

THOMPSON LAKE DAM IMPROVEMENTS

SECTION 25, TOWN 3 NORTH, RANGE 4 EAST,
CITY OF HOWELL, LIVINGSTON COUNTY, MICHIGAN



BRIAN JONCKHEERE
LIVINGSTON COUNTY DRAIN COMMISSIONER

THOMPSON LAKE
A PART OF SECTION 25, CITY OF HOWELL,
T3N, R4E, LIVINGSTON COUNTY, MICHIGAN

Attention: 1" = 1000'

If this scale bar does not measure 1" then drawing is not original scale.

1	11/14/24	BID SET	BJC
---	----------	---------	-----

Designed:

Checked:

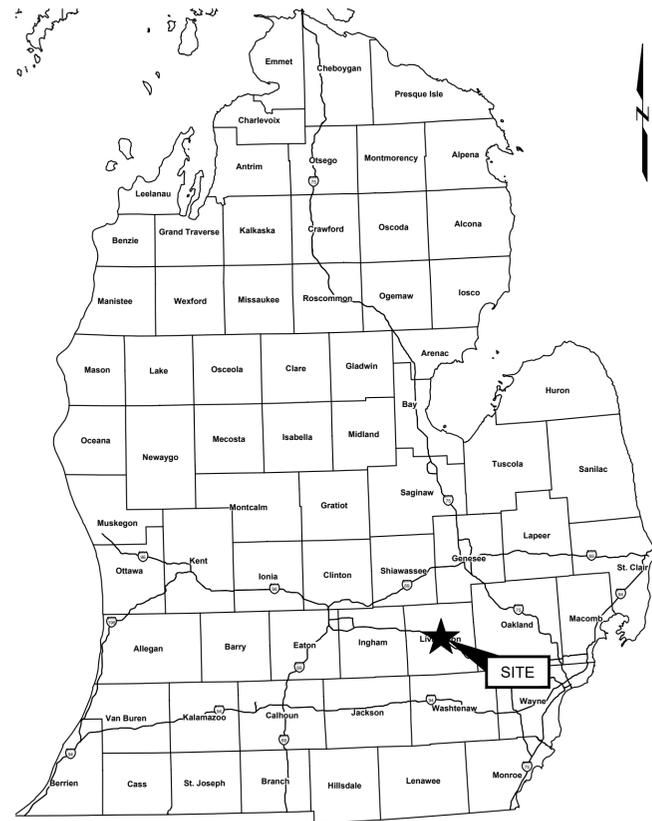
Drawn:

Approved By:

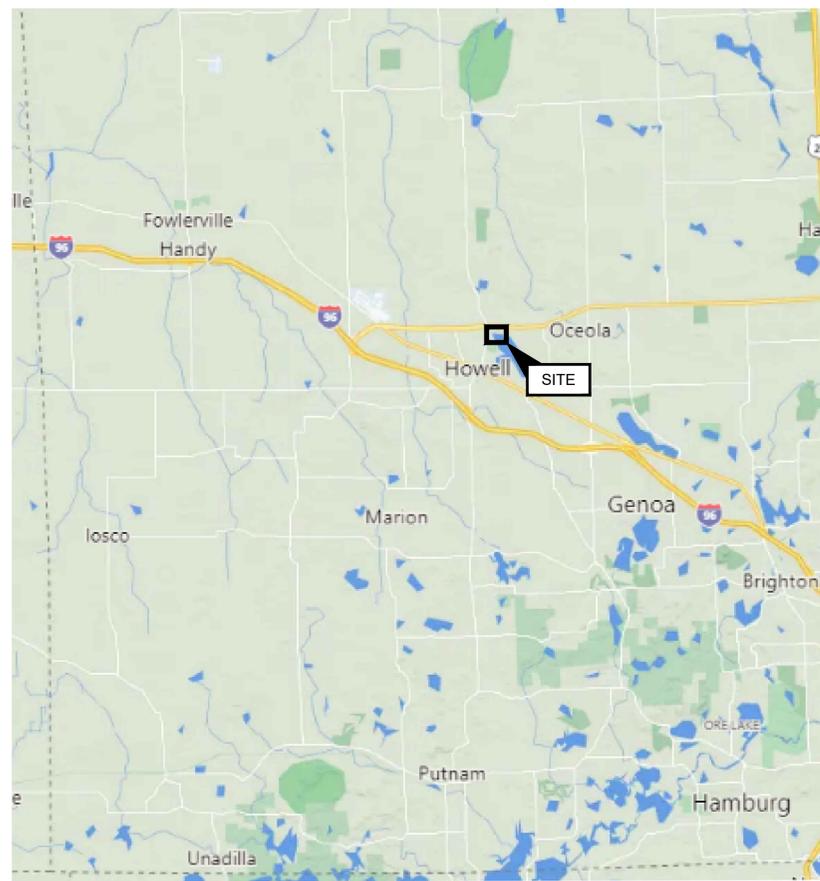
COVER SHEET

GEI Project 2400583

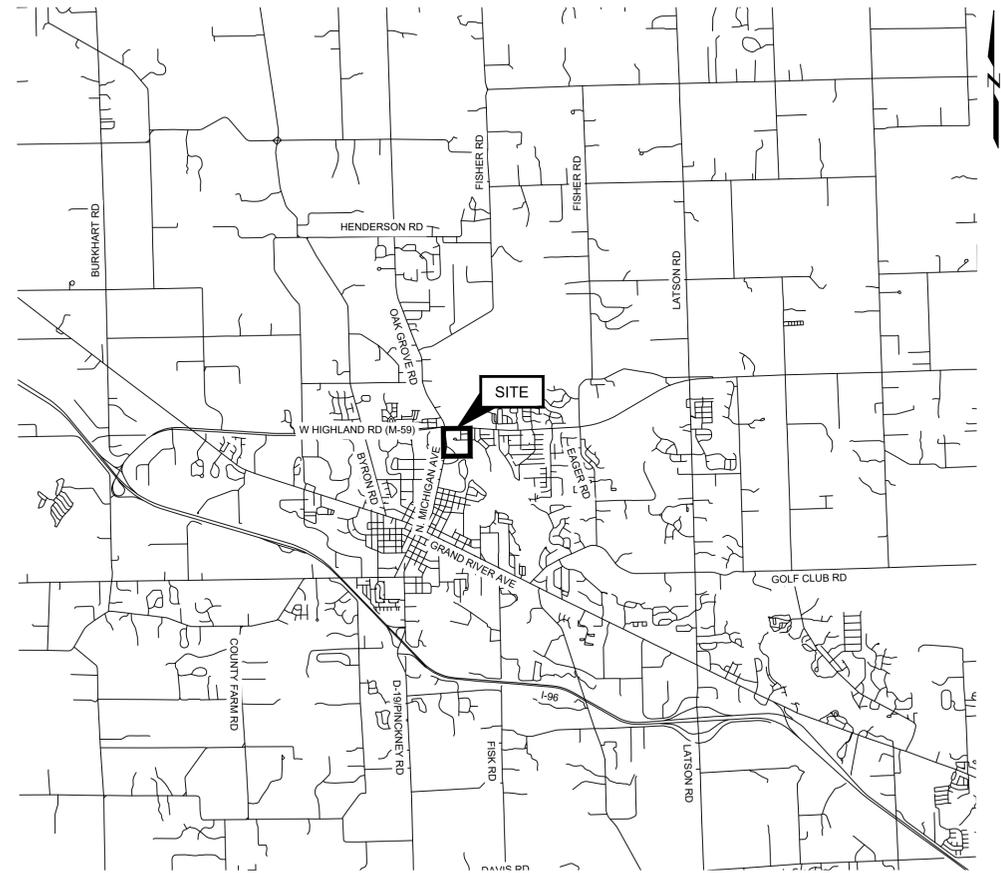
SHEET NO.



STATE MAP
NOT TO SCALE



SOURCE: BING MAPS
COUNTY MAP
NOT TO SCALE



SITE LOCATION MAP
NOT TO SCALE

SHEET SET LIST

Sheet Number	Sheet Title
1	COVER SHEET
2	CULVERT PLAN & PROFILE
3	CULVERT DETAILS
4	THOMPSON LAKE DAM DETAILS
5	SESC PLAN
6	MISCELLANEOUS DETAILS

ENGINEER OF RECORD:

BRIAN J. CENCI, P.E. #53847



11/14/2024
DATE

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, IS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF GEI CONSULTANTS AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF GEI CONSULTANTS.



BRIAN JONCKHEERE
 LIVINGSTON COUNTY DRAIN COMMISSIONER

THOMPSON LAKE
 A PART OF SECTION 25, CITY OF HOWELL,
 T3N, R4E, LIVINGSTON COUNTY, MICHIGAN

CLEARED BANK LIMITS FOR ACCESS TO CULVERT. SLOPE OF BANK IS APPROXIMATELY 3:1 - 2.5:1. SEE ACCESS PLAN SHEET 6. CONTRACTOR IS RESPONSIBLE TO REMOVE AND REPLACE 6' TALL CHAIN LINK FENCE, PER CONTRACTOR'S MEANS AND METHODS.

APPROXIMATE LIMITS OF LARGE RIPRAP (APPROX. SIZE OF RIPRAP, 2' x 2' x 2'), RIPRAP TO BE SALVAGED AND RETURNED TO CHANNEL. RIPRAP TO BE BROUGHT TO SITE IF NOT ENOUGH SALVAGED RIPRAP TO COVER NUMBERS 1 AND 2. (UP TO AN ADDITIONAL 25 SYD OF PLAIN RIPRAP AND 25 SYD HEAVY RIPRAP)
 1. CROSS VANE/J-HOOK
 2. ALONG CHANNEL BANKS AT GABION BASKET REMOVALS
 3. AT CULVERT INLET

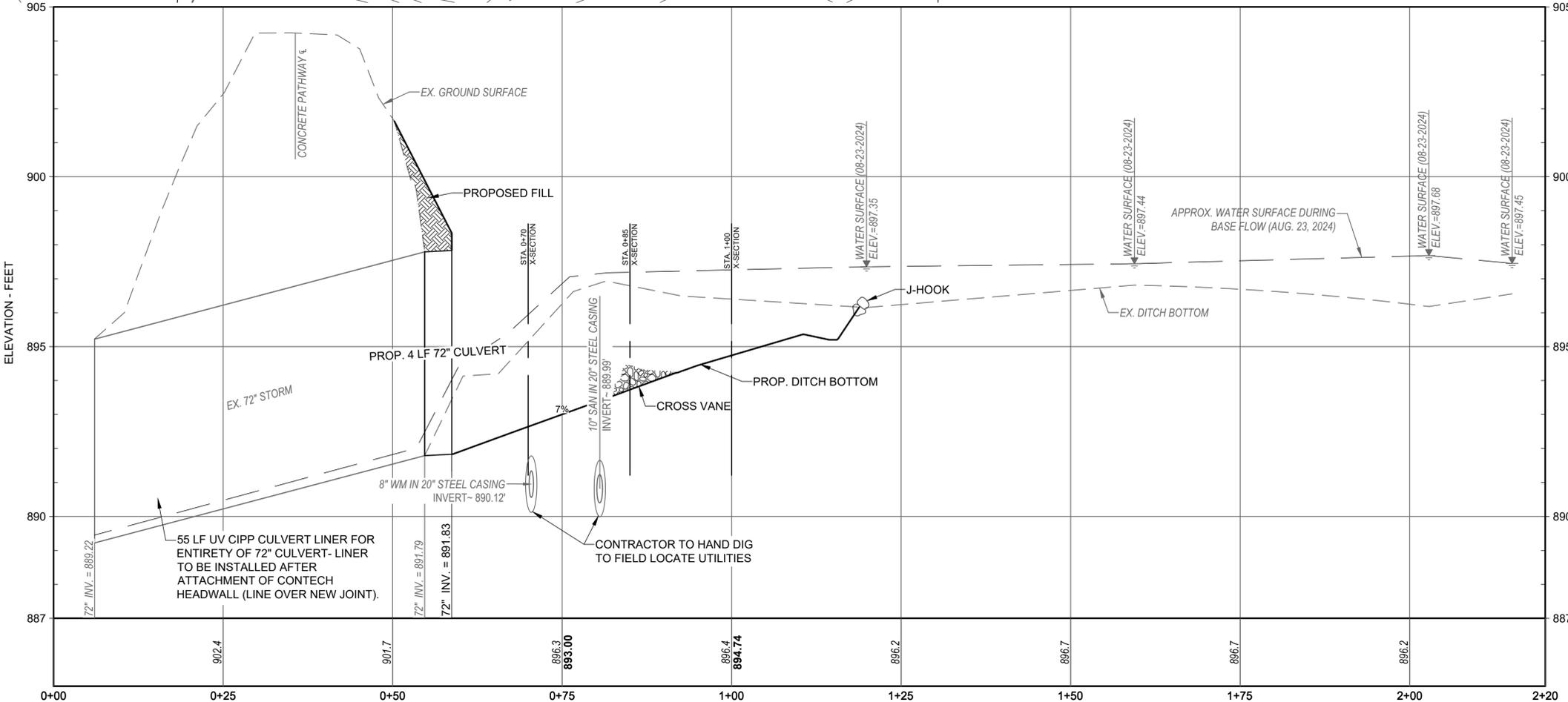
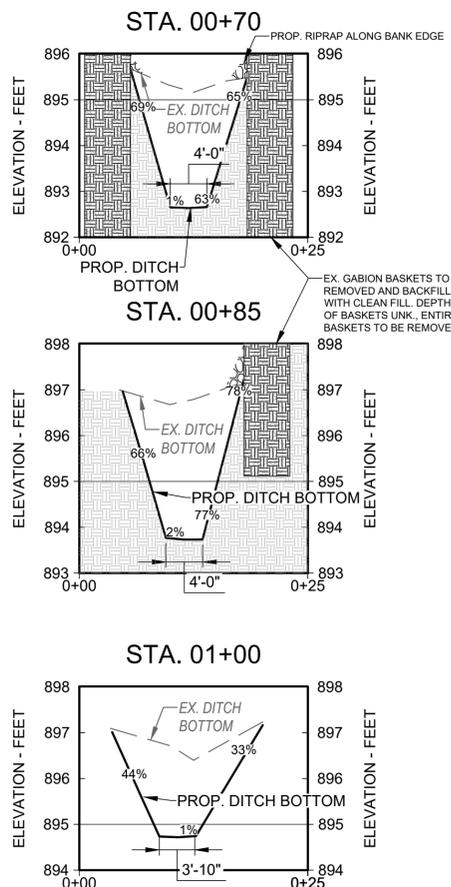
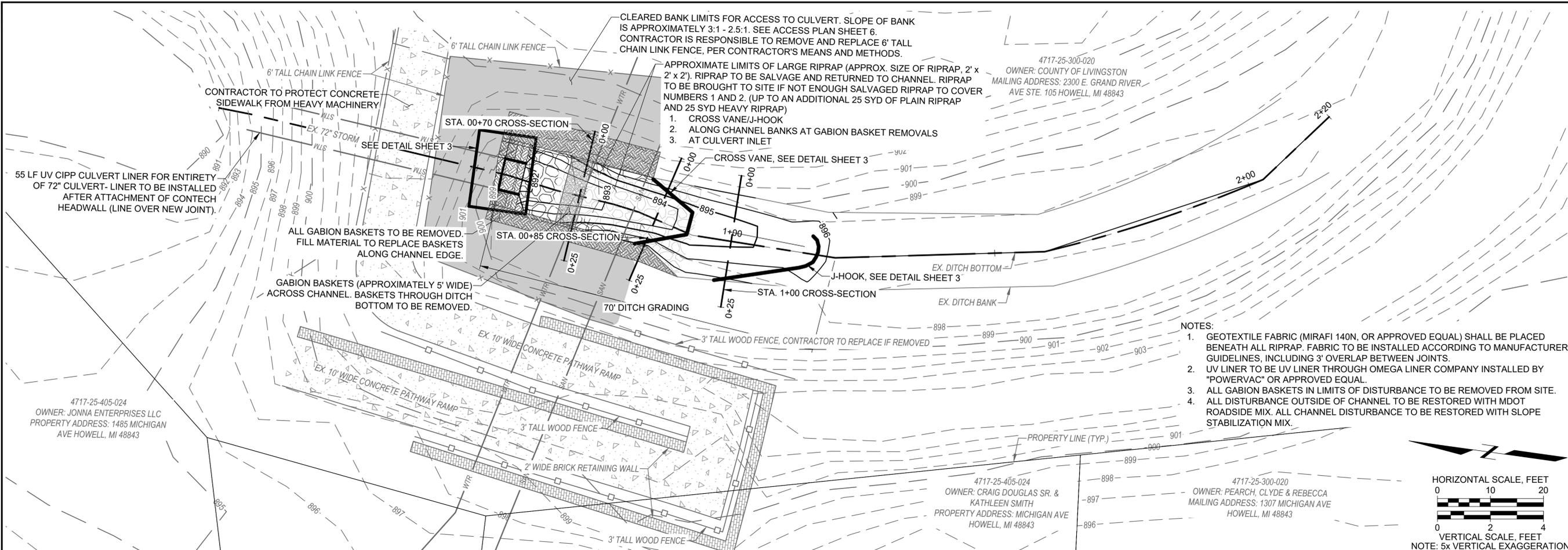
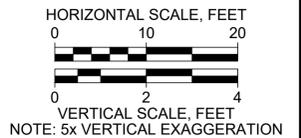
4717-25-300-020
 OWNER: COUNTY OF LIVINGSTON
 MAILING ADDRESS: 2300 E. GRAND RIVER
 AVE STE. 105 HOWELL, MI 48843

4717-25-405-024
 OWNER: JONNA ENTERPRISES LLC
 PROPERTY ADDRESS: 1485 MICHIGAN
 AVE HOWELL, MI 48843

4717-25-405-024
 OWNER: CRAIG DOUGLAS SR. &
 KATHLEEN SMITH
 PROPERTY ADDRESS: MICHIGAN AVE
 HOWELL, MI 48843

NOTES:

1. GEOTEXTILE FABRIC (MIRAFI 140N, OR APPROVED EQUAL) SHALL BE PLACED BENEATH ALL RIPRAP. FABRIC TO BE INSTALLED ACCORDING TO MANUFACTURER GUIDELINES, INCLUDING 3' OVERLAP BETWEEN JOINTS.
2. UV LINER TO BE UV LINER THROUGH OMEGA LINER COMPANY INSTALLED BY "POWERVAC" OR APPROVED EQUAL.
3. ALL GABION BASKETS IN LIMITS OF DISTURBANCE TO BE REMOVED FROM SITE.
4. ALL DISTURBANCE OUTSIDE OF CHANNEL TO BE RESTORED WITH MDOT ROADSIDE MIX. ALL CHANNEL DISTURBANCE TO BE RESTORED WITH SLOPE STABILIZATION MIX.

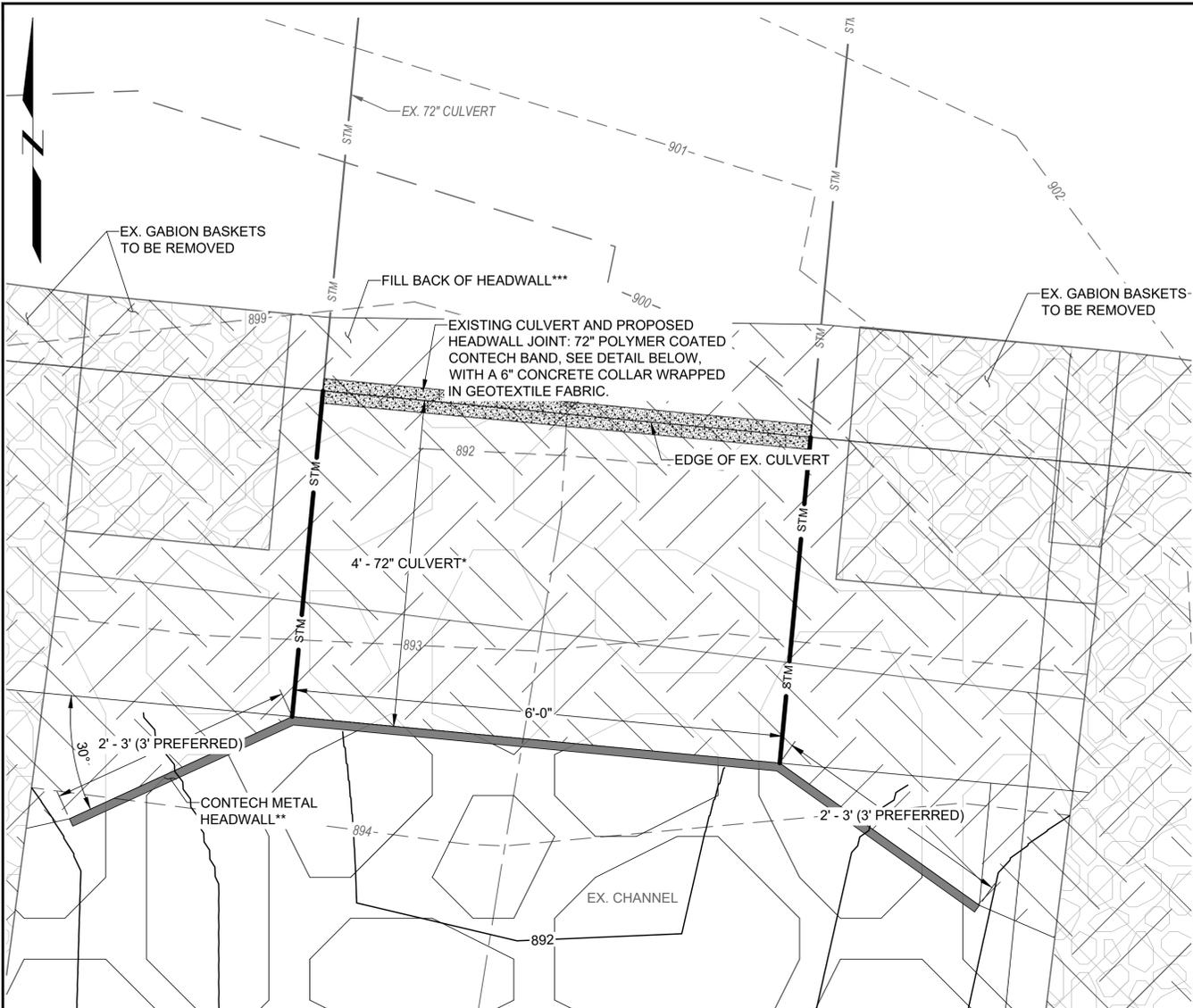


Attention: 1"
 If this scale bar does not measure 1" then drawing is not original scale.

1	11/14/24	BID SET	BJC
Designed:			
Checked:			
Drawn:			
Approved By:			

CULVERT PLAN & PROFILE

GEI Project 2400583
 SHEET NO.
2



PLAN VIEW
SCALE: 1:1

*CULVERT PIECE SHALL BE 12-GAUGE POLYMER COATED PIPE (MATCH EXISTING CORRUGATIONS OR 5 BY 1 CORRUGATIONS)

**HEADWALL AND CULVERT PIECE SHALL BE ONE CONTINUOUS PIECE. CONTACT ANTHONY.NESTOR@CONTECHES.COM (810-217-9156) FOR PROCUREMENT.

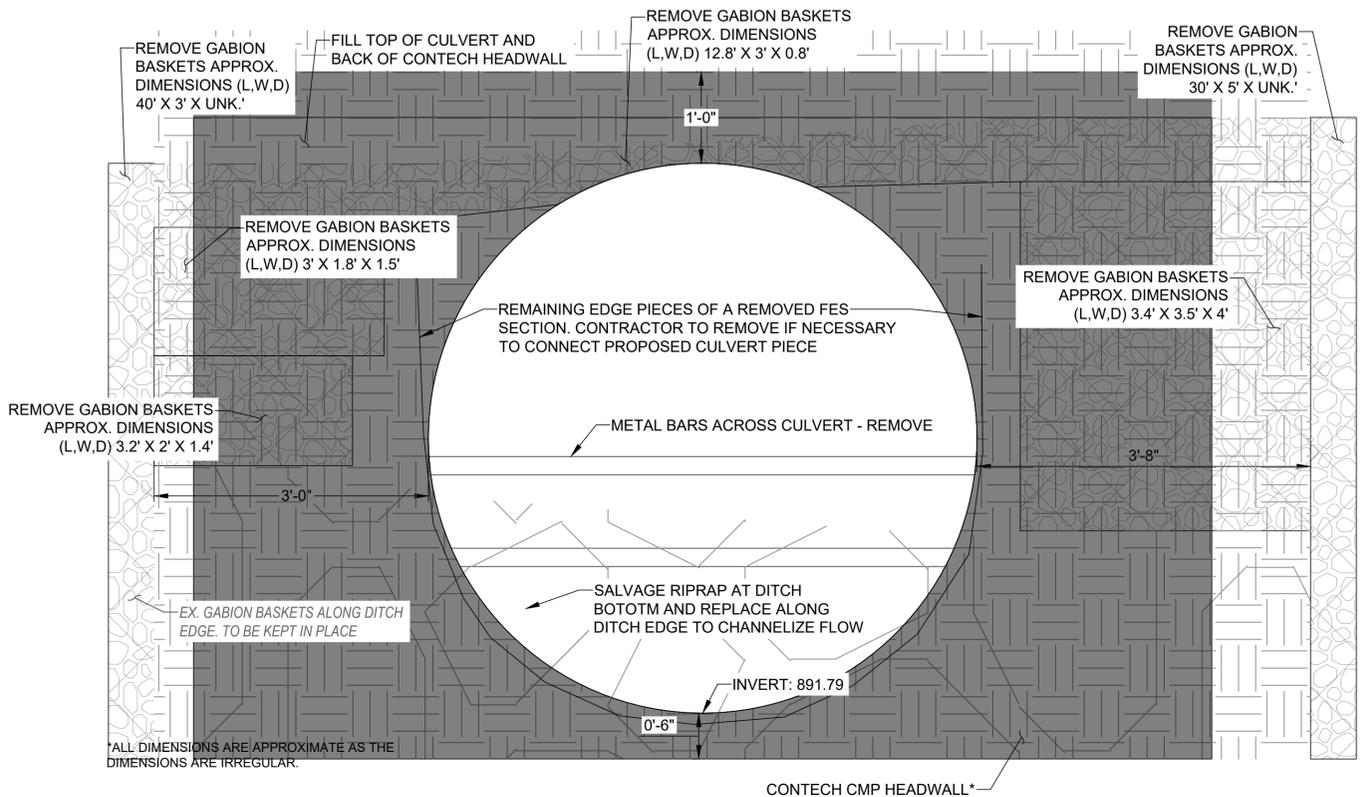
HEADWALL TO BE 7-GAUGE STEEL, DIPPED IN GALVANIZING ZINC AFTER CORRUGATING WITH A POLYMER COATING.

HEADWALL CAN BE DIRECTLY PERPENDICULAR TO CULVERT OR ANGLED WINGWALLS (ANGLED EDGES (WINGWALLS) ARE PREFERRED)

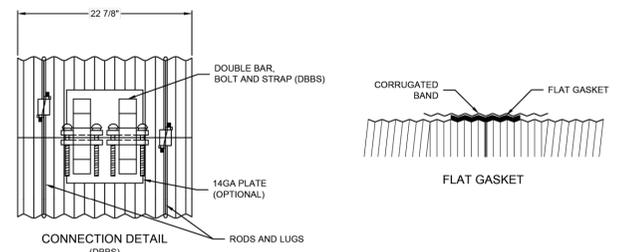
*** ALL FILL TO BE CLEAN, COMPACTED FILL THAT MEETS MDOT SPECIFICATIONS

LEGEND

	FILL
	CONTECH HEADWALL**
	EXISTING RIPRAP TO BE REMOVED AND SALVAGED
	LOCATION OF SALVAGED RIPRAP
	GABION BASKETS TO BE REMOVED
	CONCRETE COLLAR AND METAL COUPLING



SECTION VIEW
SCALE: 1:1

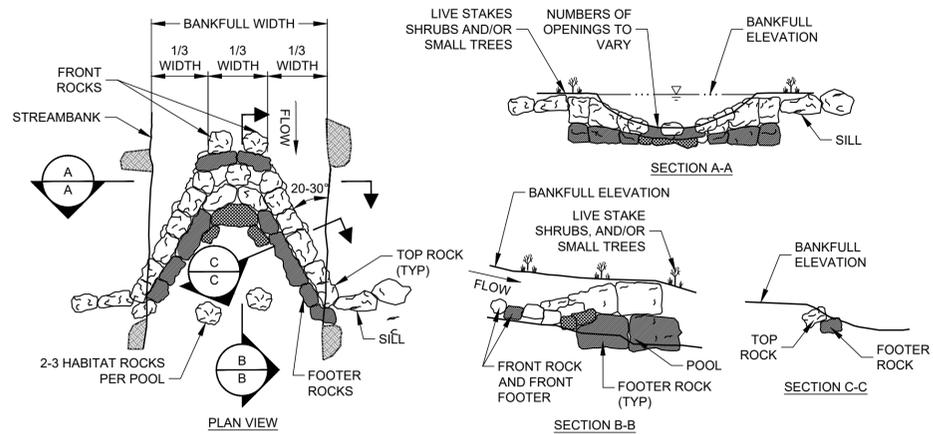


2 2/3"x1/2" RE-ROLLED END HEL-COR PIPE

GENERAL NOTES:

- JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
- BAND MATERIALS AND/OR COATING CAN VARY BY LOCATION. CONTACT YOUR CONTECH REPRESENTATIVE FOR AVAILABILITY.
- BANDS ARE SHAPED TO MATCH THE PIPE ARCH WHEN APPLICABLE.
- BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
 - 12" THRU 48" 1-PIECE
 - 54" THRU 96" 2-PIECES
 - 102" THRU 144" 3-PIECES
- BAND FASTENERS ARE ATTACHED WITH SPOT WELDS, RIVETS OR HAND WELDS.
- ALL CMP IS RE-ROLLED TO HAVE ANNULAR END CORRUGATIONS OF 2 2/3"x1/2"
- DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
- ORDER SHALL DESIGNATE GASKET OPTION, IF REQUIRED (SEE DETAILS ABOVE).

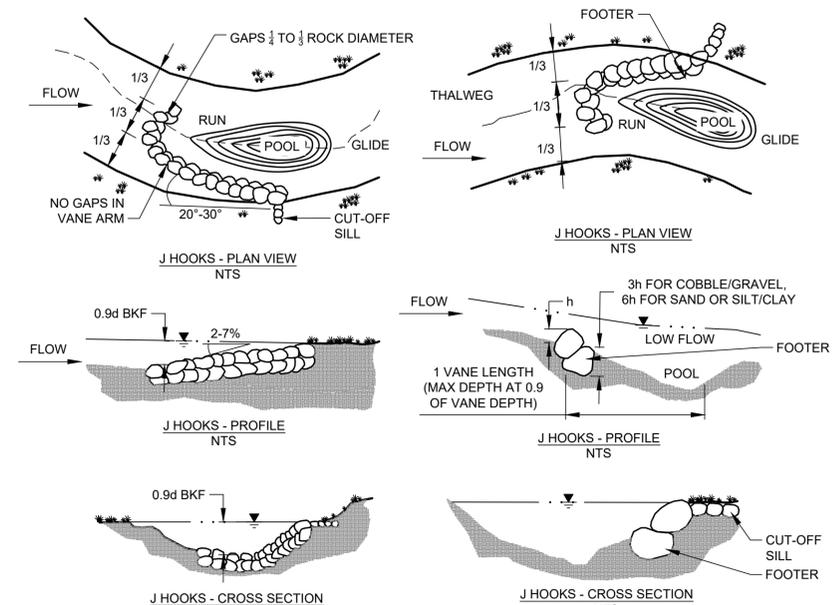
9-C / 10-C BAND DETAIL
NOT TO SCALE



NOTES:

- ROCK SHALL BE APPROX 24"(W)x36"(L)x6"-36"(H) AND SHALL BE APPROVED BY ENGINEER PRIOR TO CONSTRUCTION (CONTRACTOR TO USE EXISTING RIPRAP IN CHANNEL AND MATCH SIZE OF RIPRAP TO NOTE AS ABLE)
- LENGTH AND WIDTH SHALL BE AS SHOWN ON THE PLANS AND MAY BE MODIFIED BY ENGINEER BASED ON INDIVIDUAL SITE CONDITIONS.
- ROCK CROSS VANES SHALL REST ON FOOTER ROCKS. USE ROCKS PROVIDED ON SITE.
- ROCK VANES SHALL BE KEYED INTO UNDISTURBED BANK WITH SILL ROCKS.
- CHOKE VOIDS IN VANES WITH SMALLER ROCKS (CONTRACTOR TO PROVIDE)
- INSTALL HABITAT ROCKS PER ENGINEER'S DIRECTION
- ROCK SHALL CONSIST OF LIMESTONE OR DOLOMITE, CONCRETE, SHALE, OR SANDSTONE SHALL BE USED

ROCK CROSS VANE
SCALE: NTS



ROCK J-HOOK
SCALE: NTS

GEI Consultants
 GEI CONSULTANTS OF MICHIGAN, P.C.
 401 S. WASHINGTON SQUARE
 SUITE 103
 LANSING, MI 48233
 (517)803-4800

BRIAN JONCKHEERE
 LIVINGSTON COUNTY DRAIN COMMISSIONER

THOMPSON LAKE
 A PART OF SECTION 25, CITY OF HOWELL,
 T3N, R4E, LIVINGSTON COUNTY, MICHIGAN

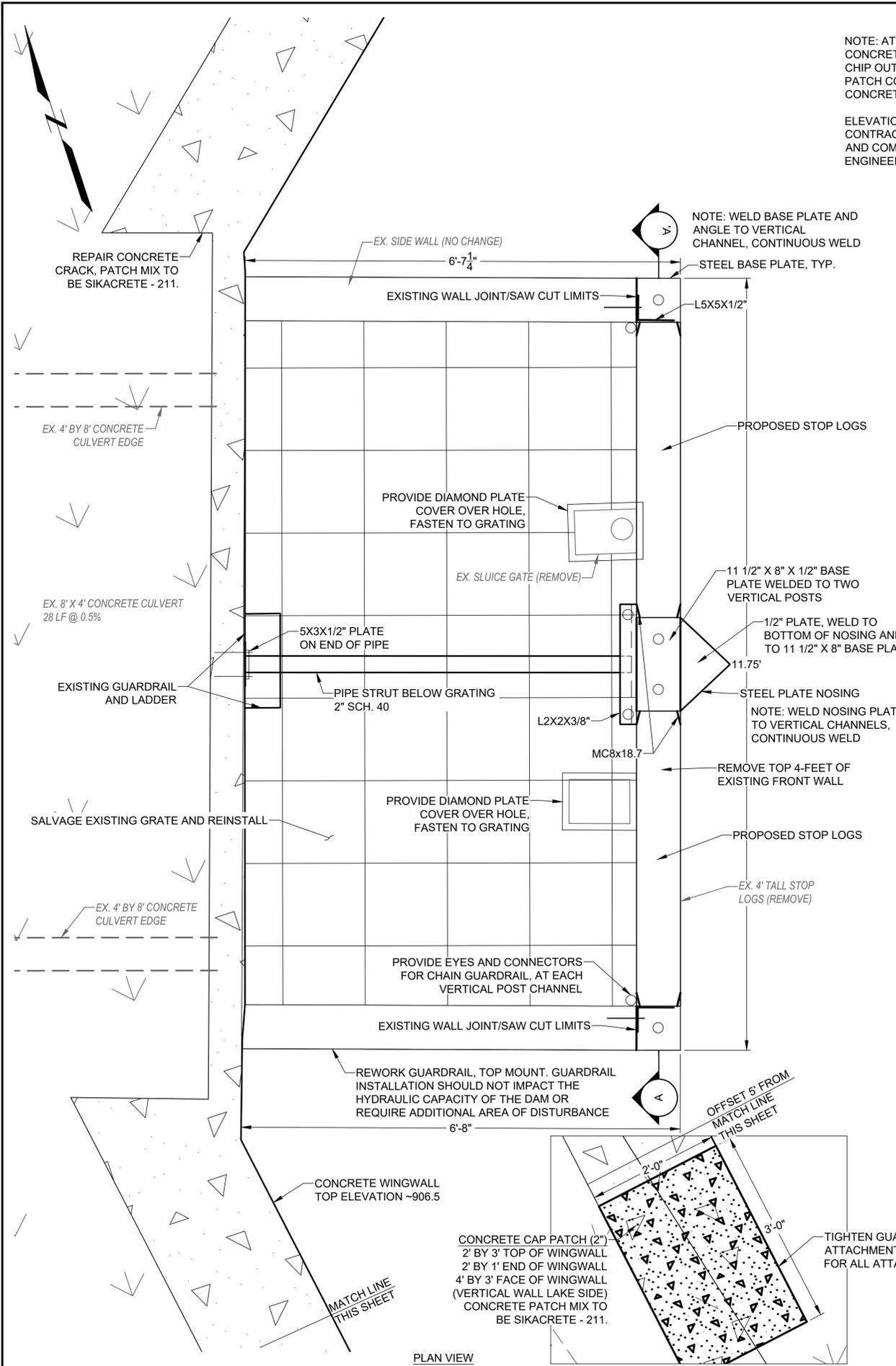
Attention: 1"
 If this scale bar does not measure 1" then drawing is not original scale.

1	11/14/24	BID SET	BJC
---	----------	---------	-----

Designed:
 Checked:
 Drawn:
 Approved By:

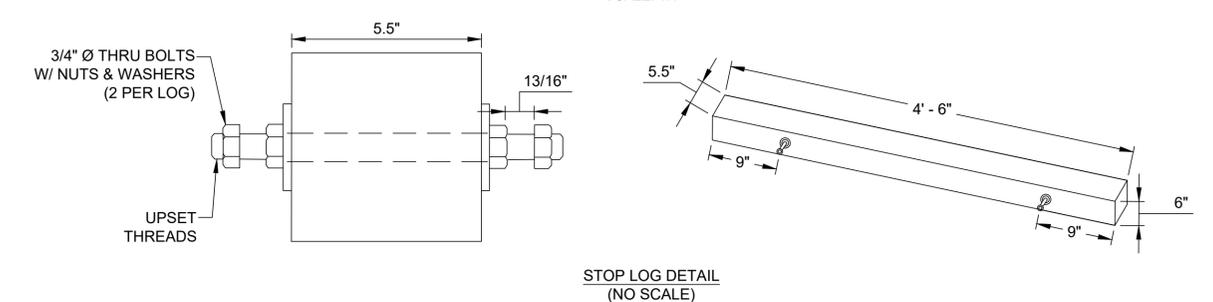
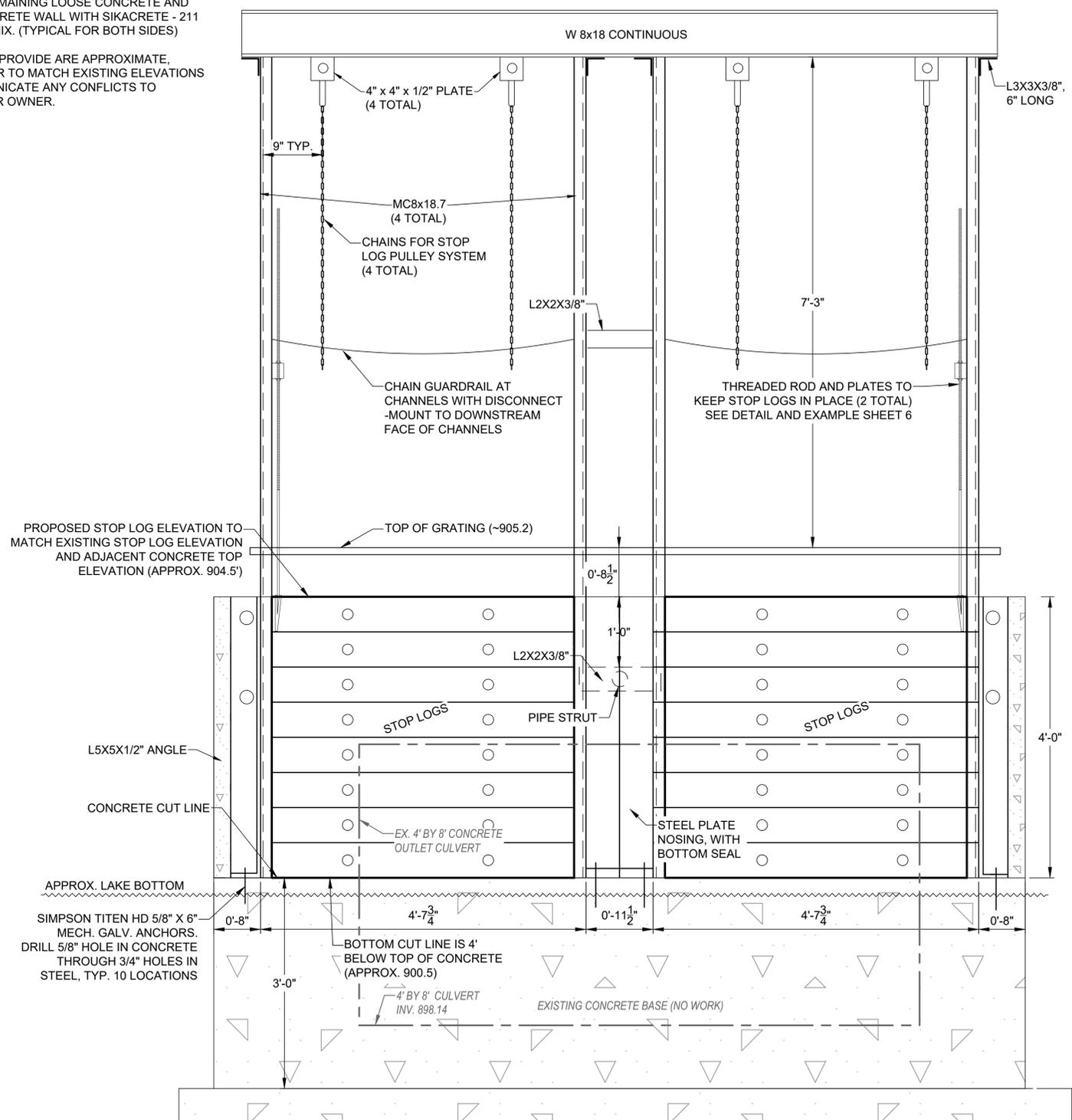
CULVERT DETAILS

GEI Project 2400583
 SHEET NO.



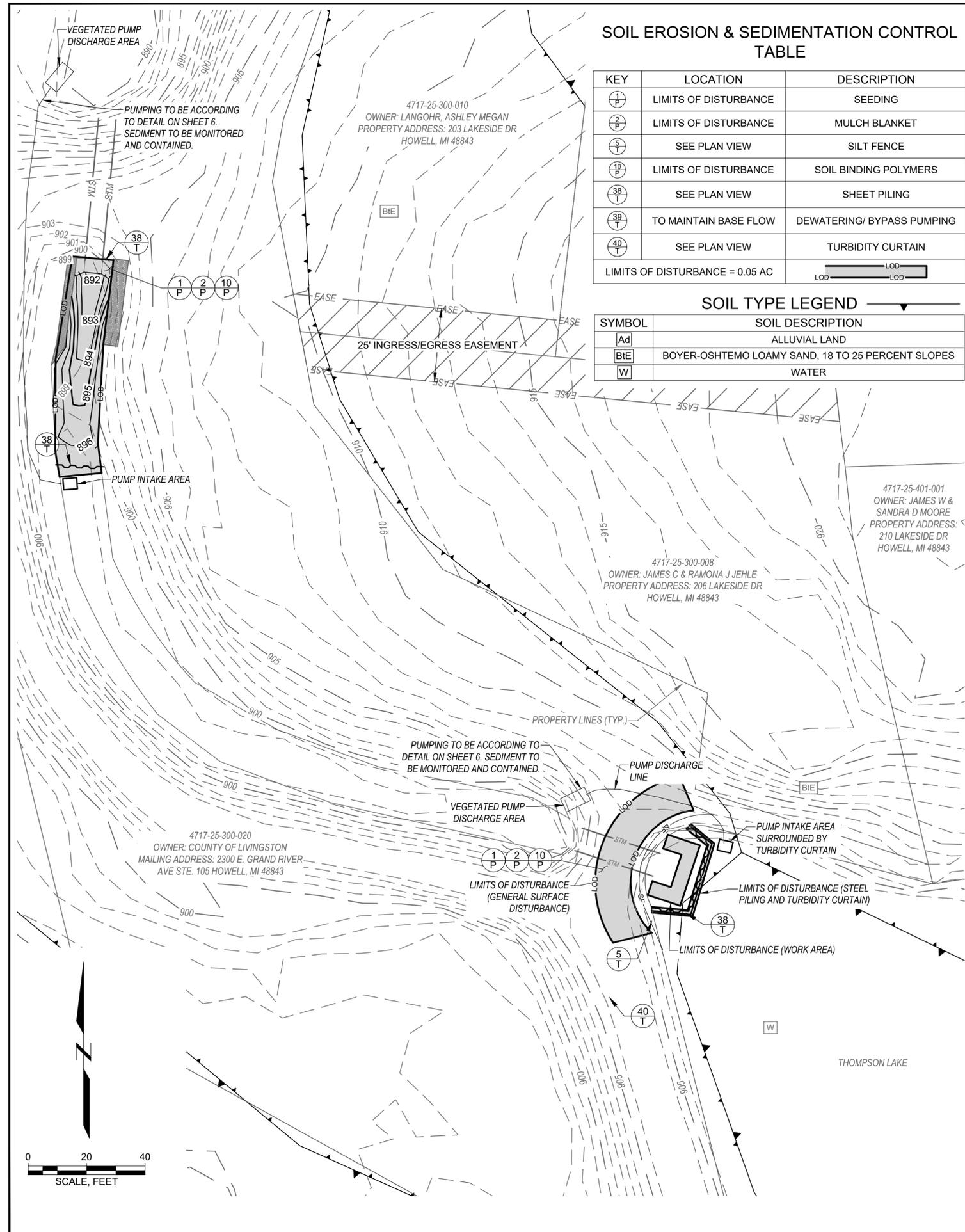
NOTE: AT SAW CUT LIMITS, AT SIDEWALL, CONCRETE IS DETERIORATED. CONTRACTOR TO CHIP OUT REMAINING LOOSE CONCRETE AND PATCH CONCRETE WALL WITH SIKACRETE - 211 CONCRETE MIX. (TYPICAL FOR BOTH SIDES)

ELEVATIONS PROVIDE ARE APPROXIMATE, CONTRACTOR TO MATCH EXISTING ELEVATIONS AND COMMUNICATE ANY CONFLICTS TO ENGINEER OR OWNER.



1	11/14/24	BID SET	BJC
---	----------	---------	-----

Designed:
 Checked:
 Drawn:
 Approved By:



SOIL EROSION & SEDIMENTATION CONTROL TABLE

KEY	LOCATION	DESCRIPTION
(1 P)	LIMITS OF DISTURBANCE	SEEDING
(2 P)	LIMITS OF DISTURBANCE	MULCH BLANKET
(10 P)	SEE PLAN VIEW	SILT FENCE
(38 T)	LIMITS OF DISTURBANCE	SOIL BINDING POLYMERS
(39 T)	SEE PLAN VIEW	SHEET PILING
(40 T)	TO MAINTAIN BASE FLOW	DEWATERING/ BYPASS PUMPING
(40 T)	SEE PLAN VIEW	TURBIDITY CURTAIN

LIMITS OF DISTURBANCE = 0.05 AC

SOIL TYPE LEGEND

SYMBOL	SOIL DESCRIPTION
Ad	ALLUVIAL LAND
BtE	BOYER-OSHTEMO LOAMY SAND, 18 TO 25 PERCENT SLOPES
W	WATER

SOIL EROSION AND SEDIMENTATION CONTROL NOTES

- TEMPORARY MEASURES SHALL BE INSTALLED PRIOR TO OR UPON COMMENCEMENT OF EARTH CHANGE ACTIVITY.
- THE CONTRACTOR SHALL CONFORM TO SOIL EROSION AND SEDIMENTATION CONTROL ACT, PART 91 OF ACT 451 OF 1994 AND MUST PROVIDE NOTICE TO THE CEA PRIOR TO THE START OF CONSTRUCTION.
- ALL SOIL EROSION CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED DAILY BY THE CONTRACTOR. THE CONTRACTOR SHALL INSPECT AFTER EACH RAIN EVENT TO ENSURE PROPER MAINTENANCE OF THE SOIL EROSION CONTROL MEASURES. ANY DEFICIENCIES OR REPAIRS TO SOIL EROSION CONTROL MEASURES ARE TO BE CORRECTED IMMEDIATELY.
- THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT MEASURES ARE INSTALLED IN COMPLIANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, AND THE PLANS. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT THE SESC MEASURES ARE MONITORED AND MAINTAINED UNTIL ALL DISTURBED AREAS ARE STABILIZED AND TEMPORARY MEASURES ARE REMOVED. THE CONTRACTOR ACKNOWLEDGES THAT SESC MEASURES MAY NEED TO BE ADAPTED, ADJUSTED, OR ADDED BASED ON SITE CONDITIONS IN ORDER TO REMAIN IN COMPLIANCE WITH PART 91 REQUIREMENTS.
- THE CONTRACTOR SHALL INSTALL FINAL SOIL EROSION CONTROL MEASURES WITHIN 72 HOURS OF FINAL GRADE IN ANY AREA (GRADE LISTED ON PLANS) UNLESS SPECIFIED OTHERWISE BY ENGINEER. WEEKLY INSPECTIONS OF SEEDED AREAS SHALL BE COMPLETED TO VERIFY GRASS GROWTH. ANY AREAS NOT ESTABLISHED SHALL BE FERTILIZED, SOILS AMENDED AND RE-SEEDED AS NECESSARY. ALL COST FOR ESTABLISHMENT OF SEEDED AREAS SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE SPECIFIC SEEDING BEING INSTALLED.
- THE CONTRACTOR SHALL REMOVE TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES WITHIN 45 DAYS AFTER PERMANENT SOIL EROSION MEASURES ARE IN PLACE AND THE AREA IS STABILIZED ("STABILIZED" MEANS THE ESTABLISHMENT OF VEGETATION OR THE PROPER PLACEMENT, GRADING, OR COVERING OF SOIL TO ENSURE ITS RESISTANCE TO SOIL EROSION, SLIDING, OR OTHER EARTH MOVEMENT).
- REMOVAL OF TEMPORARY MEASURES IS THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR IS RESPONSIBLE FOR CLEANUP & RESTORATION INCLUDING PROGRESS CLEANING. PROGRESS CLEANING INCLUDES BUT IS NOT LIMITED TO REMOVAL OF WASTE MATERIALS, DEBRIS, RUBBISH, AND EXCESS SPOILS, COMPLETE LEVELING AND DAMAGE RESTORATION AT REGULAR INTERVALS DURING CONSTRUCTION.
- SEDIMENTS CAUSED BY ACCELERATED SOIL EROSION SHALL BE REMOVED FROM RUNOFF WATER BEFORE IT LEAVES THE SITE OF THE EARTH CHANGE.
- PLACE TURF ESTABLISHMENT ITEMS AS SOON AS POSSIBLE ON POTENTIAL ERODABLE SLOPES AS DIRECTED BY THE ENGINEER. CRITICAL DITCH GRADES SHALL BE PROTECTED WITH SOD OR SEED/MULCH OR MULCH BLANKET AS DIRECTED BY THE ENGINEER.
- IF NECESSARY A TEMPORARY CONTROL MEASURE SHALL BE DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF WATER AROUND, THROUGH OR FROM THE EARTH CHANGE AREA TO LIMIT WATER FLOW TO A NON-EROSIVE VELOCITY.
- MAINTAIN ON SITE OR HAVE READILY AVAILABLE SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS TO CONTAIN AND CLEAN UP FUEL OR CHEMICAL SPILLS AND LEAKS. NO SPILLED CHEMICALS OR PETROLEUM OR VEHICULAR FLUIDS ARE TO COME INTO CONTACT WITH DRAINAGE DITCHES, WETLAND OR WATERS OF THE STATE.
- ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED AND FOUR INCHES OF TOPSOIL APPLIED. EXISTING TOPSOIL MAY BE USED FOR RESTORATION OF THIS ACTIVITY. IF ADEQUATE TOPSOIL IS NOT AVAILABLE ON SITE THE CONTRACTOR SHALL PROVIDE THE TOPSOIL, APPROVED BY THE OWNER AND ENGINEER, AS NEEDED. THE AREA SHALL BE SEEDED, FERTILIZED, WATERED AND MAINTAINED UNTIL VEGETATION IS WELL ESTABLISHED. NOTE: FERTILIZER SHALL NOT BE USED WITHIN 50 FEET OF THE RIVER, LAKE OR STREAM AT THIS SITE. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE PROJECT WILL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR WILL WATCH FOR WEATHER CHANGES THAT WILL CREATE EROSION CONDITIONS AND WILL APPLY EROSION CONTROL MEASURES BEFORE A STORM HITS THE SITE.
- STOCKPILES OF MATERIALS SHALL BE COVERED AND PROTECTED IN A MANNER TO PREVENT SILTATION OF SURROUNDING SITE OR EROSION FROM OCCURRING ON THE STOCKPILE.
- NO WORK THAT REQUIRES DEWATERING SHALL COMMENCE WITHOUT APPROVAL FROM THE ENGINEER.
- THE CONTRACTOR IS RESPONSIBLE FOR THE SESC PERMIT AT ANY SPOIL DEPOSIT LOCATIONS. LOCATIONS MUST BE APPROVED BEFORE DEPOSITION.
- THE DRAIN COMMISSIONER MAY ASSESS COST FOR SITE RESTORATION, SITE STABILIZATION, AND/OR RESTORE OR REPAIR OFF-SITE DAMAGES IF THE CONTRACTOR DOES NOT COMPLY WITH THEIR CONTRACT OR PART 91.
- DETAILED DRAWINGS AND SPECIFICATIONS ARE LOCATED IN THE MICHIGAN ASSOCIATION OF COUNTY DRAIN COMMISSIONERS SOILS EROSION AND SEDIMENTATION CONTROL AUTHORIZED PUBLIC AGENCY PROCEDURES MANUAL.
- MEASURES SHALL ONLY BE PAID FOR ONCE.

COMPLIANCE WITH PART 91 OF PA 451

- ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH AN EARTH DISTURBANCE ACTIVITY SHALL BE PROVIDED A COPY OF THIS SOIL EROSION CONTROL PLAN AND STRICTLY ADHERE TO ITS REQUIREMENTS.
- THE CONTRACTOR IS RESPONSIBLE TO INSTALL AND MAINTAIN APPLICABLE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES IN ACCORDANCE WITH THE APPROVED PLANS PRIOR TO COMMENCEMENT OF CONSTRUCTION, MASS GRADING, OR STAGING WORK. THE CONTRACTOR SHALL CONFORM TO SOIL EROSION AND SEDIMENTATION CONTROL ACT, PART 91 OF ACT 451 OF 1994.
- INSPECTION BY A CERTIFIED STORM WATER OPERATOR FOR CONSTRUCTION SITES WILL TAKE PLACE WEEKLY AND AFTER EACH RAINFALL EVENT THAT PRODUCES RUNOFF FROM THE SITE. PROPER DOCUMENTATION OF THE INSPECTIONS WILL BE MAINTAINED AS PER PART 91 OF PA 451 OF 1994.
- RESPOND IMMEDIATELY TO STORMWATER OPERATOR AND/OR SOIL EROSION AND SEDIMENTATION CONTROL INSPECTOR CONCERNS. MAKE CORRECTIVE MEASURES AS REQUIRED IMMEDIATELY.
- IF FOR ANY REASON THE OWNER IS FOUND TO BE IN VIOLATION OF PART 91 DUE TO CONTRACTOR'S NONCOMPLIANCE, THE CONTRACTOR AGREES TO PAY ALL FINES AND COSTS INCURRED BY THE OWNER INCLUDING ALL LEGAL COSTS IN THE DEFENSE OF THE OWNER.

MAINTENANCE PROGRAM FOR SESC MEASURES

GENERAL MAINTENANCE

- TEMPORARY SESC MEASURES SHALL BE INSTALLED, MAINTAINED, AND REMOVED BY THE CONTRACTOR.
- TEMPORARY SESC MEASURES SHALL BE INSTALLED PRIOR TO OR UPON COMMENCEMENT OF ANY EARTH DISTURBANCE.
- TEMPORARY MEASURES MUST BE MAINTAINED AND IN PLACE UNTIL AREAS ARE PERMANENTLY STABILIZED.
- TEMPORARY SESC MEASURES SHALL BE REMOVED AT THE END OF THE PROJECT ONCE PERMANENT MEASURES ARE IN PLACE AND DISTURBED AREAS ARE STABILIZED.
- PERMANENT MEASURES SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR UNTIL FINAL PROJECT COMPLETION.
- DAILY MAINTENANCE IS THE CONTRACTORS RESPONSIBILITY.

SEEDING AND MULCHING

- INSPECT NEWLY SEEDED AND MULCHED AREAS SUBSEQUENT TO ANTICIPATED GERMINATION DATE AND AFTER EACH SIGNIFICANT RAINFALL EVENT THAT PRODUCES RUNOFF UNTIL AREAS ARE STABILIZED AND TO CHECK FOR MOVEMENT OR EROSION.
- INSPECT MULCHED AREAS ROUTINELY AND AFTER EACH SIGNIFICANT RAINFALL EVENT TO CHECK FOR MOVEMENT OR EROSION UNTIL AREAS ARE STABILIZED. IF WASHOUTS OR EROSION OCCUR, REPAIR THE SURFACE, RE-SEED AND RE-MULCH. CONTINUE INSPECTIONS AS NECESSARY UNTIL VEGETATION IS FIRMLY ESTABLISHED.
- REPAIR ERODED AREAS, APPLYING SUPPLEMENTAL SEED, MULCH, AND WATER AS NEEDED.
- IF SEED DOES NOT ESTABLISH, CONDUCT SOIL TESTS, AMEND SOILS AS NEEDED, AND REAPPLY SEED AND/OR MULCH DURING THE RECOMMENDED GROWING SEASON.
- TO ASSIST IN THE ESTABLISHMENT OF NATIVE SPECIES, REMOVE UNWANTED COMPETING VEGETATION IN THE FIRST YEAR.
- MOWING DURING ESTABLISHMENT CAN BE USED PERIODICALLY TO DISCOURAGE WEEDS.
- SEEDING SHALL BE SLOPE STABILIZATION MIX FOR CHANNELS AND MDOT ROADSIDE MIX FOR ALL OTHER DISTURBANCES.

PERIMETER SEDIMENT CONTROL MEASURES

- INSPECT SILT FENCE DAILY AND IMMEDIATELY FOLLOWING EACH RAINFALL.
- REMOVE ACCUMULATED SEDIMENT PER MANUFACTURER'S DIRECTIONS AND PLAN SPECIFICATIONS.
- REMOVE SILT FENCE WHEN PERMANENT SESC MEASURES ARE IN PLACE AND VEGETATION IS ESTABLISHED.

SOIL BINDING POLYMERS

- APPLY EVERY TIME SEED IS PLACED
- VISUALLY INSPECT ALL AREAS WHERE THE POLYMER HAS BEEN APPLIED WITHOUT WALKING OR TRAVELING OVER THE AREA FOLLOWING EACH SIGNIFICANT PRECIPITATION OR WIND EVENT AND PRIOR TO EXPECTED EVENTS. REAPPLY IF SOIL AREAS INDICATED DISTURBANCE BY EROSION FORCES, OR IF DEEMED NECESSARY, REAPPLY IN CONJUNCTION WITH ADDITIONAL MANAGEMENT PRACTICES.
- REAPPLY IF TREATED AREA IS DISRUPTED OR SHOWS SIGNS OF DISTURBANCE FROM EROSION FORCES.

RIPRAP

- IF RIPRAP HAS BEEN DISPLACED AND THE GEOTEXTILE FABRIC IS DAMAGED DURING HIGH FLOW CONDITIONS OR FROM VANDALISM, REMOVE RIPRAP AND REPAIR GEOTEXTILE FABRIC BY ADDING ANOTHER LAYER OVERLAPPING THE DAMAGED AREA BY 2 FEET AND ANCHORING WITH PINS SPACED 3 FEET APART. REPLACE RIPRAP OVER GEOTEXTILE FABRIC.
- INSPECT FOLLOWING EACH PRECIPITATION THAT RESULTS IN RUNOFF AND CONFIRM EFFECTIVENESS, MAKE NECESSARY ADJUSTMENTS. EXPAND RIPRAP AREAS AS NEEDED.

DEWATERING

- DISCHARGE BAG DEWATERING (TYP)
- CHECK PUMP DISCHARGE BAG FOR ANY HOLES OR NOTICEABLE DETERIORATION.
- INSPECT DEWATERING DISCHARGE POINTS DAILY FOR SIGNS OF SCOUR AND EROSION.
- DEWATERING DISCHARGE POINT TO BE PLACED AT A LOCATION APPROVED BY ENGINEER.

SHEET PILING

- INSPECT ROUTINELY AND FOLLOWING EACH PRECIPITATION EVENT THAT RESULTS IN RUNOFF UNTIL RESULTS DISTURBED AREAS ARE STABILIZED THEN REMOVE TEMPORARY CONTROL MEASURES.

CONTINUED MAINTENANCE PLAN

- THE CONTRACTOR SHALL MAINTAIN ALL PERMANENT SESC MEASURES FOR A PERIOD OF 1 YEAR FOLLOWING PROJECT COMPLETION, THIS INCLUDES VEGETATION ESTABLISHMENT.

PROXIMITY TO LAKES AND STREAMS

- EARTH CHANGE IS 0 FEET FROM THOMPSON LAKE

PROPOSED EARTH CHANGE

- EARTH CHANGE INCLUDES SOIL EROSION MEASURE INSTALLATION AND DISTURBANCE CAUSED BY EQUIPMENT TO ACCESS DAM. NO DISTURBANCE AT DAM FOR REPAIR CONSTRUCTION. ALSO INCLUDES DISTURBANCE AT DOWNSTREAM CULVERT HEADWALL AND CHANNEL GRADING LIMITS.

LEGAL DESCRIPTION

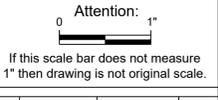
- SE 1/4 OF SECTION 25, CITY OF HOWELL, T3N, R4E, LIVINGSTON COUNTY, MI

APPROX. SESC QUANTITIES:

- SILT FENCE60 LF
- TEMP. SHEET PILING.....AS DETERMINED BY CONTRACTOR'S MEANS AND METHODS
- TURBIDITY CURTAIN.....50 LF
- SEEDING AND MULCH.....ALL DISTURBED AREA (MDOT ROADSIDE)



BRIAN JONCKHEERE
 LIVINGSTON COUNTY DRAIN COMMISSIONER
 THOMPSON LAKE
 A PART OF SECTION 25, CITY OF HOWELL,
 T3N, R4E, LIVINGSTON COUNTY, MICHIGAN



1	11/14/24	BID SET	BJC
---	----------	---------	-----

Designed:

Checked:

Drawn:

Approved By:

SESC PLAN

GEI Project 2400583

SHEET NO.

5

