

EXISTING AGRICULTURAL DRAIN TILE INVESTIGATION PLAN

WILSON SCHOOL SOLAR

Prepared for: SUNVEST SOLAR, LLC

Section no. 8, Elgin Twp., Kane Co., IL

EXISTING SUBSURFACE AGRICULTURAL DRAIN TILE INVESTIGATION REPORT

WILSON SCHOOL SOLAR
SUNVEST SOLAR, LLC

WILSON SCHOOL SOLAR / SUNVEST SOLAR, LLC, FIELD FILE NO. 4-8-8, DATE: 7/16/25.
IN ACCORDANCE WITH KANE COUNTY STORM WATER ORDINANCE DRAIN TILE INVESTIGATION STANDARDS
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DESCRIPTION CHART NO. 1A:

ID NO.	SZ.	TYPE / QUALITY	FLOW %	SILT %	DEPTH (IN.)	FIELD NOTES:
A1	6"	CLAY / GOOD	SLIGHT	10%	37"	ACTIVE FLOW RATE AND CAPACITY
B1	3"	CLAY / GOOD	SLIGHT	10%	39"	ACTIVE FLOW RATE AND CAPACITY
C	—	NO DRAIN TILES	—	—	—	NO DRAIN TILE LOCATED
D1	3"	CLAY / GOOD	SLIGHT	20%	33"	ACTIVE FLOW RATE AND CAPACITY
D2	3"	CLAY / GOOD	SLIGHT	90%	22"	SILT RESTRICTED / PARTIAL CAPACITY
E	—	NO DRAIN TILES	—	—	—	NO DRAIN TILE LOCATED
F	—	NO DRAIN TILES	—	—	—	NO DRAIN TILE LOCATED
G	—	NO DRAIN TILES	—	—	—	NO DRAIN TILE LOCATED
H	—	NO DRAIN TILES	—	—	—	NO DRAIN TILE LOCATED
I	3"	CLAY / GOOD	SLIGHT	10%	24"	ACTIVE FLOW RATE AND CAPACITY
I2	4"	CLAY / GOOD	SLIGHT	38%	38"	ACTIVE FLOW RATE AND CAPACITY
J1	3"	CLAY / GOOD	SLIGHT	15%	33"	ACTIVE FLOW RATE AND CAPACITY

INVESTIGATION SLIT TRENCH LOCATIONS

ID NO.	SZ.	TYPE / QUALITY	FLOW %	SILT %	DEPTH (IN.)	FIELD NOTES:
1	6"	CLAY / GOOD	SLIGHT	10%	60"	MAINLINE AT PROPERTY EGRESS
2	3"	CLAY / GOOD	SLIGHT	90%	26"	LATERAL AT PROPERTY EGRESS
3	3"	CLAY / GOOD	SLIGHT	10%	34"	LATERAL AT PROPERTY EGRESS
4	4"	CLAY / GOOD	SLIGHT	CLEAN	28"	MAINLINE AT PROPERTY EGRESS

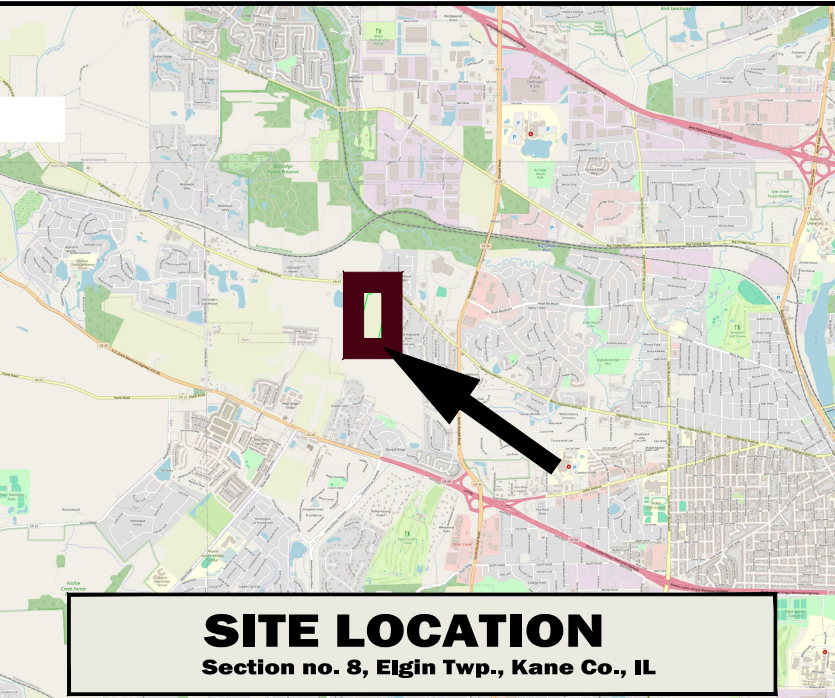


DESCRIPTION CHART NO. 1B:

DATA POINT	SZ.	TYPE / QUALITY	FLOW %	SILT %	DEPTH (IN.)	FIELD NOTES:
1	6"	CLAY / GOOD	SLIGHT	10%	60"	MAINLINE AT PROPERTY EGRESS
2	3"	CLAY / GOOD	SLIGHT	90%	26"	LATERAL AT PROPERTY EGRESS
3	3"	CLAY / GOOD	SLIGHT	10%	34"	LATERAL AT PROPERTY EGRESS
4	4"	CLAY / GOOD	SLIGHT	CLEAN	28"	MAINLINE AT PROPERTY EGRESS

SURVEY DATA POINT LOCATIONS

DATA POINT	SZ.	TYPE / QUALITY	FLOW %	SILT %	DEPTH (IN.)	FIELD NOTES:
1	6"	CLAY / GOOD	SLIGHT	10%	60"	MAINLINE AT PROPERTY EGRESS
2	3"	CLAY / GOOD	SLIGHT	90%	26"	LATERAL AT PROPERTY EGRESS
3	3"	CLAY / GOOD	SLIGHT	10%	34"	LATERAL AT PROPERTY EGRESS
4	4"	CLAY / GOOD	SLIGHT	CLEAN	28"	MAINLINE AT PROPERTY EGRESS



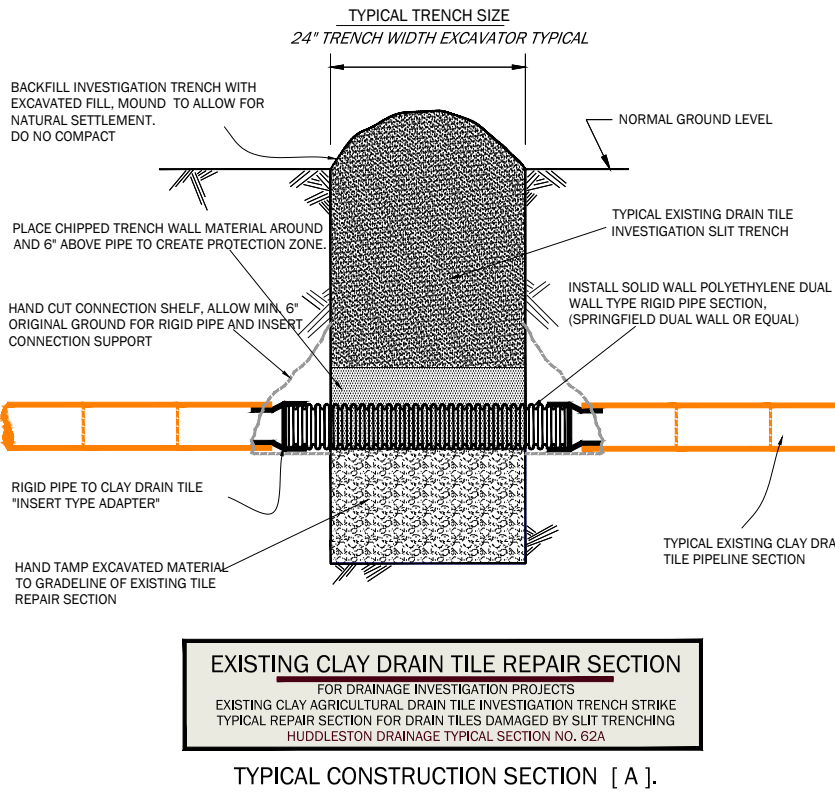
SITE LOCATION
Section no. 8, Elgin Twp., Kane Co., IL

MAP LEGEND:	EXIST. DRAIN TILE COVER MEASUREMENT, TOP OF TILE TO SURFACE
EX. POLYETHYLENE MAINLINE OR SYSTEM PART	EX. CONCRETE DRAIN TILE MAINLINE OR SYSTEM PART
EXISTING DRAIN TILE CONTINUES TO UPLAND WATERSHED	EXISTING DRAIN TILE OUTLETS TO SURFACE
EXIST. DRAIN TILE (1) INSPECTION STRUCTURE / (2) CATCH BASIN	EXIST. DRAIN TILE (1) LOCATED END / (2) ASSUMED END
EXISTING DRAIN TILE CONTINUES TO OFF-SITE OUTLET SYSTEM	EXISTING DRAIN TILE FAILURE; FLOW SURCHARGE TO SURFACE
EXISTING DRAIN TILE MAPPED BY SPECULATION AND ASSUMPTION	EXISTING DRAIN TILE ABANDONED (NOT FUNCTIONAL)
EXISTING DRAIN TILE "BLOWOUT" OR FAILURE	HAND PROBE OR ELECTRONIC SCAN FOR DRAIN TILE LOCATION
INVESTIGATION SLIT TRENCH FOR INVESTIGATION	SPECIFIC PIT EXCAVATION FOR INVESTIGATION
SURVEY DATA POINTS	REPORT IDENTIFICATION NUMBER

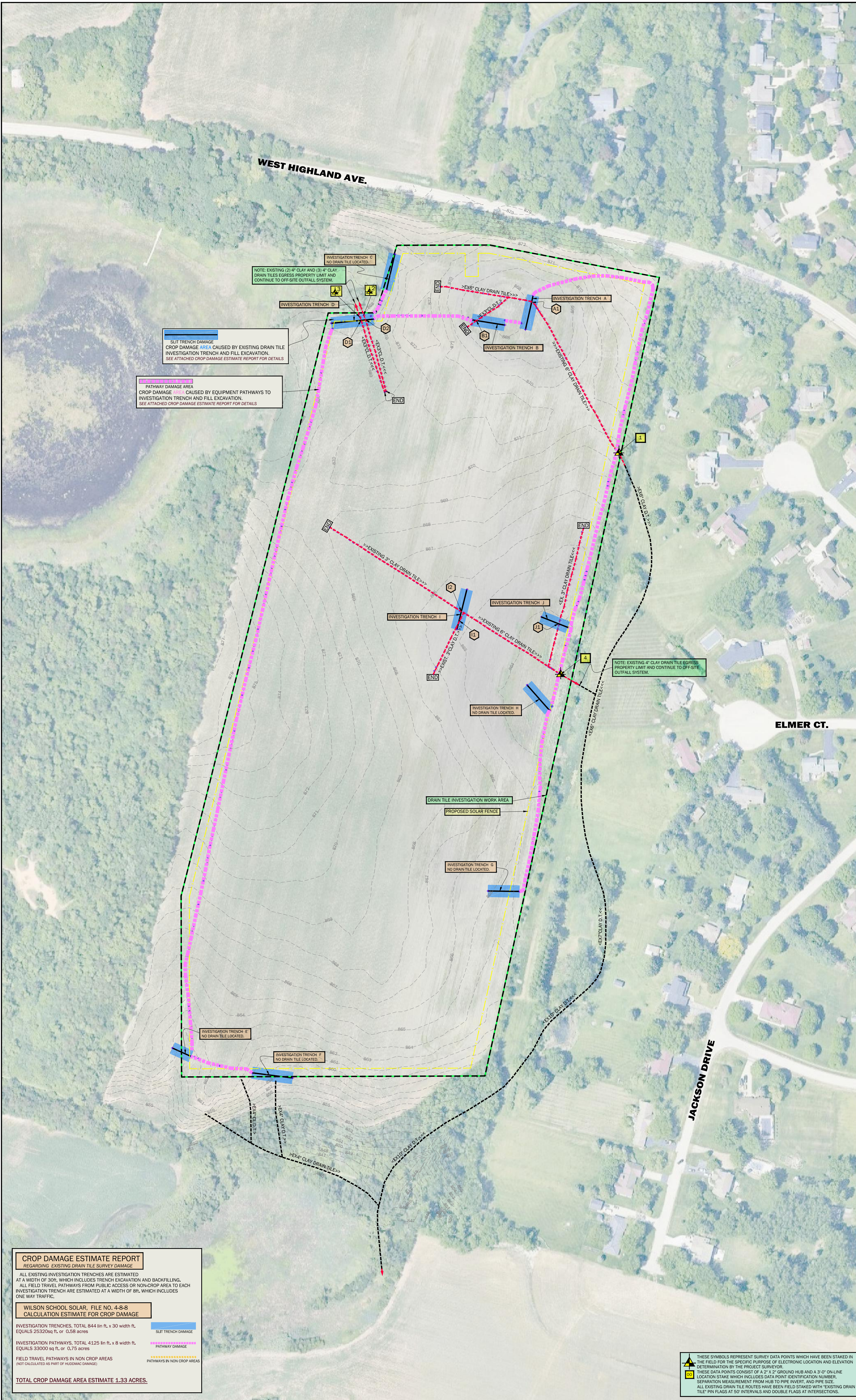
REPORT LEGEND:	POINT OF EXCAVATION FOR SPECIFIC DRAIN TILE INVESTIGATION.
SZ. (SIZE)	DRAIN TILE INTERNAL DIAMETER IN INCHES.
MATERIAL / QUALITY	TYPE OF TILE MATERIALS, PIPE QUALITY - GOOD, FAIR & POOR.
FLOW %	PERCENTAGE OF TILE DIAMETER OCCUPIED BY ACTIVE FLOW.
SILT %	RESTRICTED OR BACKED UP FLOW, SURCHARGED CONDITION
DEPTH	PERCENTAGE OF TILE DIAMETER OCCUPIED BY RESTRICTIVE SILT.
(GENERAL NOTES)	TRUNK LINE OR MUTUAL DRAIN, COLLECTOR OF SUB-SYSTEMS.
MAINLINE TILE	SECONDARY TRUNK LINE OR RANDOM SYSTEM COLLECTOR.
SUB-MAIN TILE	FEEDER LINE, SERVICE TILE OR SYSTEM SPUR.
LATERAL TILE	EXISTING SYSTEM PIPE FAILURE OR RESTRICTION.
"BLOWOUT"	MAINLINE, SUB MAIN OR LATERAL PLANNED TERMINATION.
DRAIN TILE ENDS	INVESTIGATION TRENCH, TYPICAL 2'-0" WIDE x 6'-0" DEPTH.
SLIT TRENCH	

SPECIAL NOTES:

- All existing agricultural drain tiles located during this investigation survey have been identified on this plan and field staked at 50' intervals, in some occasions certain existing local drain tile sections may be speculated and considered as an assumed route which shall be delineated on this plan.
- Any existing drain tile not encountered during site trenching or probe transect procedures will remain unknown.
- All existing drain tiles damaged during the investigation process shall be repaired to their original state in accordance with Natural Resource Conservation Service standards for drain tile installation and repair. All existing drain tile not encountered during site trenching procedure will remain unknown.
- (Huddleston McBride (82a) typical standard "A")
- All existing drain tile location dimensions have been mapped to state plane coordinates by GPS survey systems and include sub meter accuracy, all locations pertinent to final design shall be verified by the project surveyor.
- This drain tile investigation report is intended to identify existing drain tile mainline systems only with additional priority on drain tiles which may service the upland property of others or with mutual drainage status.
- This drain tile investigation report shall be filed with Huddleston McBride Drainage Co., and will be reproduced and disbursed only by permission of the contract principal.
- Solar Field Development - It is our recommendation that all existing drain tile systems within the proposed solar field development should be replaced by "like kind" construction which will assure the location and replacement of unknown drain tile systems that were not located by this Existing Drain Tile Investigation.



EXISTING CLAY DRAIN TILE REPAIR SECTION



CROP DAMAGE ESTIMATE REPORT
REGARDING EXISTING DRAIN TILE SURVEY DAMAGE

ALL EXISTING INVESTIGATION TRENCHES ARE ESTIMATED AT A WIDTH OF 30", WHICH INCLUDES TRENCH EXCAVATION AND BACKFILLING. ALL FIELD TRAVEL PATHWAYS FROM PUBLIC ACCESS OR NON-CROP AREA TO EACH INVESTIGATION TRENCH ARE ESTIMATED AT A WIDTH OF 80", WHICH INCLUDES ONE WAY TRAFFIC.

WILSON SCHOOL SOLAR, FILE NO. 4-8-8
CALCULATION ESTIMATE FOR CROP DAMAGE

INVESTIGATION TRENCHES, TOTAL 844 lin ft. x 30 width ft.
EQUALS 25320 sq. ft. or 0.58 acres

INVESTIGATION PATHWAYS, TOTAL 4125 lin ft. x 8 width ft.
EQUALS 33000 sq. ft. or 0.75 acres

FIELD TRAVEL PATHWAYS IN NON CROP AREAS
(NOT CALCULATED AS PART OF HUCMAC DAMAGE)

TOTAL CROP DAMAGE AREA ESTIMATE 1.33 ACRES.

THESE SYMBOLS REPRESENT SURVEY DATA POINTS WHICH HAVE BEEN STAKED IN THE FIELD FOR THE SPECIFIC PURPOSE OF ELECTRONIC LOCATION AND ELEVATION DETERMINATION BY THE PROJECT SURVEYOR.
THESE DATA POINTS CONSIST OF A 1" x 1" GROUND HUB AND A 3" x 3" ON LINE LOCATION STAKE WHICH INCLUDES DATA POINT IDENTIFICATION NUMBER.
SEPARATION MEASUREMENT FROM HUB TO PIPE INVERT, AND PIPE SIZE.
ALL EXISTING DRAIN TILE ROUTES HAVE BEEN FIELD SWEEED WITH "EXISTING DRAIN TILE" PIN FLAGS AT 50' INTERVALS AND DOUBLE FLAGS AT INTERSECTIONS.

PROJECT CLIENT:
SUNVEST SOLAR, LLC
Bill French, Project Manager
330 W. State Street, Suite 1, Geneva, IL 60134

APPROVED BY AND DATE:
RUDY P. DIXON, P.E. 7/16/25
ACKNOWLEDGMENTS:
HUDDLESTON MCBRIDE DRAINAGE CO.
MAPPING AND ARCHIVE SYSTEMS
OSCAR, BY AND DATE:
TOM HUDDLESTON 7/16/25

PROJECT DATE:
7/16/25
FIELD FILE NO.:
4-8-8
DRAWING NO.:
4-8-8_X1
WEATHER CONDITIONS:
SUNNY/ COOL - 70o
DRAWING SCALE:
1" TO 120'
SHEET NO.:
ONE OF ONE

WILSON SCHOOL SOLAR
HUDDLESTON MCBRIDE
PROFESSIONAL LAND DRAINAGE SERVICES
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