUR FOOT HORIZONTAL TO ONE FOOT VERTICAL, WITH SOME LOCATIONS THROUGHOUT THE PROJECT WITH SLOPES OF TWO FEET HORIZONTAL TO ONE FOOT VERTICAL. THE MATERIAL FOR EMBANKMENT CONSTRUCTION SHALL BE OBTAINED FROM THE ACCESS ROAD/TURBINE EXCAVATION (SEE GEOTECHNICAL REPORT FOR RESTRICTIONS), OR ANY SUITABLE, APPROVED SOIL OBTAINED ONSITE/OFFSITE BY CONTRACTOR, AS DIRECTED OR APPROVED BY THE ENGINEER. THIS MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 8".
 - SIDE SLOPES GREATER THAN 3:1 WILL NOT BE PERMITTED, UNLESS OTHERWISE NOTED ON THE PLAN.

STORM WATER DESIGN PARAMETERS

- CULVERTS WITHIN THE COUNTY RIGHT OF WAY WERE NOT SIZED BASED ON SPECIFIC STORM INTERVALS. EXISTING DITCHES PROVED TO BE TOO SMALL IN MANY INSTANCES TO PRACTICALLY ALLOW INSTALLATION OF LARGER CULVERTS. IT IS EXPECTED THAT CULVERTS WILL BE OVERTOPPED DURING SOME STORMS AND MAINTENANCE WILL BE REQUIRED THROUGH THE LIFE OF THE PROJECT. INSTALLED CULVERTS SHALL BE SIZED TO MATCH THE DOWNSTREAM CULVERT SIZE (E.G. IF THE DOWNSTREAM CULVERT IS A 24" THE INSTALLED CULVERT SHALL BE A 24", UNLESS IN CIRCUMSTANCES WHERE THERE MAY BE CONSTRUCTABILITY CONCERNS) OR SIZED BASED ON COUNTY REQUEST. IN INSTANCES WHERE EXISTING DOWNSTREAM CULVERT SIZES COULD NOT BE DETERMINED, PROPOSED PERMANENT CULVERTS WERE DESIGNED TO ACCOMMODATE BETWEEN THE 1-YEAR AND 2-YEAR, 24-HOUR STORM EVENT. ALL CULVERTS SHALL BE INSTALLED PER OHIO DEPARTMENT OF TRANSPORTATION AND/OR PAULDING COUNTY STANDARD SPECIFICATIONS AND SHALL BE MANUFACTURED OF CORRUGATED METAL PIPE OR HIGH DENSITY POLYETHYLENE PIPE AS NOTED. ALL CULVERTS SHALL BE PLACED AT A MINIMUM 0.5% GRADE. ALL TEMPORARY PORTIONS OF THE INSTALLED CULVERTS SHALL BE REMOVED UPON COMPLETION OF THE PROJECT.
- LOW WATER CROSSINGS HAVE BEEN DESIGNED TO ALLOW NATURAL DRAINAGE TO OCCUR POST CONSTRUCTION OF THE ACCESS ROADS. IT IS ANTICIPATED THAT DURING "HEAVY" RAIN STORM EVENTS AND DURING THE FREEZE/THAW CYCLE, SOME ACCESS ROADS WILL BE IMPASSABLE DUE TO THE SEASONAL ENVIRONMENTAL CONDITIONS. MAINTENANCE OF THE ACCESS ROADS MAY BE REQUIRED DUE TO THE NATURAL DRAINAGE.
- WHEN INSTALLING DRAINAGE CULVERTS, THE CONTRACTOR SHALL SET THE FLOW LINE ELEVATIONS AND CULVERT LONGITUDINAL SLOPE WITH THE EXISTING GRADE OF THE DITCH. FURTHER, A MINIMUM COVER OF 12" SHALL BE PROVIDED OVER ALL CULVERTS.
- ALL PERMANENT PIPE CULVERTS SHALL BE INSTALLED PER OHIO DEPARTMENT OF TRANSPORTATION AND/OR PAULDING COUNTY STANDARD SPECIFICATIONS AND SHALL BE MANUFACTURED OF CORRUGATED METAL PIPE OR HIGH DENSITY POLYETHYLENE PIPE AS NOTED.
- ANTICIPATED CULVERTS HAVE BEEN SHOWN ON THE CONSTRUCTION PLAN, ADDITIONAL CULVERTS MAY NEED TO BE INSTALLED IN AREAS WHERE CONCENTRATED FLOW IS EXPECTED DUE TO CONSTRUCTION ACTIVITIES.
- ALL TEMPORARY CRANE CROSSING CULVERTS HAVE BEEN DESIGNED TO ACCOMMODATE THE 1-YEAR 24 HOUR STORM EVENT OR MATCHING DOWNSTREAM CULVERT SIZES. IT IS ANTICIPATED THAT DURING LARGER RAINFALL EVENTS THE STORMWATER WILL OVERTOP THE CONSTRUCTED CRANE CROSSING.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

- THE CONTRACTOR SHALL PROVIDE EROSION CONTROL MEASURES AS PLANNED AND SPECIFIED FOLLOWING BEST MANAGEMENT PRACTICES AS OUTLINED BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) AND BEING IN CONFORMANCE WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL STORMWATER PERMIT.
- REFER TO THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR THE NORTHWEST OHIO WIND PROJECT, PREPARED BY WESTWOOD PROFESSIONAL SERVICES, FOR EROSION CONTROL AND RESTORATION SPECIFICATIONS, SEDIMENT AND EROSION CONTROL PROCEDURES, LOCATIONS OF BMPs, DETAILS, AND INSPECTION INFORMATION.
- ALL PASTURES AND DRAINAGE SWALES DISTURBED DURING CONSTRUCTION ACTIVITIES AND NOT COVERED BY ROAD SURFACING MATERIALS, SHALL BE SEEDED IN ACCORDANCE WITH THE SWPP PLAN.

TABLE 1: OHIO DOT 703.17 SPEC AGGREGATE GRADATION	
SIEVE SIZE	PERCENT PASSING
2"	(100)
1"	(70-100)
3/4"	(50-90)
No. 4	(30-60)
No. 30	(9-33)
No. 200	(0-15)
LOS ANGELES TEST = MAX 50% WEAR	
FRACTURED PIECES = MIN 90% BY WEIGHT	

TESTING:

- TESTING SHALL BE PERFORMED BY A DESIGNATED INDEPENDENT TESTING AGENCY.
- SUBMIT ONE SET OF TESTING AND INSPECTION RECORDS SPECIFIED TO THE CIVIL ENGINEER OF RECORD.

DEFINITIONS:

- PROOF ROLLING:
SHALL BE PERFORMED IN THE PRESENCE OF THE GEOTECHNICAL ENGINEER OR QUALIFIED GEOTECHNICAL REPRESENTATIVE USING A FULLY LOADED TANDEM AXLE DUMP TRUCK OR WATER TRUCK WITH A MINIMUM GROSS WEIGHT OF 25 TONS OR A FULLY LOADED BELLY DUMP WITH AN EQUIVALENT AXLE LOADING. PROOF-ROLLING ACCEPTANCE STANDARDS INCLUDE NO RUTTING GREATER THAN 1.5 INCHES, AND NO "PUMPING" OF THE SOIL BEHIND THE LOADED TRUCK.
- SIEVE ANALYSIS:
SHALL BE CONDUCTED IN ACCORDANCE WITH AASHTO T27
- PROCTORS:
SHALL BE DETERMINED IN ACCORDANCE WITH AASHTO T99
- ATTERBERG LIMITS:
SHALL BE DETERMINED IN ACCORDANCE WITH AASHTO T89 AND T90
- MOISTURE DENSITY (NUCLEAR DENSITY):
SHALL BE DONE IN ACCORDANCE WITH AASHTO T310
- DYNAMIC CONE PENETROMETER (DCP) TESTING:
SHALL BE DONE IN ACCORDANCE WITH ASTM D6951-03

SUBGRADE COMPACTION, TEST ROLLING AND AGGREGATE BASE COMPACTION:

- FILL MATERIAL:
 - SOILS USED AS FILL MATERIAL SHALL BE TESTED FOR GRAIN SIZE ANALYSIS, MOISTURE CONTENT, ATTERBERG LIMITS ON FINES CONTENT, AND PROCTOR TESTS (STANDARD DRY MAXIMUM DENSITY).
 - FOR PLACED & COMPACTED FILLS, PROVIDE ONE COMPACTION TEST PER LIFT FOR EVERY 1000 FT OF ROAD LENGTH. INCLUDE THE LOCATION, DRY DENSITY, MOISTURE CONTENT, AND COMPACTION PERCENT BASED ON STANDARD PROCTOR MAXIMUM DRY DENSITY.
 - IN ROADWAY CUT AREAS, OR WHERE EMBANKMENT CONSTRUCTION REQUIRES LESS THAN 12 INCHES OF FILL PLACEMENT, COMPACT TO A MINIMUM OF 95 PERCENT OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY.
 - IF STRUCTURAL FILL IS REQUIRED, GEOTECHNICAL ENGINEER SHALL BE CONSULTED BY GENERAL CONTRACTOR FOR DETERMINATION OF SUITABILITY.
- COMPACTED SUBGRADE (CEMENT STABILIZED):
A. ALL SUBGRADE SHALL BE CEMENT STABILIZED. REFER TO CEMENT STABILIZATION SPECIFICATIONS ON SHEET 7 FOR CONSTRUCTION METHODS AND TESTING SCHEDULE.
- COMPACTED SUB-GRADE (NON-CEMENT STABILIZED):
 - PROVIDE 3 MOISTURE DENSITY COMPACTION TEST PER ACCESS ROAD, OR ONE FOR EVERY 1000 L.F. OF ROAD LENGTH, WHICHEVER IS GREATER. COMPACTED SUBGRADE MUST BE COMPACTED TO A MINIMUM OF 98% STANDARD PROCTOR MAXIMUM DRY DENSITY AT ±3% OF OPTIMUM MOISTURE CONTENT FOR GRANULAR SOILS AND AT -2 TO +3% OF OPTIMUM MOISTURE CONTENT FOR COHESIVE SOILS.
 - TEMPORARY RADIUS IMPROVEMENTS SHALL BE LIMITED TO PROOF ROLLING ON THE AGGREGATE SURFACE. PROOF ROLLING SHALL BE COMPLETED IN THE PRESENCE OF A GEOTECHNICAL ENGINEER OR A QUALIFIED GEOTECHNICAL REPRESENTATIVE USING A FULLY LOADED WATER TRUCK WITH AN EQUIVALENT AXLE LOADING. ACCEPTANCE STANDARDS SHALL BE NO RUTTING GREATER THAN 3 INCHES AND NO "PUMPING" OF SOILS BEHIND THE LOADED TRUCK. IF PROOF ROLLING DETERMINES THAT THE ROAD IS UNSTABLE, ADDITIONAL AGGREGATE SHALL BE ADDED UNTIL THE UNSTABLE SECTION IS ABLE TO PASS A PROOF ROLL.
- AGGREGATE BASE:
 - AGGREGATE BASE SHALL BE PROOF-ROLLED OVER THE ENTIRE LENGTH. IF PROOF ROLLING DETERMINES THAT THE ROAD IS UNSTABLE, ADDITIONAL AGGREGATE SHALL BE ADDED UNTIL THE UNSTABLE SECTION IS ABLE TO PASS A PROOF ROLL.
 - PROVIDE 1 DCP TEST FOR EVERY 1,000 L.F. OF ROAD LENGTH. ROAD BASE SHALL BE COMPACTED TO ACHIEVE A PENETRATION INDEX VALUE LESS THEN OR EQUAL TO 10 MM/BLOW.
 - PROVIDE 1 SIEVE ANALYSIS (PROJECT MAX OF 20) PER 2500 CY OF ROAD BASE PLACED.
- CRANE TRAVEL SHOULDERS:
 - CRANE TRAVEL SHOULDER COMPACTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL CRANE SHOULDER COMPACTION PROCEDURES AND TESTING PROCEDURES SHALL BE THE CONTRACTOR'S MEANS AND METHODS
- CRANE PADS:
 - SCARIFY AND COMPACT EXISTING SOILS TO A DEPTH OF 12-INCHES. MOISTURE DENSITY TESTING SHALL BE PERFORMED AT A MINIMUM OF 2 PER CRANE PAD. CRANE PADS MUST BE COMPACTED TO A MINIMUM OF 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY AT OF OPTIMUM MOISTURE CONTENT FOR GRANULAR SOILS AND AT -1 TO +2% OF OPTIMUM MOISTURE CONTENT FOR COHESIVE SOILS.
 - ALL CRANE PADS MUST BE PROOF ROLLED PRIOR TO UTILIZATION.
 - IF THE CRANE PAD CANNOT ACHIEVE PROOF-ROLL ACCEPTANCE AS DETERMINED BY THE GEOTECHNICAL ENGINEER, DCP TEST MAY BE USED. WHEN UTILIZED, DCP TESTING SHALL BE USED AT MINIMUM RATE OF 2 PER CRANE PAD AND ACHIEVE A MAXIMUM OF 24 MM/BLOW.
 - AT THE CONTRACTOR'S DISCRETION, CRANE MATS MAY BE UTILIZED TO PROVIDE ADDITIONAL STABILITY.
 - CRANE PAD CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE TESTING PROCEDURES IN SECTIONS A, B, C AND D ABOVE ARE RECOMMENDATIONS BASED ON WESTWOOD'S PAST EXPERIENCE ON SIMILAR WND PROJECTS. ALL FINAL CRANE PAD CONSTRUCTION AND TESTING PROCEDURES SHALL BE THE CONTRACTOR'S MEANS AND METHODS.
- EXISTING TURBINE ACCESS ROADS:
 - TURBINE ACCESS ROADS SHALL BE CLEARED OF ALL VEGETATION AND BLADED TO REMOVE RUTTING, WASHBOARDS AND TO CREATE A SMOOTH, UNIFORM DEPTH AGGREGATE SURFACE.
 - TURBINE ACCESS ROADS SHALL BE PROOF ROLLED PRIOR TO UTILIZATION.
 - AFTER PASSING PROOF ROLL, A 2" AGGREGATE CAP SHALL BE PLACED ALONG THE ENTIRE LENGTH OF THE ACCESS ROAD AND COMPACTED WITH A SMOOTH DRUM ROLLER.
 - ADDITIONAL MAINTENANCE MAY BE REQUIRED ON PREVIOUSLY CONSTRUCTED ROADS TO KEEP THEM IN SAFE OPERATING CONDITIONS DURING CONSTRUCTION.

PRODUCTS

- ROAD BASE SHALL CONSIST OF OHIO DOT 703.17 SPECIFICATION AGGREGATE GRADATION, MEETING THE GRADATION PROVIDED IN TABLE 1.
- ROAD SUBGRADE AND SHOULDERS SHALL CONSIST OF COMPACTED NATIVE SOILS.
- GEOTEXTILE FABRIC FOR ROAD BASE MATERIAL SEPARATION SHALL BE MIRAFI HP270 OR APPROVED EQUAL.
- CULVERTS: SEE PLAN FOR CULVERT LOCATIONS. CULVERTS SHALL MEET THE MINIMUM SPECIFICATIONS SET FORTH BY THE OHIO DEPARTMENT OF TRANSPORTATION AND/OR PAULDING COUNTY. ALL CULVERTS SHALL BE MANUFACTURED OF 16-GAGE CORRUGATED METAL PIPE UNLESS NOTED OTHERWISE.

PROJECT CONTACT INFORMATION:

TITLE	COMPANY	NAME	CONTACT NUMBER
OWNER	TRISHE WIND OHIO, LLC	ALEX DABERKO	203-422-8104
PROJECT MANAGER	WESTWOOD	STEVE BATTAGLIA	952-906-7405
ENGINEER OF RECORD	WESTWOOD	DANIEL BECKMANN	952-906-7424
CONTRACTOR	WHITE CONSTRUCTION	ALAN DOWNES	608-320-2818
PAULDING COUNTY ENGINEER	PAULDING COUNTY	TRAVIS MCGARVEY	419-399-2366
OHIO EPA			800-329-7518

GENERAL NOTES:

- THE PLANIMETRIC FEATURES SHOWN ON THE PLANS ARE PROVIDED BY WESTWOOD PROFESSIONAL SERVICES SUPPLEMENTED WITH PUBLICLY AVAILABLE DATA. GROUND SURFACE CONTOURS AND ELEVATIONS HAVE BEEN PROJECTED FROM A 3-METER ACCURACY PUBLIC LIDAR DATASET PROVIDED BY THE STATE OF OHIO. THE DATASET WAS FLOWN IN 2006 UNDER THE OHIO STATEWIDE IMAGERY PROGRAM (OSIP).
- WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE OWNER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING DAMAGED PROPERTY MARKERS AND MONUMENTS.
- EFFORTS SHALL BE MADE TO MINIMIZE SOIL DISTURBANCE TO AREAS OUTSIDE OF THE ROAD GRADING LIMITS, CRANE PATHS, AND TURBINE SITES. TYPICAL DISTURBANCE SHALL BE LIMITED TO 10 LF FROM THE EDGE OF PROPOSED GRADING.
- FINALIZE GRADING AROUND THE BASE OF TURBINES IN ACCORDANCE WITH DETAIL TS-03 AND TS-04.
- GRADE ALL PROPOSED ROADS TO A MAXIMUM SLOPE OF 8%. IF 10% SLOPE CANNOT BE ACHIEVED, THE CONTRACTOR MAY UTILIZE ASSIST VEHICLES FOR THE PURPOSE OF DELIVERIES. GRADE ALL PROPOSED CRANE PATHS TO A MAXIMUM OF 10% UNLESS OTHERWISE NOTED IN PLAN SHEETS.
- IF LOCALIZED LOW POINTS ARE ENCOUNTERED DURING TOPSOIL STRIPPING, MASSAGE SURROUNDING AREA TO MAINTAIN POSITIVE DIRECTION OF DRAINAGE TO MINIMIZE PONDING OF STORMWATER DURING RAINFALL EVENTS.
- ANY FACILITIES REMOVED TO ALLOW FOR CONSTRUCTION (MAILBOXES, SIGNS, FENCES, ETC.) SHALL BE REPLACED BY THE CONTRACTOR IN A CONDITION AS GOOD AS EXISTING.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DRAINAGE THROUGHOUT THE CONSTRUCTION OF THIS PROJECT. CONSTRUCTION ACTIVITIES SHALL NOT BLOCK THE NATURAL OR MANMADE CREEKS OR DRAINAGE SWALES CAUSING RAINWATER TO POND. DEPENDING ON FIELD CONDITIONS, ADDITIONAL CULVERTS IN EXCESS OF THOSE ON THE PLANS MAY BE REQUIRED.
- WHILE BUILDING THE ROADS AND EXCAVATING THE TURBINE FOUNDATIONS, EXCESS SOIL WILL RESULT. THE CONTRACTOR SHALL DISPOSE OF THIS EXCESS SOIL IN AN APPROVED MANNER. EXCESS TOPSOIL SHALL BE DISTRIBUTED INTO A THIN LAYER ON LAND IMMEDIATELY ADJACENT TO WHERE THE TOPSOIL ORIGINATED. WHILE DOING SO THE CONTRACTOR SHALL AVOID CAUSING RIDGES OR MOUNDS THAT WOULD MAKE IT DIFFICULT FOR STORM WATER RUNOFF TO DRAIN. THE FINAL SURFACE OF THE DISTURBED TOPSOIL SHALL BE SMOOTH AND FOLLOW THE NATURAL CONTOUR OF THE LAND.
- THE CONTRACTOR SHALL NOTIFY OHIO 811 AT LEAST 48 HOURS BEFORE EXCAVATION ACTIVITIES COMMENCE.
- TEMPORARY INTERSECTION WIDENING SHALL, UPON COMPLETION OF ALL PROJECT CONSTRUCTION OR UPON NOTIFICATION OF THE ENGINEER, BE REMOVED AND THE AREA RESTORED TO ITS ORIGINAL LINES AND GRADES WITH THE UPPER FOOT OF THE RESTORED GROUND BEING TOPSOIL, EXCEPT WHERE REQUESTED BY THE TOWNSHIP OR COUNTY TO PERMANENTLY REMAIN. DISTURBED AREAS OUTSIDE OF THE FINAL ROADWAY SHALL BE SEEDED AND MULCHED.
- TURBINE SETBACKS ARE NOT IDENTIFIED ON THE CONSTRUCTION PLANS. IT SHALL BE THE RESPONSIBILITY OF THE OWNER AND CONTRACTOR TO ENSURE THAT ALL TURBINE SETBACKS MEET PROJECT REQUIREMENTS.
- GEOTECHNICAL REPORTS WITH RECOMMENDATIONS HAVE BEEN PREPARED BY BARR ENGINEERING, INC. ALL GRADING SHALL CONFORM TO THE GEOTECHNICAL ENGINEERING REPORT AND RECOMMENDATIONS.
- WETLAND INFORMATION SHOWN ON THE PLAN WAS PROVIDED BY WESTWOOD PROFESSIONAL SERVICES.
- CULTURAL RESOURCE REPORTS HAVE BEEN PROVIDED BY WESTWOOD PROFESSIONAL SERVICES. THE LOCATIONS OF CULTURAL RESOURCE SITES MAY BE CONFIDENTIAL AND PROTECTED BY STATE OR FEDERAL LAW. PUBLIC RELEASE OF SPECIFIC INFORMATION REGARDING THESE RESOURCES MAY BE RESTRICTED.
- ELECTRICAL INFORMATION SHOWN ON THE PLANS IS FOR REFERENCE ONLY. REFER TO ELECTRICAL CONSULTANT'S PLANS FOR SPECIFIC LOCATIONS AND CONSTRUCTION DETAILS FOR THE UNDERGROUND POWER COLLECTION SYSTEM AND SUBSTATION.
- CRANE PATHS ARE SHOWN ON THE CONSTRUCTION PLANS. FINAL CRANE PATH ALIGNMENTS SHALL BE DETERMINED BY THE CONTRACTOR BASED ON FIELD CONDITIONS WITHIN THE WETLAND AND CULTURAL RESOURCE CORRIDORS, SPECIAL LANDOWNER AGREEMENTS AND THE PROJECT BOUNDARY. ALL PROPOSED CRANE PATH REVISIONS SHALL BE VERIFIED BY THE ENGINEER PRIOR TO CONSTRUCTION.
- EFFORTS SHALL BE MADE TO MINIMIZE SOIL DISTURBANCE TO AREAS OUTSIDE OF THE ROAD GRADING LIMITS, CRANE PATHS, AND TURBINE SITES. DISTURBANCE SHALL BE LIMITED TO 50 LF WIDTH FOR PROPOSED ACCESS ROADS AND 50 LF FOR CRANE PATHS, AND SHALL BE LIMITED TO A 175 LF RADIUS FOR PROPOSED WIND TURBINE GENERATORS. THE GRADING LIMITS SHALL BE CENTERED ON THE ROADWAYS AND WIND TURBINES. THE CONTRACTOR SHALL MAKE ALL EFFORTS TO KEEP ACTIVITIES WITHIN THE ERECTION AREAS SHOWN ON THE PLANS BUT IT IS UNDERSTOOD THAT SOME ACTIVITIES THAT WILL NOT REQUIRE GRADING OR SOIL DISTURBANCE MAY EXTEND BEYOND THE DEFINED LIMITS. DURING ERECTION OF THE ROTOR, TRUCKS AND/OR FORKLIFTS MAY EXTEND BEYOND THESE LIMITS. SEE DETAIL TS01 FOR TYPICAL ERECTION AREAS.
- TRUCK TURNAROUNDS ARE NOT SHOWN ON THE PLANS. GENERAL CONTRACTOR TO COORDINATE AND ASSIST WITH TRUCK TURNAROUNDS WHERE NECESSARY.
- AN ALTA SURVEY HAS BEEN PROVIDED BY WESTWOOD PROFESSIONAL SERVICES. CONTRACTOR AND OWNER ARE RESPONSIBLE FOR LOCATING ALL UTILITIES AND VERIFYING LOCATION OF CONSTRUCTION ACTIVITIES PRIOR TO COMMENCING WORK.
- PLANS DO NOT DETAIL VARIOUS COUNTY/TOWNSHIP ROAD SECTION UPGRADES OR WIDENING REQUIRED FOR CONSTRUCTION DELIVERIES PER THE ROAD MAINTENANCE AGREEMENT BETWEEN PROJECT OWNER AND PAULDING COUNTY.
- THERE IS HIGH LIKELIHOOD THAT EXISTING DRAIN TILE WILL BE IMPACTED. WESTWOOD WAS NOT PROVIDED EXISTING DRAIN TILE INFORMATION PRIOR TO DESIGN. CONTRACTOR SHALL NOTIFY LANDOWNER AND PROJECT OWNER UPON DISTURBANCE OF EXISTING DRAIN TILE. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE/RECONSTRUCT IMPACTED DRAIN TILE IN ORDER TO MAINTAIN CONVEYANCE OF DRAIN TILE FLOW AS IN PRE-CONSTRUCTION CONDITIONS.
- EXISTING TURBINE ACCESS ROADS CONSTRUCTED PRIOR TO 2017 SHALL BE REVIEWED BY THE CONTRACTOR AND PROJECT OWNER PRIOR TO CONSTRUCTION DELIVERIES AND SHALL MEET THE REQUIREMENTS OF SECTION 7 'EXISTING TURBINE ACCESS ROADS' UNDER 'SUBGRADE COMPACTION, TEST ROLLING AND AGGREGATE BASE COMPACTION'.

TABLE 3: TESTING SCHEDULE SUMMARY		
LOCATION	TEST	FREQUENCY
STRUCTURAL FILL	GRAIN SIZE ANALYSIS, MOISTURE CONTENT, ATTERBERG LIMITS ON FINES CONTENT, AND PROCTOR	1 PER MAJOR SOIL TYPE
CEMENT STABILIZED SUBGRADE	REFER TO SHEET 7 FOR TESTING REQUIREMENTS	REFER TO SHEET 7 FOR FREQUENCY
COMPACTED SUBGRADE (NON-CEMENT STABILIZED)	PROOF-ROLL	ENTIRE LENGTH
	MOISTURE DENSITY TEST (NUCLEAR DENSITY)	1 PER 1000 FT OR MIN. 3 PER ROAD
	DCP (NOT REQUIRED UNLESS PROOF ROLL FAILS)	2 PER 1000 FT
AGGREGATE BASE	PROOF-ROLL	ENTIRE AREA
	SIEVE ANALYSIS, LL, PL, AND LA ABRASION	1 PER 2,500 CY
	DCP TEST	1 PER 1,000 LF OF ROAD
CRANE PAD COMPACTED SUBGRADE	PROOF-ROLL	ENTIRE AREA
	MOISTURE DENSITY TEST (NUCLEAR DENSITY)	2 PER PAD
	DCP (NOT REQUIRED UNLESS PROOF ROLL FAILS)	2 PER PAD
CRANE SHOULDERS	PROOF-ROLL	ENTIRE LENGTH

Westwood

Phone (952) 937-5150 7699 Anagram Drive
Fax (952) 937-5822 Eden Prairie, MN 55344
Toll Free (888) 937-5150 westwoodps.com

Westwood Professional Services, Inc.

Designed:			KLG
Checked:			SPB
Drawn:			KLG
As-Built Drawing:			
Revisions: #	DATE	DESCRIPTION	
A	09/01/17	60% plans	
B	09/07/17	90% plans	
C	09/11/17	90% plans	
D	09/22/17	100% plans	

Prepared for:



3900 E. White Ave
Clinton, IN 47842

Trishe Wind Ohio, LLC
c/o Starwood Energy Group, LLC
5 Greenwich Office Park, 2nd Floor
Greenwich, CT 06831

Northwest
Ohio Wind
Project
Paulding, Ohio

Construction Notes

100% Completion
Issued For Review

Array Updated: 09/18/2017

Date: 09/22/2017

Sheet: 9 OF 35



SEE SHEET 12

LEGEND:

- TURBINE LOCATION
- TURBINE NUMBER
- PROPOSED ACCESS ROAD
- PROPOSED CRANE PATH
- PROPOSED UNDERGROUND COLLECTION
- PROPOSED DISTURBANCE LIMITS
- PROPOSED EROSION/SEDIMENT CONTROL
- EXISTING OVERHEAD POWER
- EXISTING OIL/GAS PIPELINE
- EXISTING TELEPHONE LINE
- EXISTING CABLE LINE
- EXISTING RIGHT OF WAY
- EXISTING 10' CONTOURS
- EXISTING 2' CONTOURS
- DELINEATED WETLAND
- EXISTING ROAD
- OUT OF PROJECT BOUNDARY
- FEMA FLOODPLAIN BOUNDARY
- PROPOSED CULVERT
- POTENTIAL CRANE MAT LOCATIONS

NOTE: PLANS DO NOT DETAIL VARIOUS COUNTY/TOWNSHIP ROAD SECTION UPGRADES OR WIDENING REQUIRED FOR CONSTRUCTION DELIVERIES PER THE ROAD MAINTENANCE AGREEMENT BETWEEN PROJECT OWNER AND PAULDING COUNTY.

Westwood

Phone (952) 937-5150 7699 Anagram Drive
Fax (952) 937-5822 Eden Prairie, MN 55344
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

Designed:	KLK
Checked:	SJB
Drawn:	KLK

As-Built Drawing:

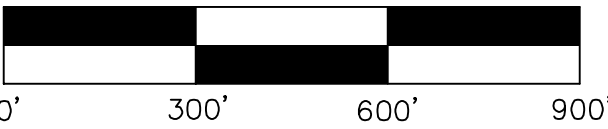
Revisions	DATE	DESCRIPTION
A	09/01/17	60% plans
B	09/07/17	90% plans
C	09/11/17	90% plans
D	09/22/17	100% plans

Prepared for:



3900 E. White Ave
Clinton, IN 47842

Trishe Wind Ohio, LLC
c/o Starwood Energy Group, LLC
5 Greenwich Office Park, 2nd Floor
Greenwich, CT 06831



Northwest
Ohio Wind
Project
Paulding, Ohio

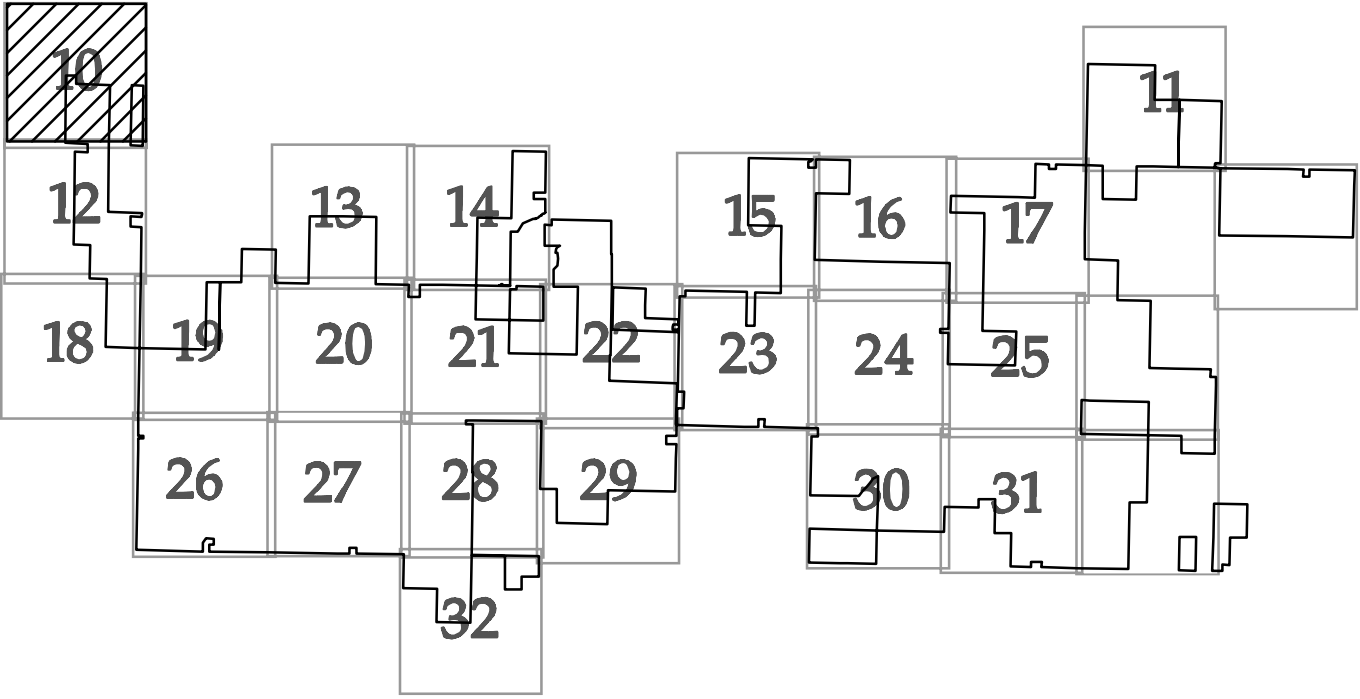
Civil Site Plan T01

100% Completion
Issued For Review

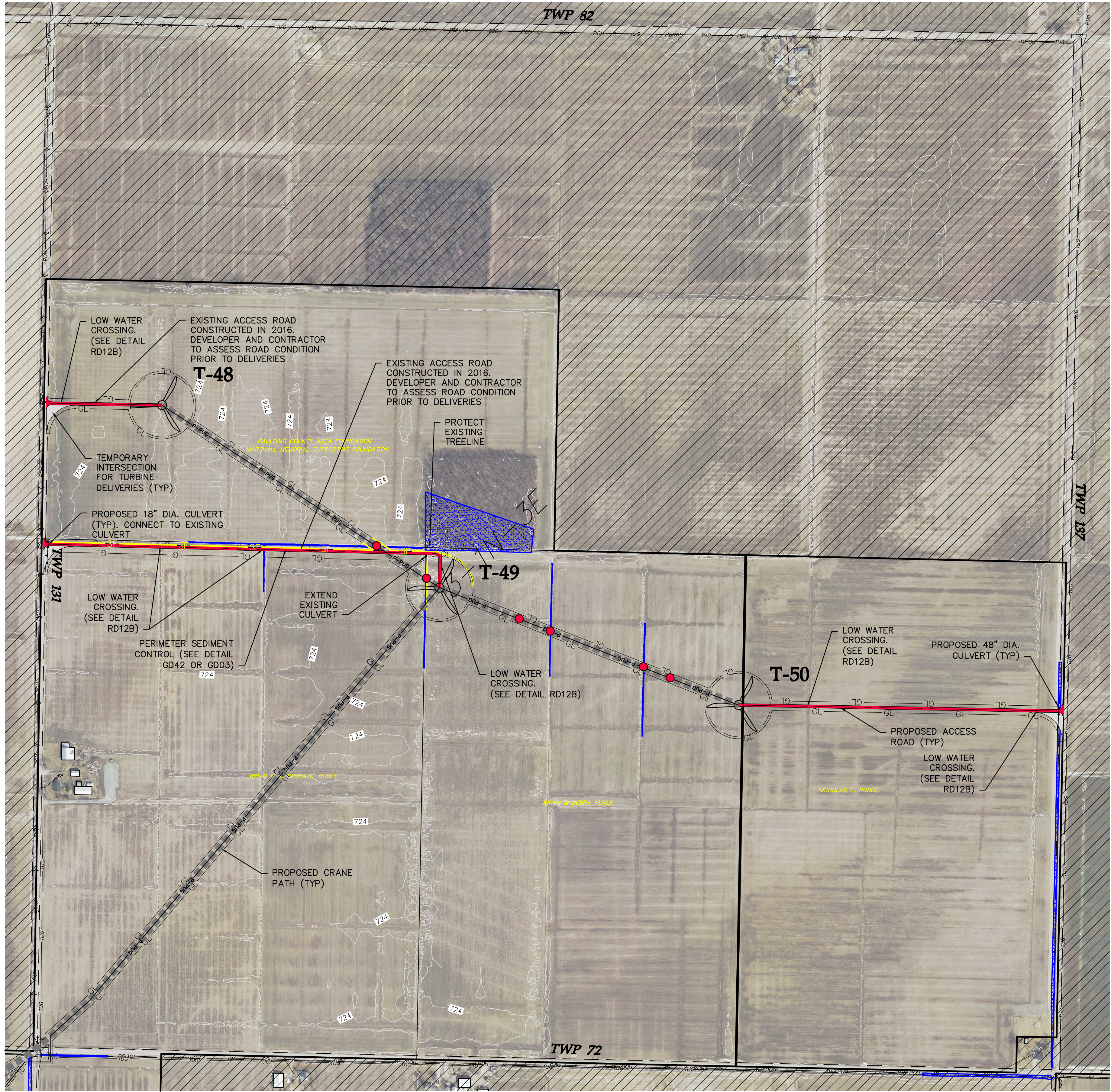
Array Updated: 09/18/2017

Date: 09/22/2017

Sheet: 10 OF 35



KEY MAP



LEGEND:

- TURBINE LOCATION
- T-XX TURBINE NUMBER
- PROPOSED ACCESS ROAD
- PROPOSED CRANE PATH
- PROPOSED UNDERGROUND COLLECTION
- PROPOSED DISTURBANCE LIMITS
- PROPOSED EROSION/SEDIMENT CONTROL
- EXISTING OVERHEAD POWER
- EXISTING OIL/GAS PIPELINE
- EXISTING TELEPHONE LINE
- EXISTING CABLE LINE
- EXISTING RIGHT OF WAY
- EXISTING 10' CONTOURS
- EXISTING 2' CONTOURS
- DELINEATED WETLAND
- EXISTING ROAD
- OUT OF PROJECT BOUNDARY
- FEMA FLOODPLAIN BOUNDARY
- PROPOSED CULVERT
- POTENTIAL CRANE MAT LOCATIONS

NOTE: PLANS DO NOT DETAIL VARIOUS COUNTY/TOWNSHIP ROAD SECTION UPGRADES OR WIDENING REQUIRED FOR CONSTRUCTION DELIVERIES PER THE ROAD MAINTENANCE AGREEMENT BETWEEN PROJECT OWNER AND PAULDING COUNTY.

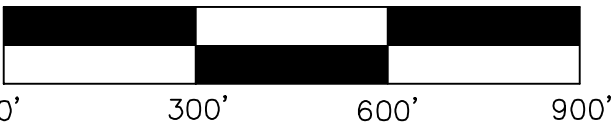
Designed:	KLK	
Checked:	SJB	
Drawn:	KLK	
As-Built Drawing:		
Revisions:		
#	DATE	DESCRIPTION
A	09/01/17	60% plans
B	09/07/17	90% plans
C	09/11/17	90% plans
D	09/22/17	100% plans

Prepared for:



3900 E. White Ave
Clinton, IN 47842

Trishe Wind Ohio, LLC
c/o Starwood Energy Group, LLC
5 Greenwich Office Park, 2nd Floor
Greenwich, CT 06831



Northwest
Ohio Wind
Project
Paulding, Ohio

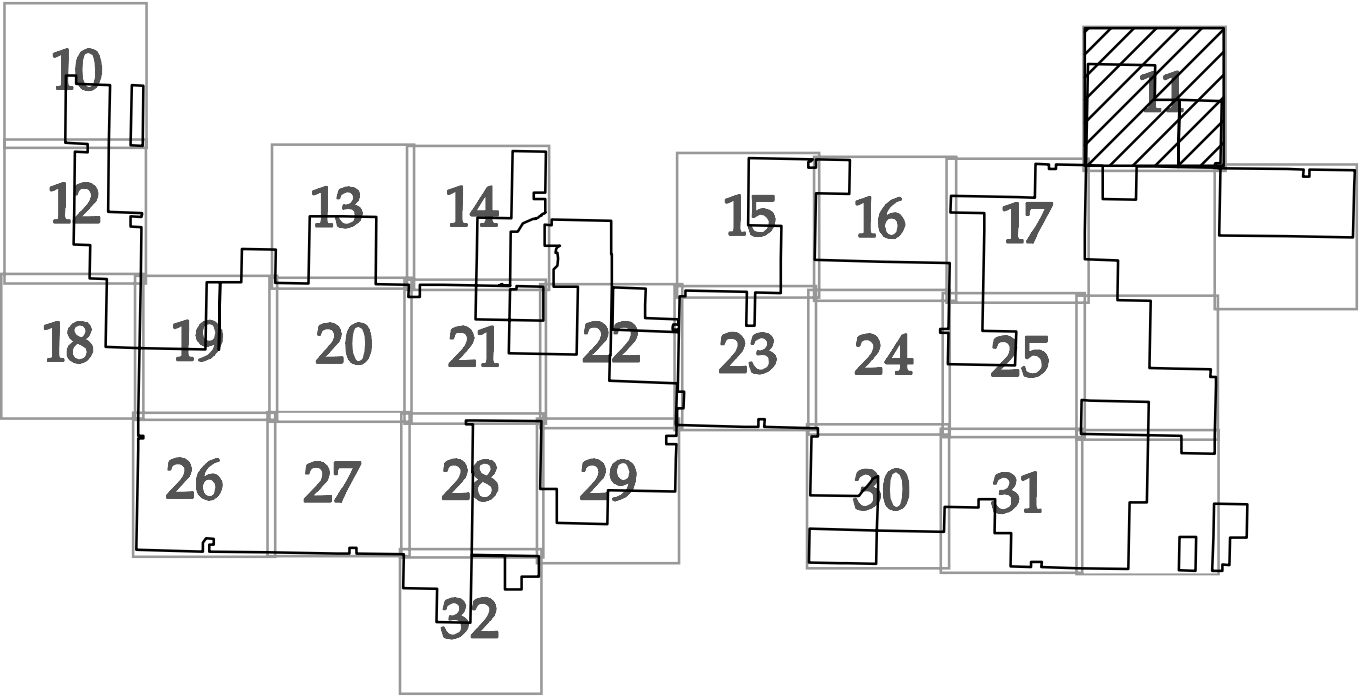
Civil Site Plan T48 T49
T50

100% Completion
Issued For Review

Array Updated: 09/18/2017

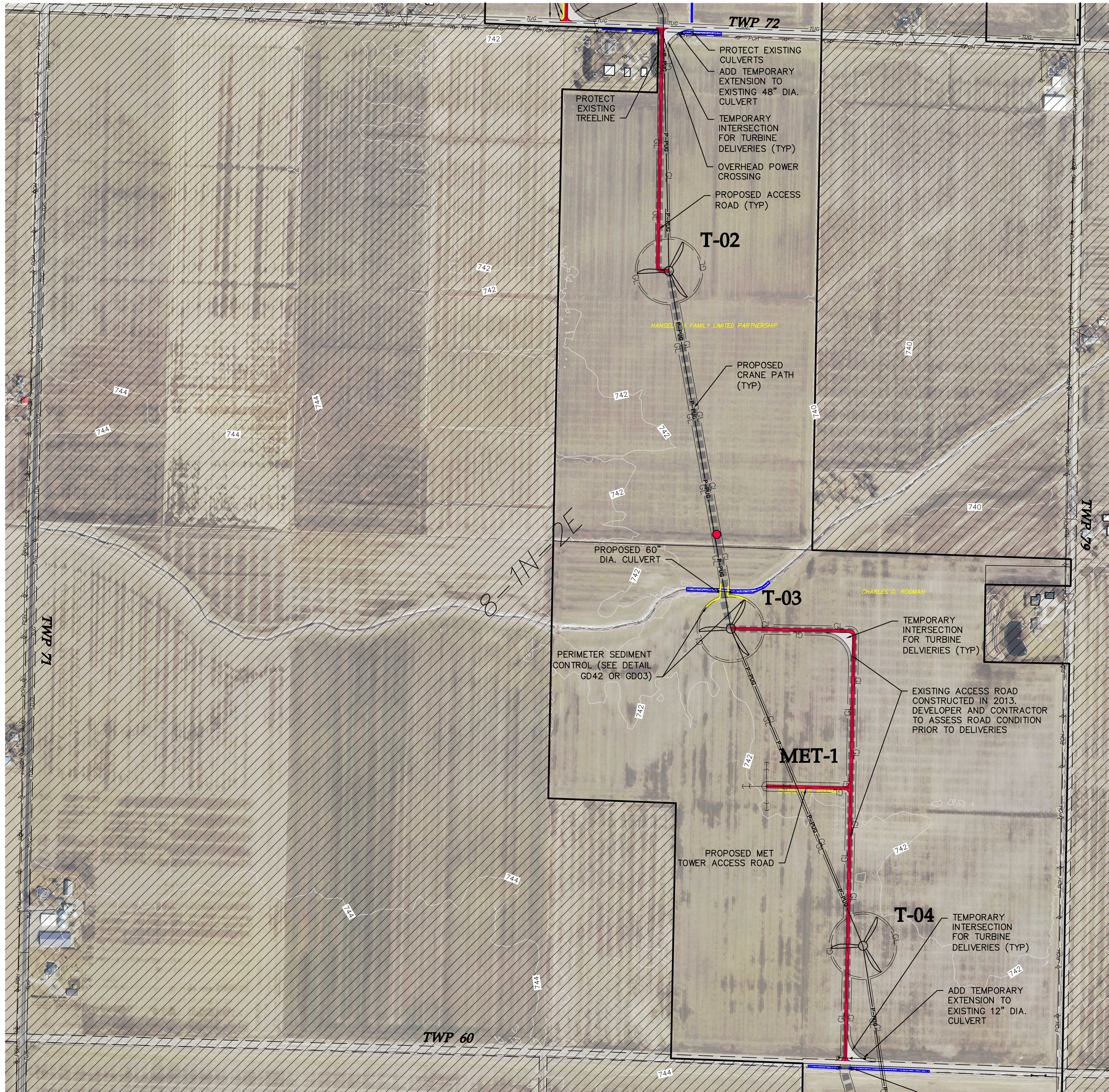
Date: 09/22/2017

Sheet: 11 OF 35



KEY MAP

SEE SHEET 10



SEE SHEET 18

LEGEND:

- TURBINE LOCATION
- T-XX TURBINE NUMBER
- PROPOSED ACCESS ROAD
- PROPOSED CRANE PATH
- PROPOSED UNDERGROUND COLLECTION
- PROPOSED DISTURBANCE LIMITS
- PROPOSED EROSION/SEDIMENT CONTROL
- EXISTING OVERHEAD POWER
- EXISTING OIL/GAS PIPELINE
- EXISTING TELEPHONE LINE
- EXISTING CABLE LINE
- EXISTING RIGHT OF WAY
- EXISTING 10' CONTOURS
- EXISTING 2' CONTOURS
- DELINEATED WETLAND
- EXISTING ROAD
- OUT OF PROJECT BOUNDARY
- FEMA FLOODPLAIN BOUNDARY
- PROPOSED CULVERT
- POTENTIAL CRANE MAT LOCATIONS

NOTE: PLANS DO NOT DETAIL VARIOUS COUNTY/TOWNSHIP ROAD SECTION UPGRADES OR WIDENING REQUIRED FOR CONSTRUCTION DELIVERIES PER THE ROAD MAINTENANCE AGREEMENT BETWEEN PROJECT OWNER AND PAULDING COUNTY.

Westwood

Phone (952) 937-5150 7699 Anagram Drive
Fax (952) 937-5822 Eden Prairie, MN 55344
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

Designed: KLG

Checked: SJB

Drawn: KLG

As-Built Drawing:

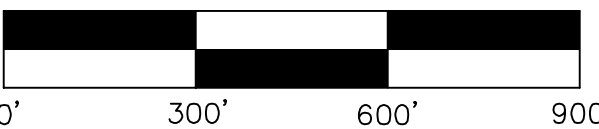
Revisions	DATE	DESCRIPTION
A	09/01/17	60% plans
B	09/07/17	90% plans
C	09/11/17	90% plans
D	09/22/17	100% plans

Prepared for:



3900 E. White Ave
Clinton, IN 47842

Trishe Wind Ohio, LLC
c/o Starwood Energy Group, LLC
5 Greenwich Office Park, 2nd Floor
Greenwich, CT 06831



Northwest
Ohio Wind
Project
Paulding, Ohio

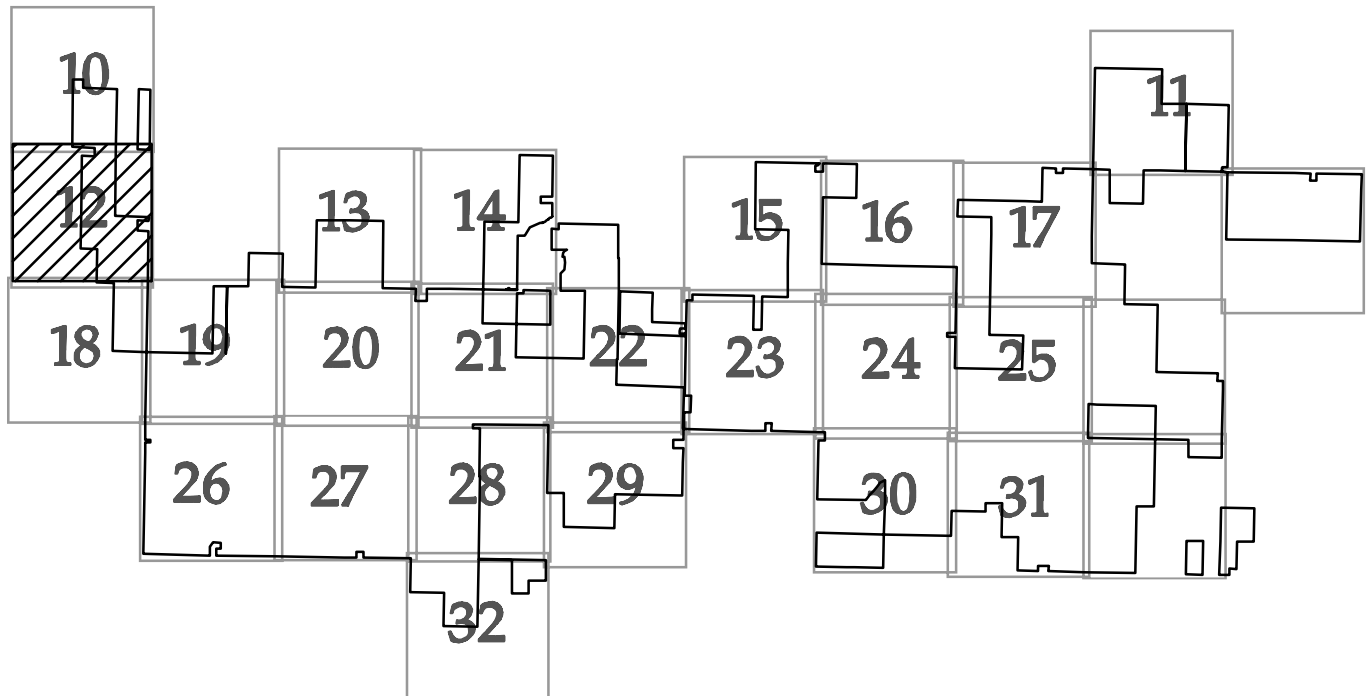
Civil Site Plan T2 T3
T4

100% Completion
Issued For Review

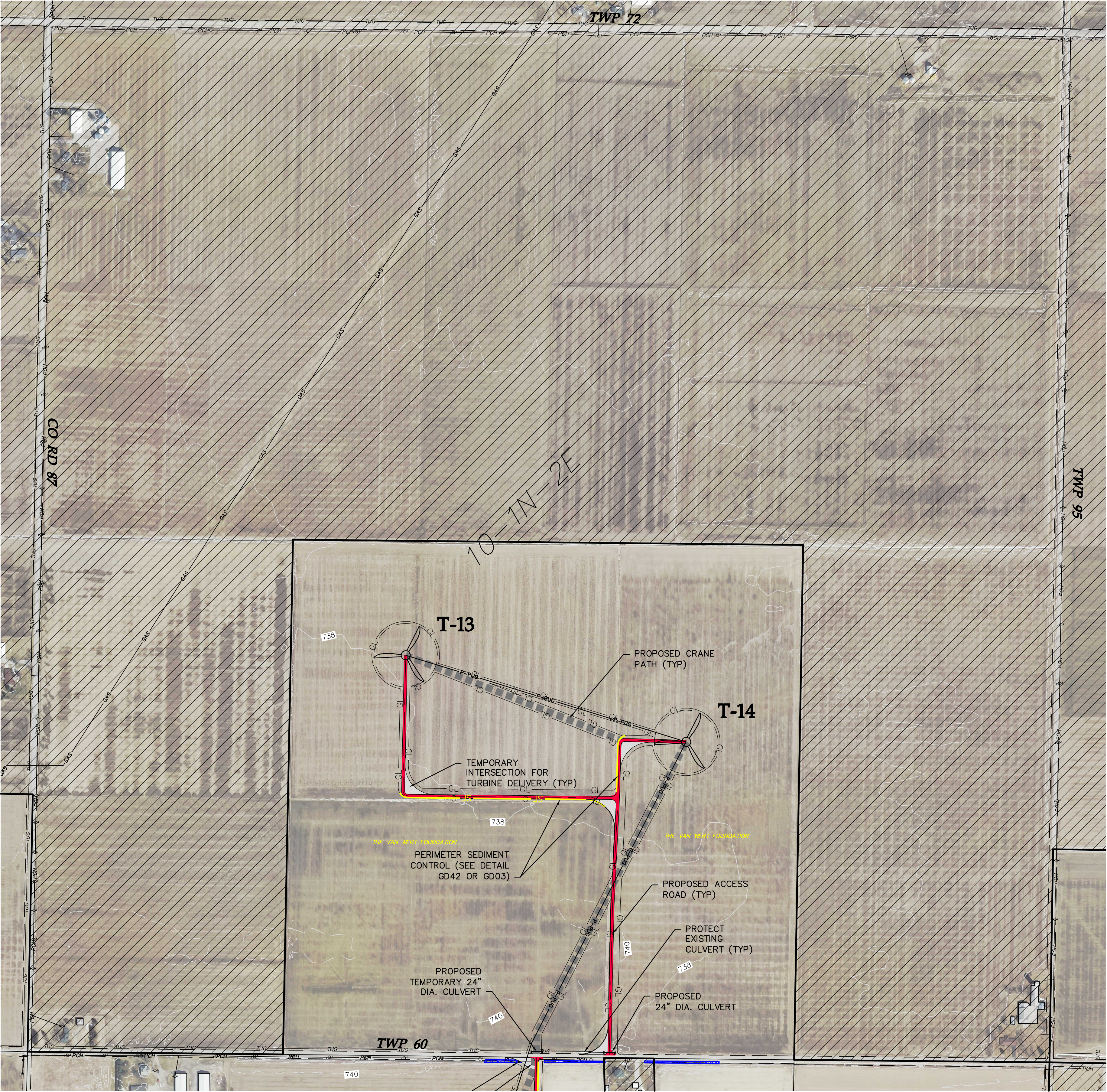
Array Updated: 09/18/2017

Date: 09/22/2017

Sheet: 12 OF 35




KEY MAP



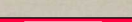
SEE SHEET 20

SEE SHEET 14

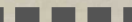
LEGEND:


T-XX

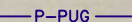
TURBINE LOCATION



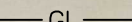
TURBINE NUMBER



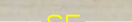
PROPOSED ACCESS ROAD



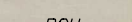
PROPOSED CRANE PATH



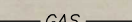
PROPOSED UNDERGROUND COLLECTION



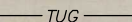
PROPOSED DISTURBANCE LIMITS



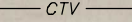
PROPOSED EROSION/SEDIMENT CONTROL




EXISTING OVERHEAD POWER



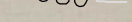
EXISTING OIL/GAS PIPELINE




EXISTING TELEPHONE LINE



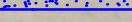
EXISTING CABLE LINE



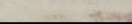
EXISTING RIGHT OF WAY




EXISTING 10' CONTOURS




EXISTING 2' CONTOURS




DELINEATED WETLAND




EXISTING ROAD



OUT OF PROJECT BOUNDARY



FEMA FLOODPLAIN BOUNDARY



PROPOSED CULVERT

POTENTIAL CRANE MAT LOCATIONS

NOTE: PLANS DO NOT DETAIL VARIOUS COUNTY/TOWNSHIP ROAD SECTION UPGRADES OR WIDENING REQUIRED FOR CONSTRUCTION DELIVERIES PER THE ROAD MAINTENANCE AGREEMENT BETWEEN PROJECT OWNER AND PAULDING COUNTY.

Designed:	KLK
Checked:	SJB
Drawn:	KLK

As-Built Drawing:

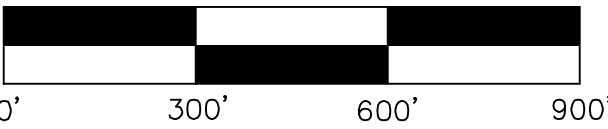
Revisions	DATE	DESCRIPTION
A	09/01/17	60% plans
B	09/07/17	90% plans
C	09/11/17	90% plans
D	09/22/17	100% plans

Prepared for:



3900 E. White Ave
Clinton, IN 47842

Trishe Wind Ohio, LLC
c/o Starwood Energy Group, LLC
5 Greenwich Office Park, 2nd Floor
Greenwich, CT 06831



Northwest
Ohio Wind
Project
Paulding, Ohio

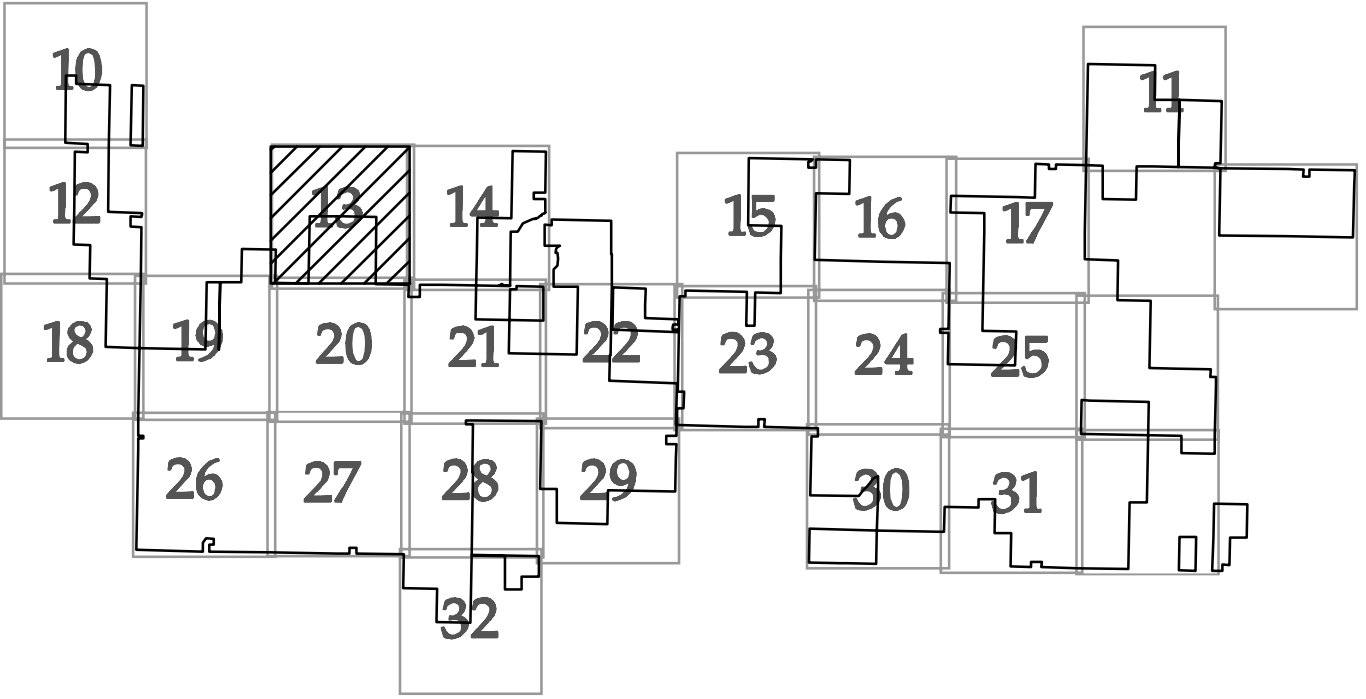
Civil Site Plan T13 T14

100% Completion
Issued For Review

Array Updated: 09/18/2017

Date: 09/22/2017

Sheet: 13 OF 35



KEY MAP

A

B

C

D

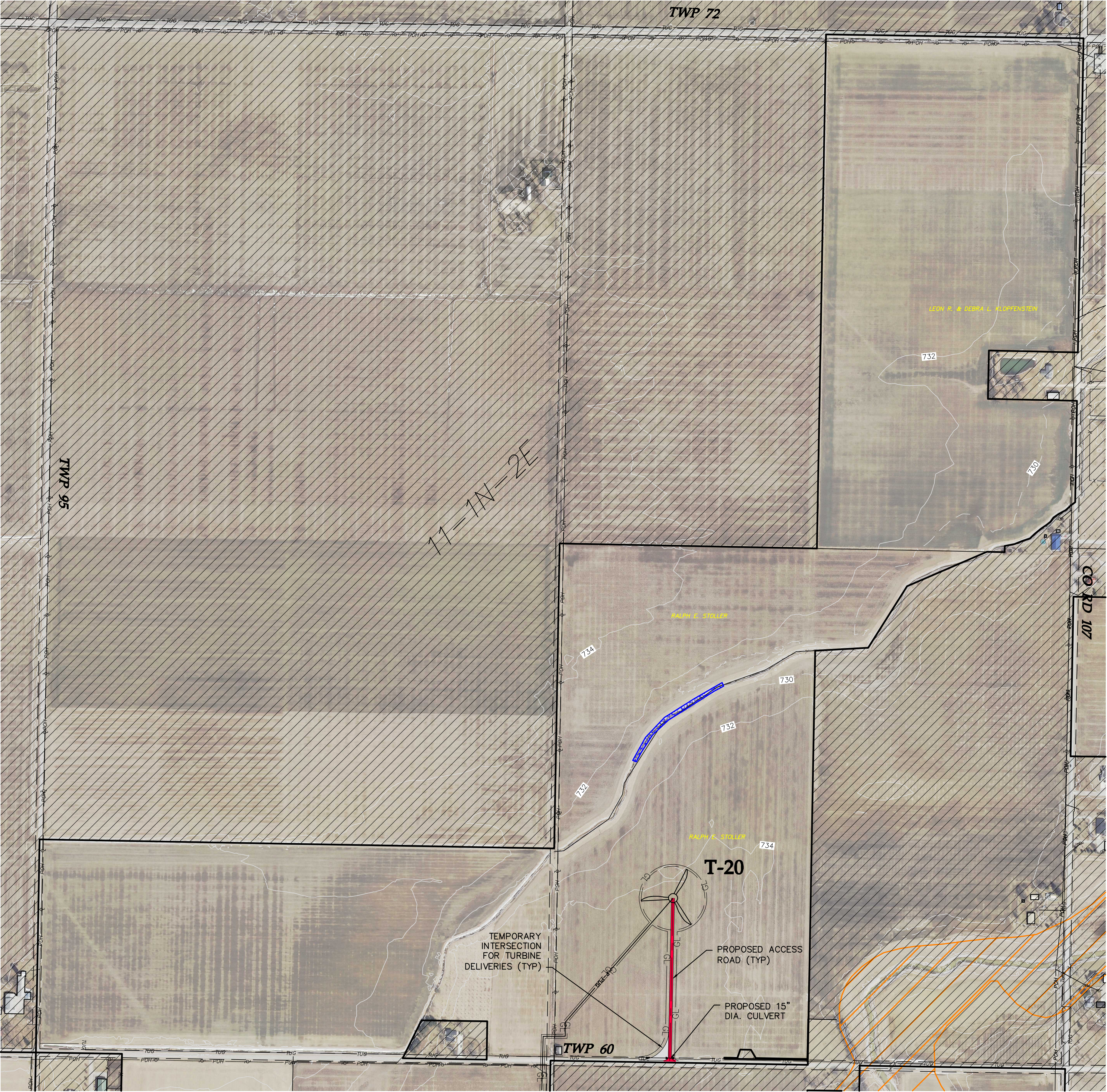
E

F

G

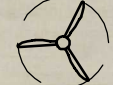
H

SEE SHEET 13




SEE SHEET 21

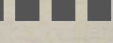
LEGEND:


T-XX

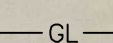
TURBINE LOCATION




PROPOSED ACCESS ROAD



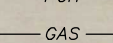
PROPOSED CRANE PATH



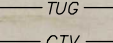
PROPOSED UNDERGROUND COLLECTION



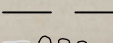
PROPOSED DISTURBANCE LIMITS




PROPOSED EROSION/SEDIMENT CONTROL



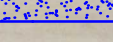
EXISTING OVERHEAD POWER



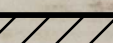
EXISTING OIL/GAS PIPELINE




EXISTING TELEPHONE LINE



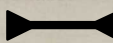
EXISTING CABLE LINE




EXISTING RIGHT OF WAY



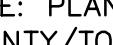
EXISTING 10' CONTOURS




EXISTING 2' CONTOURS




DELINEATED WETLAND




EXISTING ROAD




OUT OF PROJECT BOUNDARY



FEMA FLOODPLAIN BOUNDARY



PROPOSED CULVERT



POTENTIAL CRANE MAT LOCATIONS

NOTE: PLANS DO NOT DETAIL VARIOUS COUNTY/TOWNSHIP ROAD SECTION UPGRADES OR WIDENING REQUIRED FOR CONSTRUCTION DELIVERIES PER THE ROAD MAINTENANCE AGREEMENT BETWEEN PROJECT OWNER AND PAULDING COUNTY.

Westwood

Phone

(952) 937-5150

7699 Anagram Drive

Fax

(952) 937-5822

Eden Prairie, MN 55344

Toll Free

(888) 937-5150

westwoodsps.com

Westwood Professional Services, Inc.

Designed:	KLG
Checked:	SJB
Drawn:	KLG

As-Built Drawing:

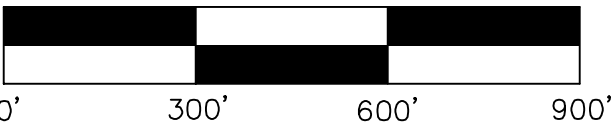
Revisions	DATE	DESCRIPTION
A	09/01/17	60% plans
B	09/07/17	90% plans
C	09/11/17	90% plans
D	09/22/17	100% plans

Prepared for:



3900 E. White Ave
Clinton, IN 47842

Trishe Wind Ohio, LLC
c/o Starwood Energy Group, LLC
5 Greenwich Office Park, 2nd Floor
Greenwich, CT 06831



Northwest
Ohio Wind
Project

Paulding, Ohio

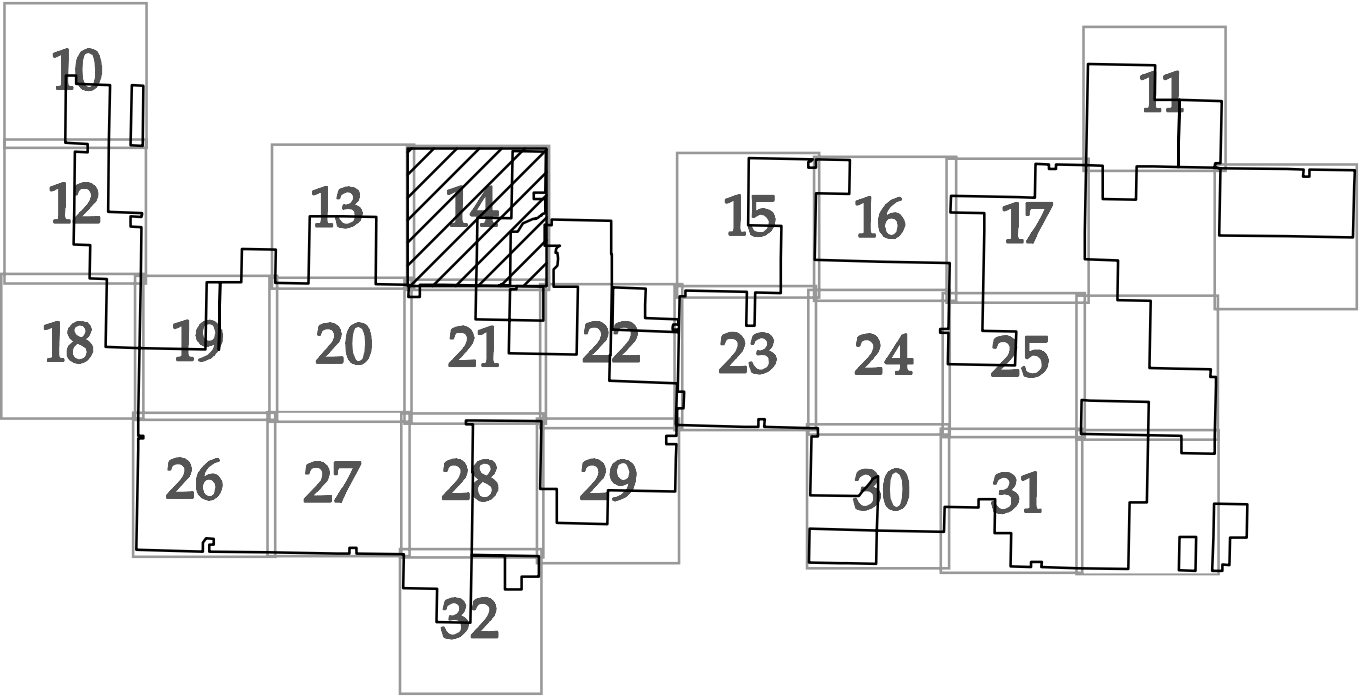
Civil Site Plan T20

100% Completion
Issued For Review

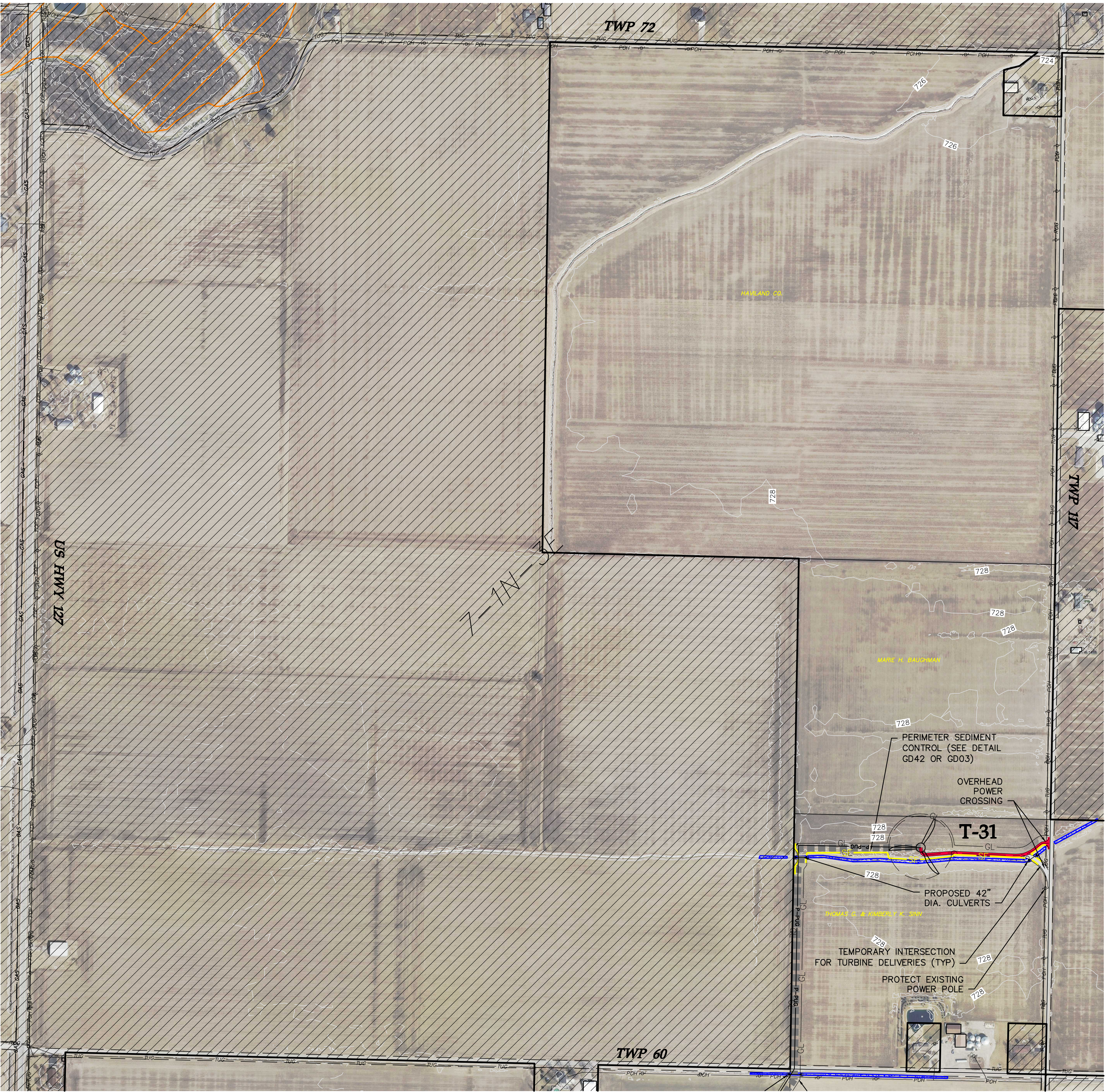
Array Updated: 09/18/2017

Date: 09/22/2017

Sheet: 14 OF 35



KEY MAP



LEGEND:

- TURBINE LOCATION
- TURBINE NUMBER
- PROPOSED ACCESS ROAD
- PROPOSED CRANE PATH
- PROPOSED UNDERGROUND COLLECTION
- PROPOSED DISTURBANCE LIMITS
- PROPOSED EROSION/SEDIMENT CONTROL
- EXISTING OVERHEAD POWER
- EXISTING OIL/GAS PIPELINE
- EXISTING TELEPHONE LINE
- EXISTING CABLE LINE
- EXISTING RIGHT OF WAY
- EXISTING 10' CONTOURS
- EXISTING 2' CONTOURS
- DELINEATED WETLAND
- EXISTING ROAD
- OUT OF PROJECT BOUNDARY
- FEMA FLOODPLAIN BOUNDARY
- PROPOSED CULVERT
- POTENTIAL CRANE MAT LOCATIONS

NOTE: PLANS DO NOT DETAIL VARIOUS COUNTY/TOWNSHIP ROAD SECTION UPGRADES OR WIDENING REQUIRED FOR CONSTRUCTION DELIVERIES PER THE ROAD MAINTENANCE AGREEMENT BETWEEN PROJECT OWNER AND PAULDING COUNTY.

Westwood

Phone (952) 937-5150 7699 Anagram Drive
Fax (952) 937-5822 Eden Prairie, MN 55344
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

Designed: KLG

Checked: SJB

Drawn: KLG

As-Built Drawing:

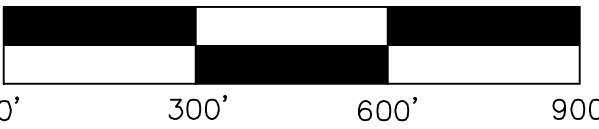
Revisions	DATE	DESCRIPTION
A	09/01/17	60% plans
B	09/07/17	90% plans
C	09/11/17	90% plans
D	09/22/17	100% plans

Prepared for:



3900 E. White Ave
Clinton, IN 47842

Trishe Wind Ohio, LLC
c/o Starwood Energy Group, LLC
5 Greenwich Office Park, 2nd Floor
Greenwich, CT 06831



Northwest
Ohio Wind
Project
Paulding, Ohio

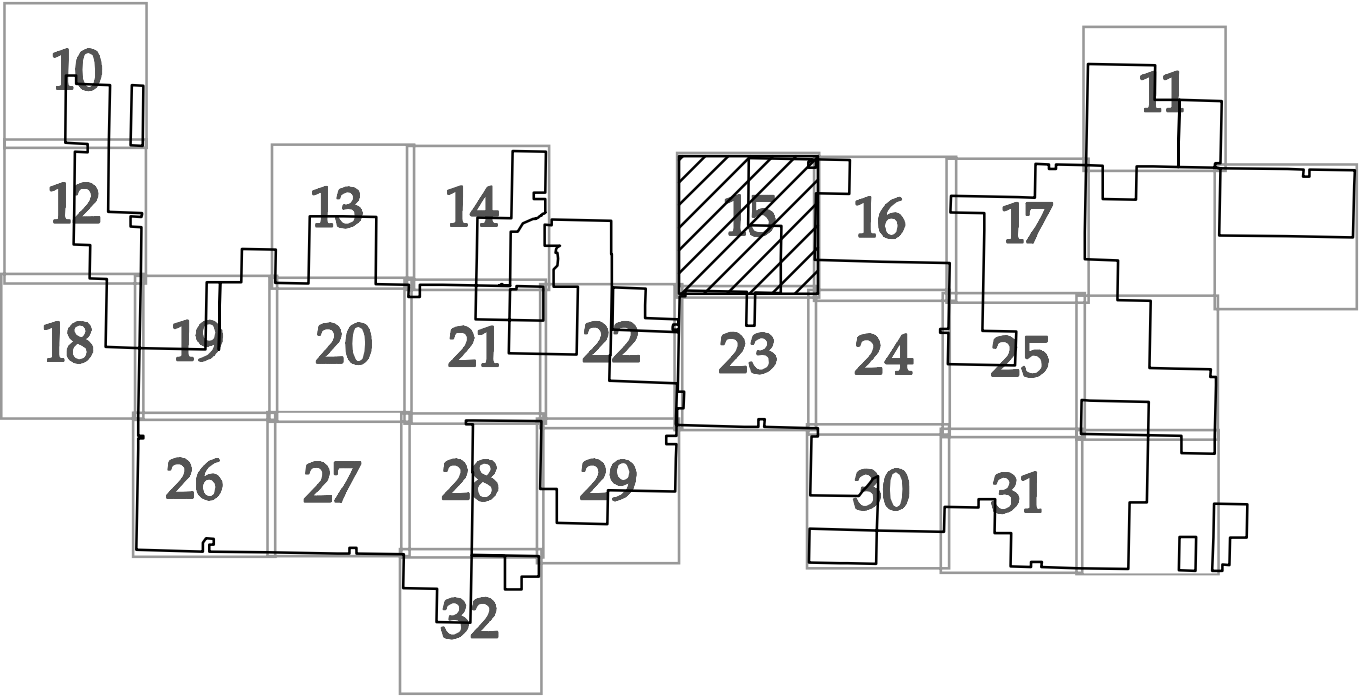
Civil Site Plan T31

100% Completion
Issued For Review

Array Updated: 09/18/2017

Date: 09/22/2017

Sheet: 15 OF 35



KEY MAP

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

9/25/2017 3:25:13 PM

in

Case No(s). 13-0197-EL-BGN, 16-1687-EL-BGA, 17-1099-EL-BGA

Summary: Notification Update to September 1, 2017 Filing Regarding Compliance with Condition 6 – Drawings for Final Design Plan (Part 2 of 5) electronically filed by Mr. William V Vorys on behalf of Trishe Wind Ohio, LLC