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NOTES

- 1) THIS PROJECT INCLUDES ASBESTOS-CONTAINING MATERIAL ABATEMENT, UNIVERSAL WASTE REMOVAL AND DISPOSAL/RECYCLING, DEMOLITION OF A VACANT RESIDENTIAL BUILDING AND ASSOCIATED OUT BUILDING, WELLS AND SEPTIC TANKS ABANDONMENT, LIMITED LEAD-IMPACTED SOIL AND SURFICIAL DEBRIS REMOVAL, AND SITE RESTORATION OF THE WORK AREAS.
- 2) ABANDONMENT OF A WATER WELL AND CROCK WELL TO BE COMPLETED BY A LICENSED WATER WELL DRILLING CONTRACTOR REGISTERED IN THE STATE OF MICHIGAN.
- 3) DEMOLITION SHALL BE COMPLETED BY A LICENSED RESIDENTIAL BUILDER.
- 4) ABATEMENT WORKERS ARE TO BE ACCREDITED AS ABATEMENT WORKERS AS REQUIRED BY THE EPA MODEL ACCREDITATION PLAN (MAP) ASBESTOS ABATEMENT WORKER TRAINING (40 CFR PART 763, SUBPART E, APPENDIX C) AND THE REQUIREMENTS SET FORTH BY THE LARA.
- 5) ALL WORKERS ARE REQUIRED TO BE CERTIFIED 40 HOUR HAZWOPER TRAINED (29 CFR 1910.120 (E)).
- 6) CONTRACTOR IS TO SUBMIT TO THE CITY OR ITS AUTHORIZED AGENT COPIES OF ALL STATE AND LOCAL LICENSES AND PERMITS NECESSARY TO CARRY OUT THE WORK OF THIS CONTRACT.
- 7) THE CONTRACTOR SHALL COORDINATE WITH THE CITY AND ITS AUTHORIZED AGENT AND LOCAL UTILITY PROVIDER FOR THE SHUT-OFF OF UTILITIES ASSOCIATED WITH THE BUILDINGS AND STRUCTURES TO BE DEMOLISHED.
- 8) THE CONTRACTOR SHALL VERIFY IN WRITING THAT ONSITE ELECTRICAL WIRING, GAS AND/OR WATER ENTERING THE BUILDING STRUCTURES TO BE DEMOLISHED HAVE BEEN PHYSICALLY DISCONNECTED PRIOR TO PROCEEDING WITH DEMOLITION OPERATIONS.
- 9) THE CONTRACTOR SHALL REMOVE, TRANSPORT AND DISPOSE OF A CLASS 8 OR GREATER UTILITY POLE.
- 10) ALL DIMENSIONS ARE IN FEET. BEARINGS BASED ON LEGAL DESCRIPTION AS PROVIDED IN TITLE WORK.
- 11) TOTAL PROPERTY ACREAGE = 23.797 ACRES
- 12) FLOOD ZONE: PARCEL DOES NOT LIE IN AN AREA WITH A DESIGNATED FLOOD ZONE CLASSIFICATION PER FEMA MAP 26163C0195E PER MDEQ.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVALS

APPROVED: _____ DATE: _____
OWNER

APPROVED: _____ DATE: _____
REGISTERED PROFESSIONAL ENGINEER

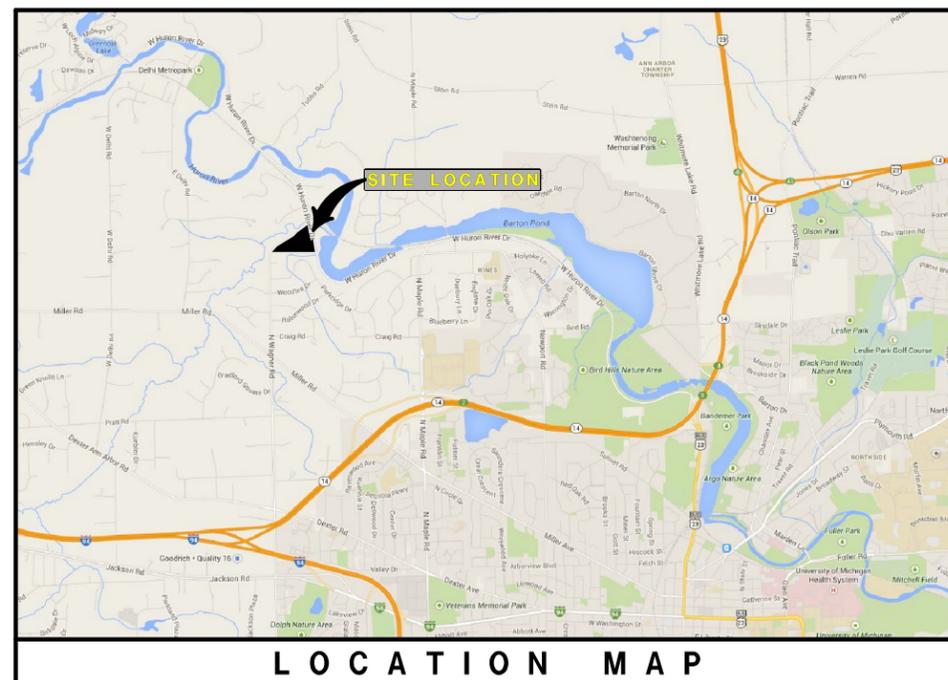
PLANS PREPARED BY:



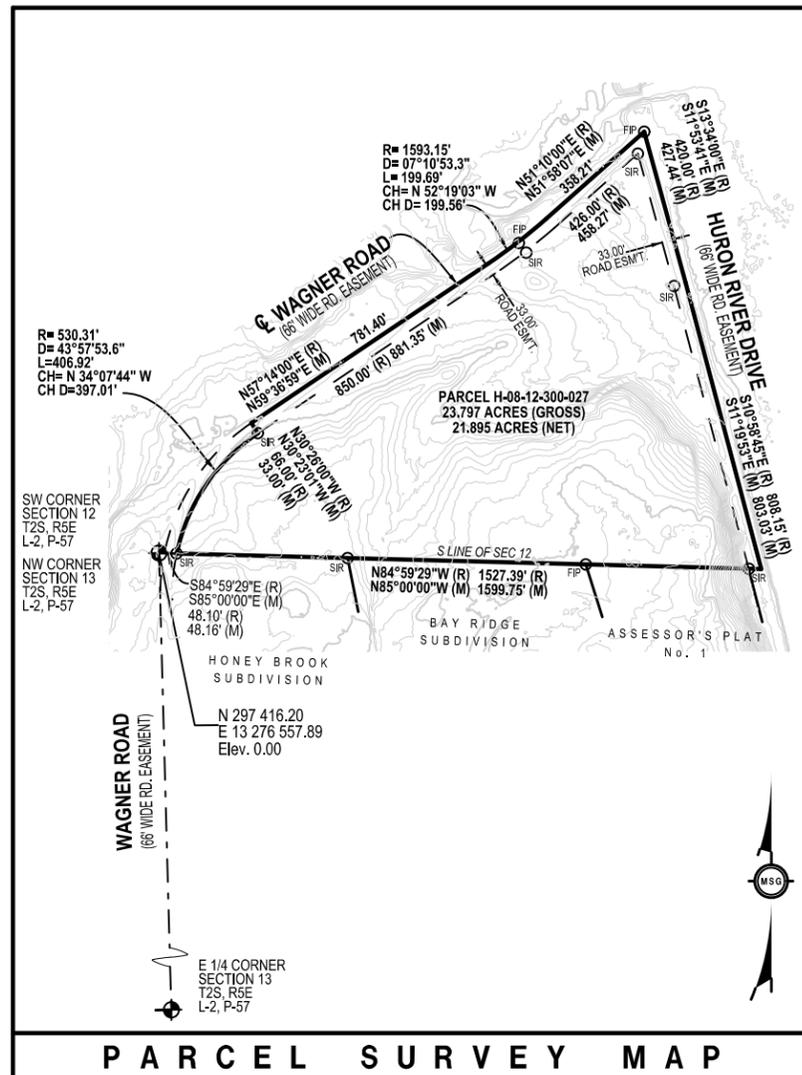
ENGINEER'S SEAL

LIMITED SOIL & SURFICIAL DEBRIS REMOVAL DEMOLITION & RESTORATION PROJECT

AT THE
BROKAW PROPERTY
3013 WEST HURON RIVER DRIVE
TOWNSHIP OF SCIO
WASHTENAW COUNTY, MICHIGAN



NOT TO SCALE



PARCEL SURVEY MAP

NOT TO SCALE

CERTIFICATE OF SURVEY

PART OF THE SW 1/4 OF SECTION 12,
T. 2 S., R. 5 E., SCIO TOWNSHIP, WASHTENAW COUNTY, MICHIGAN

CERTIFIED TO:
CITY OF ANN ARBOR

A PARCEL OF LAND SITUATED IN THE TOWNSHIP OF SCIO, WASHTENAW COUNTY, MICHIGAN, AND IS DESCRIBED AS FOLLOWS:
PART OF THE SOUTHWEST 1/4, SECTION 12, T2S, R5E, SCIO TOWNSHIP, WASHTENAW COUNTY, MICHIGAN.

SAID PARCEL IS MORE PARTICULARLY DESCRIBED AS: COMMENCING AT THE SOUTHWEST CORNER OF SAID SECTION 12; THENCE ALONG THE SOUTH LINE OF SAID SECTION 12 NORTH 84°59'29" EAST (R) SOUTH 85°00'00"E (M), 48.10 FEET (R) 48.16' (M) TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF WAGNER ROAD (66 FEET WIDE) AND THE POINT OF BEGINNING; THENCE 407.00 FEET (R) 406.49 FEET (M) ALONG A NON-TANGENTIAL CURVE TO THE RIGHT, HAVING A RADIUS OF 530.31 FEET (R & M), DELTA 43°57'54" (M), CHORD BEARING NORTH 37°34'51" EAST (R) NORTH 34°07'44" EAST (M), 397.08 FEET (R) 397.01 FEET (M); THENCE NORTH 59°38'38" EAST, 774.99 FEET (RECORDED AS NORTH 57°14'00" EAST 850.00 FEET TO P1); THENCE 199.69 FEET ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 1593.15 FEET, DELTA 07°10'53", CHORD BEARING NORTH 52°19'03" EAST 199.56 FEET; THENCE NORTH 51°58'07" EAST, 358.21 FEET (RECORDED AS NORTH 51°10'00" EAST FROM P1) TO THE INTERSECTION OF WAGNER ROAD AND HURON RIVER DRIVE (66 FEET WIDE); THENCE ALONG THE CENTERLINE OF HURON RIVER DRIVE SOUTH 13°34'00" EAST (R) SOUTH 11°53'41" EAST (M), 420.00 FEET (R) 427.44 FEET (M) AND SOUTH 10°58'45" EAST (R) SOUTH 11°21'34" EAST, 808.15 FEET (R) 803.03 FEET (M); THENCE LEAVING SAID DRIVE CENTERLINE NORTH 84°59'29" WEST (R), 1527.39 FEET (R) 1599.75 FEET (M) TO THE POINT OF BEGINNING. CONTAINING 23.797 ACRES (GROSS) 21.895 ACRES (NET), SUBJECT TO THE RIGHTS OF THE PUBLIC OVER THE SOUTHERLY 33 FEET THEREOF IN WAGNER ROAD AND THE WESTERLY 33 FEET THEREOF IN HURON RIVER DRIVE, AND RESTRICTIONS OR EASEMENTS OF RECORD.

KENNETH S. WILKERSON, P.S.
LICENSED PROFESSIONAL SURVEYOR
MICHIGAN LICENSE NO. 21584
DATE: 09/18/14

DESCRIPTION
DEMOLITION BID

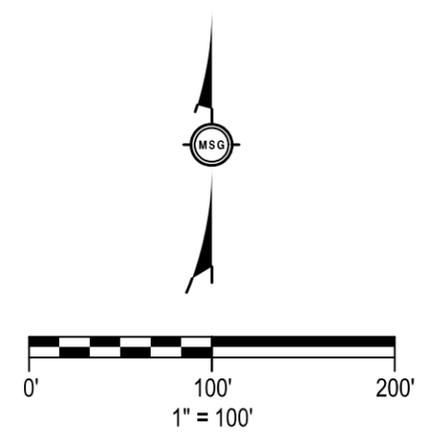
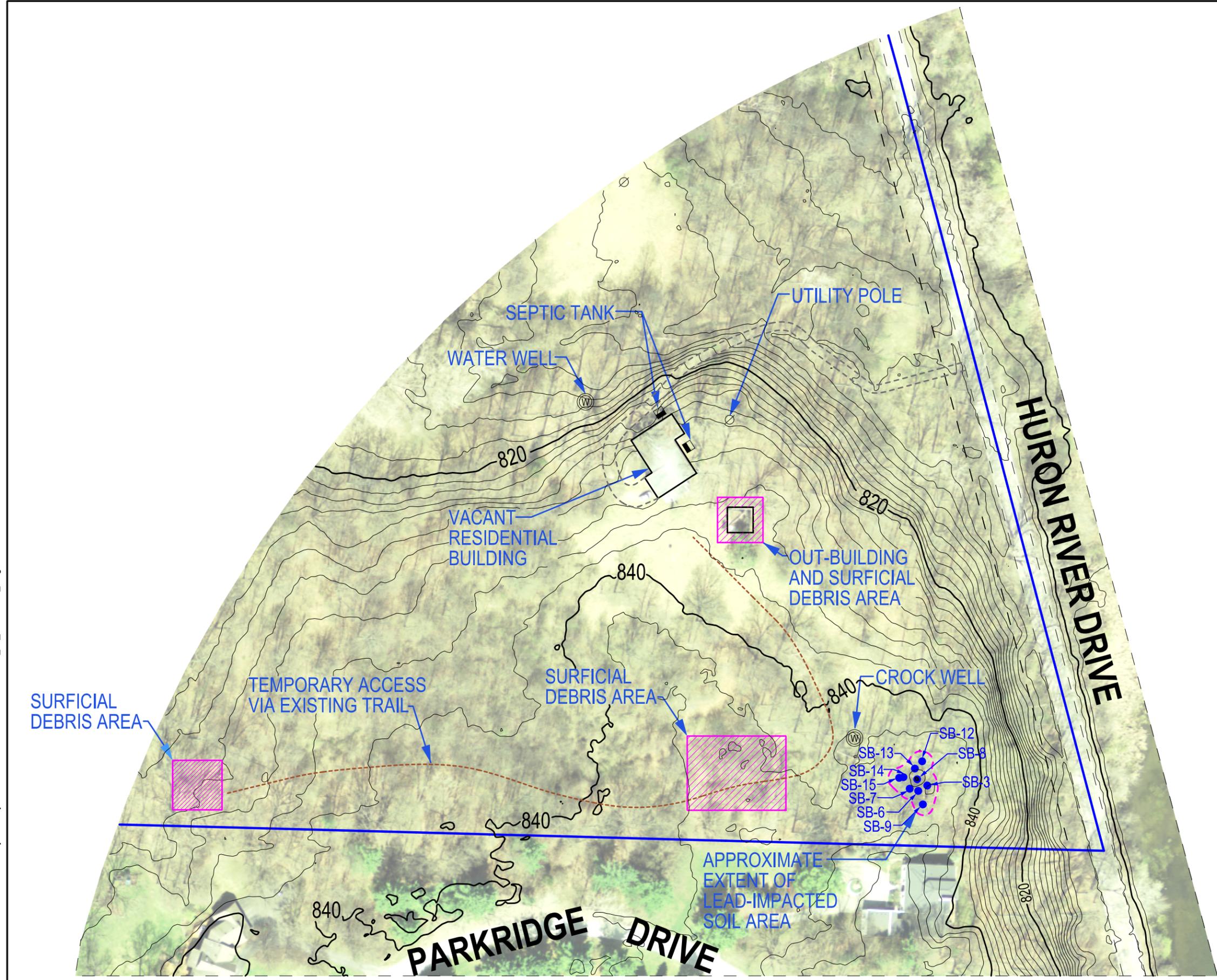


BROKAW PROPERTY

PROJECT
LIMITED SOIL & SURFICIAL
DEBRIS REMOVAL,
DEMOLITION & RESTORATION

TITLE SHEET

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CONTOUR INTERVAL = 2 FEET

LEGEND

-  UTILITY POLE
-  SUMP TANK
-  WELL
-  SURFICIAL DEBRIS AREA
-  APPROXIMATE EXTENT OF LEAD-IMPACTED SOIL AREA
-  PROPERTY LINE
-  GRAVEL DRIVE
-  EXISTING CONTOURS
-  EXISTING TRAIL
-  SOIL BORINGS THAT EXCEED PART 201 GENERIC RESIDENTIAL DIRECT CONTACT CRITERIA FOR LEAD.

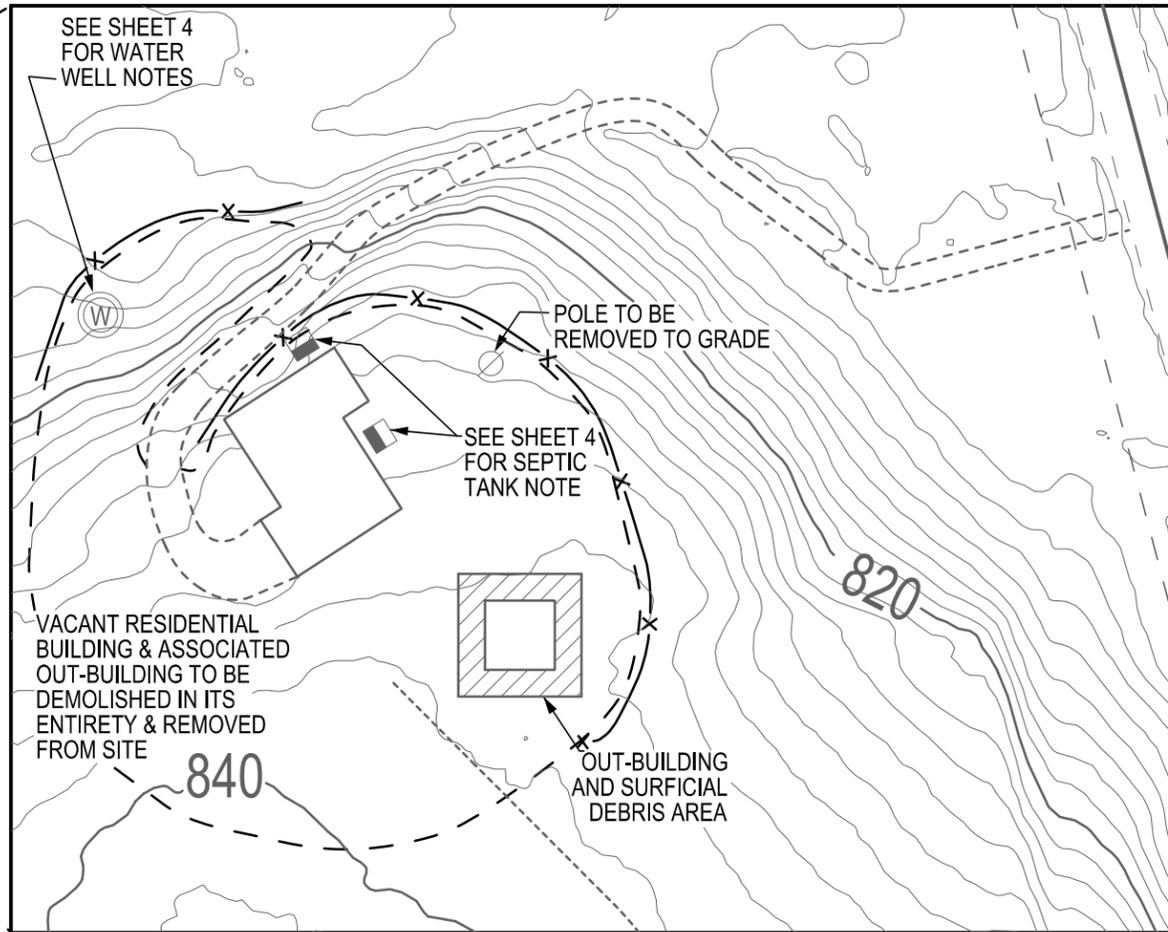
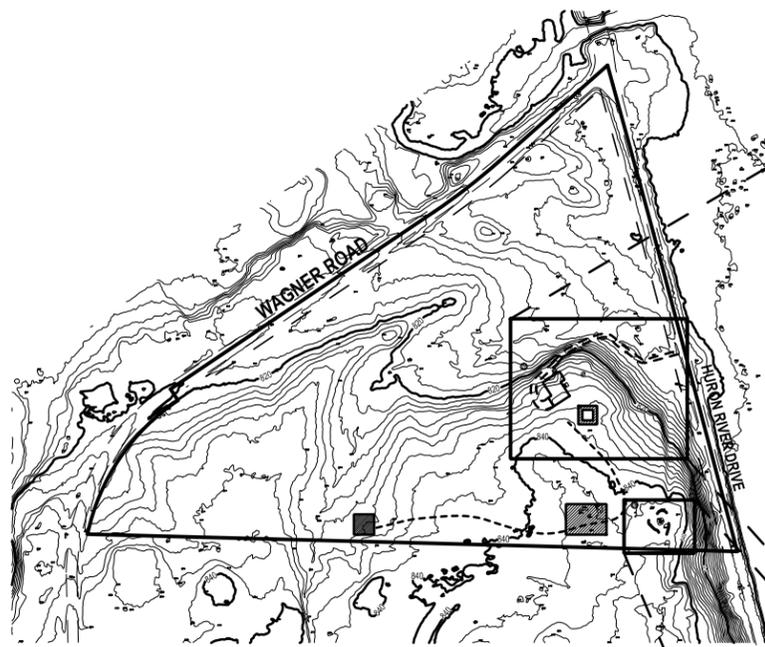
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 TECHNICAL SKILL. CREATIVE SPIRIT.
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SHEET 2

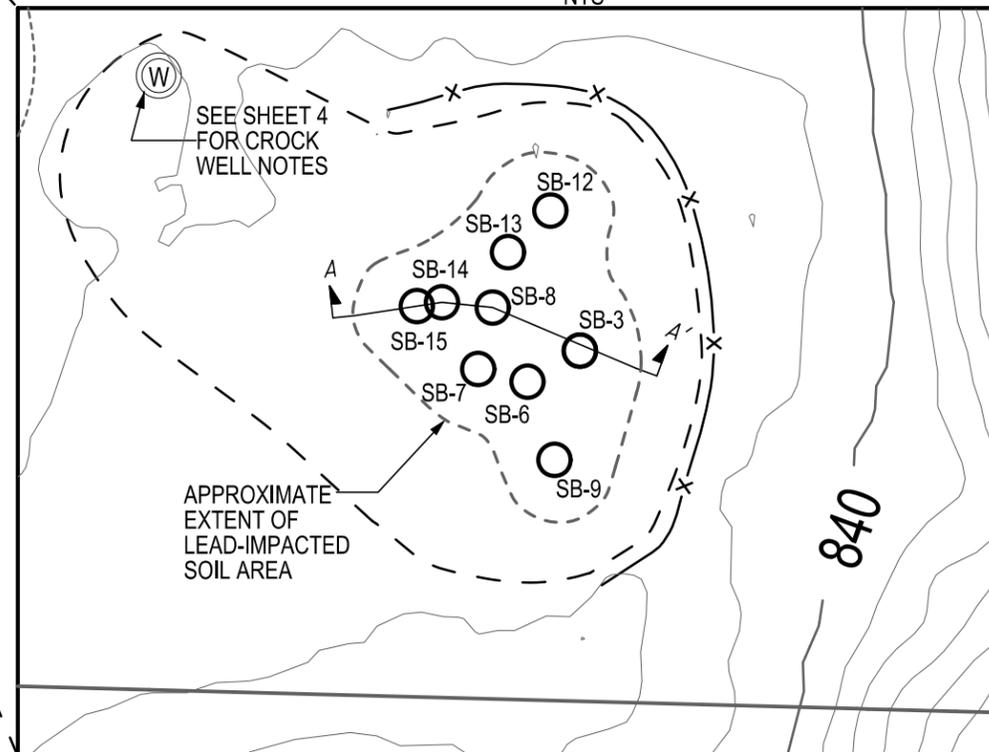
EXISTING CONDITIONS

Brokaw Property
3013 West Huron River Dr.
Washtenaw County, Michigan

DATE 10/7/2014	DRAWN BY CJB	DESIGNED BY REM	PROJECT NO. ANNA0028
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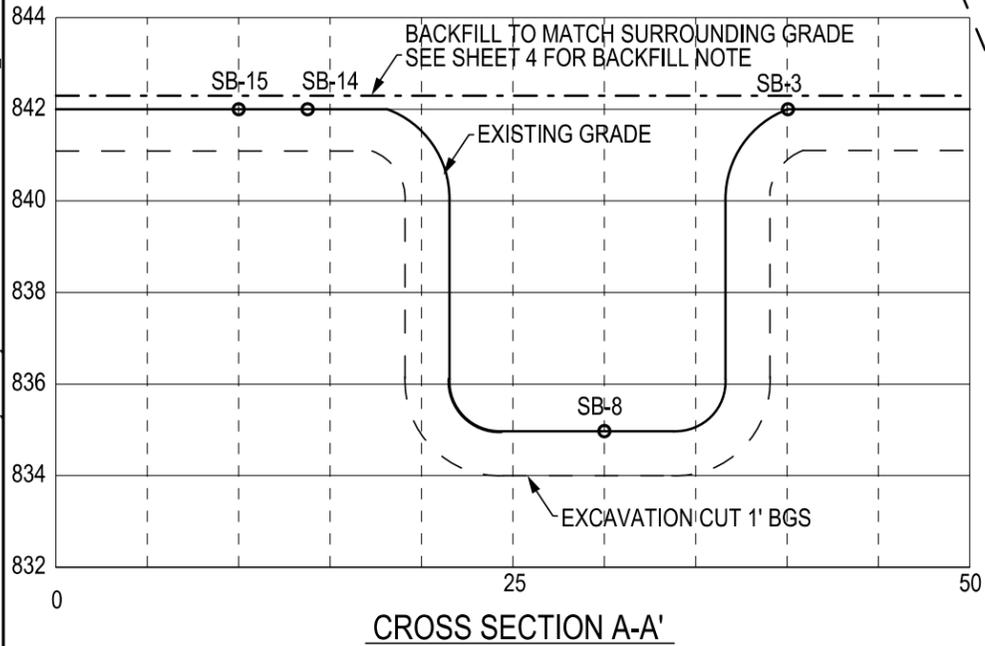
DEMOLITION AND SURFICIAL DEBRIS REMOVAL AREA
NTS



LIMITED LEAD-IMPACTED SOIL AREA
NTS

- MSG
- LEGEND
- UTILITY POLE
 - SUMP TANK
 - WELL
 - SURFICIAL DEBRIS AREA
 - APPROXIMATE EXTENT OF LEAD-IMPACTED SOIL AREA
 - PROPERTY LINE
 - GRAVEL DRIVE
 - PROPOSED SILT FENCE
 - EXISTING PATH
 - APPROXIMATE WORK LIMITS
 - SOIL BRINGS THAT EXCEED PART 201 GENERIC RESIDENTIAL DIRECT SOIL BRINGS THAT EXCEED
 - CROSS SECTION LINE

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SHEET 3
DEMOLITION PLAN

Brokaw Property
3013 West Huron River Dr.
Washtenaw County, Michigan

DATE 10/9/2014	DRAWN BY CJB	DESIGNED BY REM	PROJECT NO. ANNA0028
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WATER WELL NOTES

1. THIS WORK SHALL BE COMPLETED BY A LICENSED WATER WELL DRILLING CONTRACTOR REGISTERED IN THE STATE OF MICHIGAN WHO SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES RELATING TO PERFORMANCE OF THE WORK.
2. PRIOR TO PLUGGING THE WATER SUPPLY WELL, THE CONTRACTOR SHALL MAKE APPROPRIATE MEASUREMENTS TO VERIFY WELL DEPTH AND DIAMETER IN ORDER TO CALCULATE THE NECESSARY AMOUNT OF PLUGGING MATERIAL. THE CONTRACTOR SHALL REMOVE THE CONCRETE BLOCK AND SURROUNDING HOUSING AND ALL MATERIALS FROM WITHIN WATER WELL WHICH MAY HINDER ITS PROPER ABANDONMENT. MATERIALS THAT MAY BE ENCOUNTERED ARE AS FOLLOWS: PUMP, DROP-PIPE, PUMP ROD, PACKER, WIRE, CHECK VALVE, AND OTHER DEBRIS OR OBSTRUCTIONS.
3. THE CONTRACTOR SHALL CUT THE WATER WELL SUPPLY CASING ONE (1) FOOT BELOW THE GROUND SURFACE.
4. THE NEAT CEMENT SLURRY SHALL BE PLACED INTO THE WATER WELL BY PUMPING DOWN A TREMIE PIPE OF AT LEAST ONE-INCH INSIDE DIAMETER WHICH HAS BEEN PLACED TO THE BOTTOM OF THE WELL TO AVOID SEGREGATION OR DILUTION OF SEALING MATERIALS. THE SLURRY SHALL BE APPLIED IN ONE CONTINUOUS OPERATION UNTIL THE ABANDONED WATER WELL IS FILLED. THE TREMIE PIPE SHALL BE SUBMERGED IN THE NEAT CEMENT SLURRY AT ALL TIMES DURING PLACEMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE AMOUNT OF NEAT CEMENT SLURRY REQUIRED TO PLUG THE ABANDONED WATER WELL.

CROCK WELL NOTES

1. PRIOR TO PLUGGING THE CROCK WELL, THE CONTRACTOR SHALL MAKE APPROPRIATE MEASUREMENTS TO VERIFY WELL DEPTH AND DIAMETER IN ORDER TO CALCULATE THE NECESSARY AMOUNT OF BACKFILL MATERIAL. THE CONTRACTOR SHALL REMOVE ALL MATERIALS FROM WITHIN CROCK WELL WHICH MAY HINDER ITS PROPER ABANDONMENT. MATERIALS THAT MAY BE ENCOUNTERED ARE AS FOLLOWS: PUMP, DROP-PIPE, PUMP ROD, PACKER, WIRE, CHECK VALVE, AND OTHER DEBRIS OR OBSTRUCTIONS.
2. THE CONTRACTOR SHALL PLACE A LAYER OF BENTONITE CHIPS OR BENTONITE PELLETS THAT IS NOT LESS THAN SIX (6) INCHES THICK AT THE BOTTOM OF THE WELL. THE REMAINDER OF THE WELL SHALL BE PLUGGED BY PLACING MDOT CLASS II SAND IN LAYERS THAT ARE NOT MORE THAN 10 FEET THICK, WITH A LAYER OF BENTONITE CHIPS OR BENTONITE PELLETS THAT IS NOT LESS THAN SIX (6) INCHES THICK PLACED ON TOP OF EACH CLEAN SOIL BACKFILL LAYER.
3. THE UPPERMOST THREE (3) TO FOUR (4) FOOT SECTION OF STONE OR OTHER CURBING MATERIAL THAT SUPPORTS THE WELL BORE SHALL BE REMOVED. BEFORE BACKFILLING THE WELL UP TO THE GROUND SURFACE, A LAYER OF BENTONITE CHIPS OR BENTONITE PELLETS THAT IS NOT LESS THAN 6 INCHES THICK SHALL BE PLACED.

SEPTIC TANK NOTES

1. DISCONNECT EXISTING SEPTIC SYSTEM FROM THE VACANT RESIDENTIAL BUILDING AND SUBSEQUENT REMOVAL AND DISPOSAL OF THE SEPTIC SYSTEM, INCLUDING TWO (2) TANKS. CLOSURE OF THE SEPTIC SYSTEM WILL INCLUDE REMOVAL OF SYSTEM LIQUIDS AND SLUDGE AND PROPER OFF-SITE DISPOSAL BY A LICENSED LIQUID WASTE HAULER. UPON REMOVAL OF CONTENTS, THE TWO (2) TANKS WILL BE CRUSHED-IN-PLACE, BACKFILLED, AND RESTORED TO MATCH SURROUNDING CONDITIONS.

TREE PROTECTION NOTES

1. TREE PROTECTION METHODS SHALL COMPLY WITH THE FOLLOWING PRACTICES WITHIN THE DRIP LINE OF A TREE'S CRITICAL ROOT ZONE AREA. NO GRADE CHANGES. NO STORAGE OF EQUIPMENT, TOOLS, MATERIALS, SOIL OR DEBRIS OF ANY KIND. AVOID ANY ROOT ZONE SOIL COMPACTION.
2. ALL VEGETATION THAT IS NOT DESIGNATED ON THE PLANS TO BE REMOVED SHALL BE PROTECTED FROM DAMAGE. TREES THAT ARE DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
3. ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOP SOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN TWO DAYS COVER THEM WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION. NO LANDSCAPE TOPSOIL DRESSING GREATER THAN TWO INCHES SHALL BE PERMITTED WITHIN THE DRIP LINE OF TREES.
4. CONTRACTOR SHALL NOT REMOVE OR DAMAGE TREES UNLESS AUTHORIZED BY THE CITY AND/OR ITS PROFESSIONAL.

SOIL EROSION AND SEDIMENTATION CONTROL NOTES

1. GEOTEXTILE SILT FENCE SHALL BE PLACED AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER. REFER TO SILT FENCE DETAIL ON THIS SHEET.
2. PERIODIC INSPECTION AND MAINTENANCE SHALL BE DONE TO INSURE THAT ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES ARE OPERATING PROPERLY AND EFFICIENTLY. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF THE CONTROL ITEMS AND THE PROJECT ENGINEER RESERVES THE AUTHORITY TO ADJUST LOCATIONS AND QUANTITIES AS INDICATED BY FIELD CONDITIONS DURING CONSTRUCTION.
3. SOIL EROSION MEASURES SHALL BE INSTALLED PRIOR TO THE START OF ANY CONSTRUCTION AND SHALL BE MAINTAINED AT ALL TIMES UNTIL CONSTRUCTION IS COMPLETED. THE CONTRACTOR SHALL MAINTAIN ALL SEEDED, MULCHED AREAS UNTIL FINAL INSPECTION. MAINTENANCE SHALL ALSO INCLUDE REPAIRING ANY DAMAGE FOLLOWING THE SEEDING OR MULCHING OPERATIONS. SUCH DAMAGED AREAS SHALL BE REPAIRED TO RE-ESTABLISH THE CONDITION OF THE GRADE OF THE AREA PRIOR TO SEEDING AND SHALL THEN BE RE-SEEDED, RE-MULCHED AS DIRECTED BY THE ENGINEER.
4. FILL STOCKPILES MAY REQUIRE A SILT FENCE INSTALLED ALONG THE TOE OF THE STOCKPILE, BASED UPON PROJECT ENGINEER'S DISCRETION.
5. OTHER EROSION AND SEDIMENT CONTROL ITEMS MAY BE NECESSARY, DUE TO ENVIRONMENTAL CONDITIONS AND MAY BE REQUIRED AT THE DISCRETION OF THE COUNTY SOIL AND WATER CONSERVATION DISTRICT OR ITS REPRESENTATIVES.
6. TEMPORARY EROSION CONTROL FEATURE SHALL BE ACCEPTABLY MAINTAINED AND SHALL SUBSEQUENTLY BE REMOVED OR REPLACED BY THE CONTRACTOR WHEN DIRECTED BY THE ENGINEER. TEMPORARY AND PERMANENT EROSION CONTROL FEATURES SHALL BE CHECKED AFTER EACH MEASURABLE RAINFALL AND RE-ESTABLISHED AS NECESSARY.

BACKFILL

BACKFILL WITH MDOT CLASS II SAND, MECHANICALLY COMPACT, SEED AND MULCH

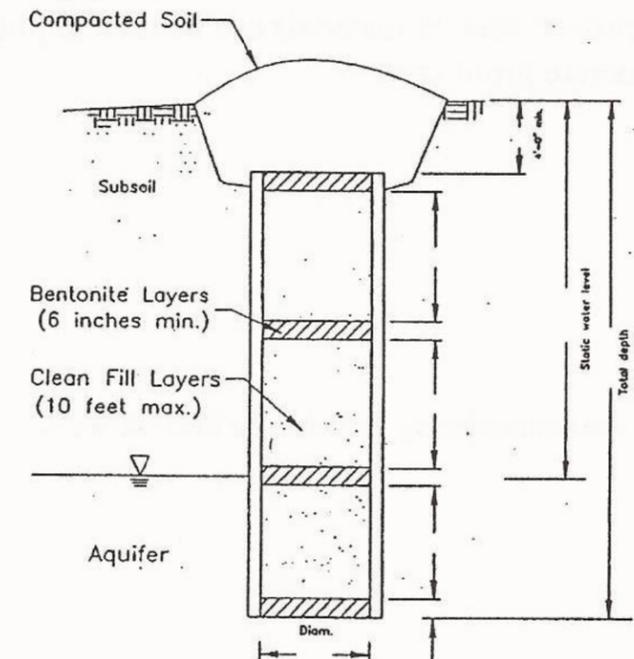
TOPSOIL

MINIMUM OF FOUR (4) INCHES OF APPROVED, CLEAN TOPSOIL OVER THE BACKFILLED AREA TOPSOIL SHALL AT A MINIMUM CONSIST OF THE FOLLOWING:

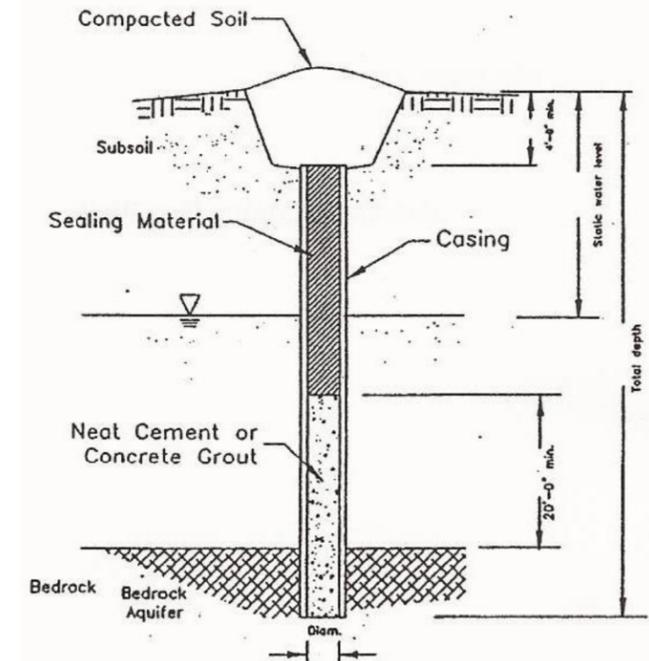
TEXTURE CLASS PERCENT	TOTAL WEIGHT	AVERAGE PERCENT
SAND (0.05-2.0 MM DIA. RANGE) 25	75	50
SILT (0.002-0.05MM DIA. RANGE) 15	40	27.5
CLAY (< 0.002 MM DIA. RANGE) 15 -	30	22.5

SEED MIXTURE

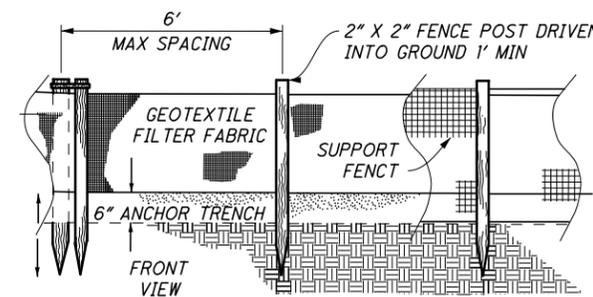
COMMON NAME	SCIENTIFIC NAME	PERCENT MIX	POUNDS PER ACRE	TOTAL POUNDS PER ACRE
TEMPORARY GRASSES				
SEED OATS	AVENA SATIVA	50%	15	30
ANNUAL RYE	LOLIUM MULTIFLORUM			
NATIVE GRASSES				
BIG BLUESTEM GRASS	ANDROPOGON GERARDII	30%	9	
CANADA WILD RYE	ELYMUS CANADENSIS			
BOTTLEBRUSH GRASS	HYSTRIX PATULA			
INDIAN GRASS	SORGHASTRUM NUTANS			
NATIVE WILDFLOWERS				
THIMBLEWEED	ANEMONE CYLINDRICA	20%	6	
BUTTERFLY WEED	ASCLEPIAS TUBEROSA			
NEW ENGLAND ASTER	ASTER NOVAE-ANGLIAE			
COUMBINE	AQUILEGIA CANADENSIS			
WHITE FALSE INDIGO	BAPTISIA LEUCANTHA			
TALL COREOPSIS	COREOPSIS TRIPTERIS			
SHOWY TICK TREFOIL	DESMODIUM CANADENSE			
FLOWERING SPURGE	EUPHORBIA COROLLATA			
WOODLAND SUNFLOWER	HELIANTHUS STRUMOSUS			
WILD LUPIN	LUPINUS PERENNIS			
BERGAMOT (BEE BALM)	MONARDA FISTULOSE			
EVENING PRIMROSE	OENOTHERA BIENNIS			
YELLOW CONEFLOWER	RATIBIDA PINNATA			
BLACK-EYED SUSAN	RUDBECKIA HIRTA			
TALL GOLDENROD	SOLIDAGO ALTISSIMA			
LANCE-LEAVED GOLDENROD	SOLIDAGO GRMINIFOLIA			
STIFF GOLDENROD	SOLIDAGO RIGIDA			
TALL MEADOWRUE	THALICTRUM POLYGAMUM			
CULVER'S ROOT	VERONICASTRUM VIRGINICUM			
IRONWEED	VERNONIA FASCICULATA			
GOLDEN ALEXANDERS	ZIZIA AUREA			



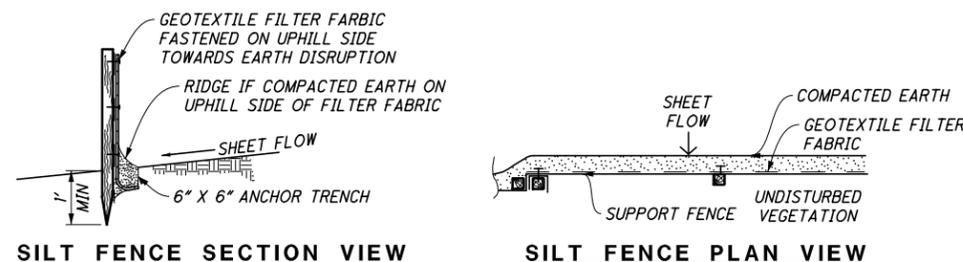
GENERIC CROCK WELL DETAIL



GENERIC WATER WELL DETAIL



SILT FENCE DETAIL



SILT FENCE SECTION VIEW

SILT FENCE PLAN VIEW



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SHEET 4

DETAILS

Brokaw Property
3013 West Huron River Dr.
Washtenaw County, Michigan

DATE	DRAWN BY	DESIGNED BY	PROJECT NO.
10/15/2014	CJB	REM	ANNA0028