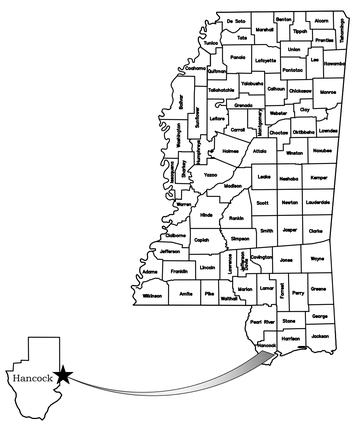
KAYAK LAUNCH IMPROVEMENTS

BAYOU DRIVE DIAMONDHEAD, MS 39525

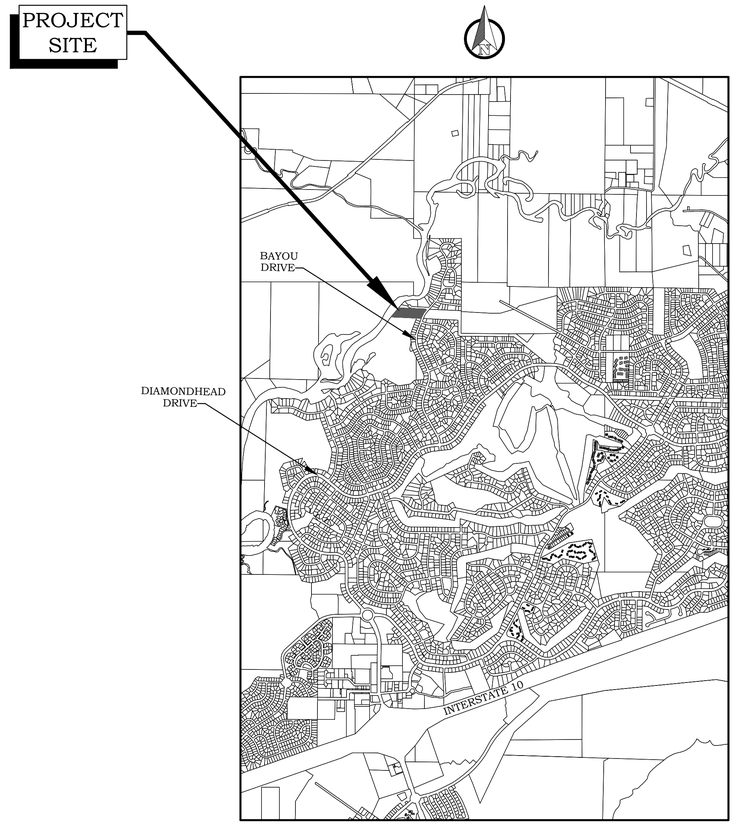
HANCOCK COUNTY, MISSISSIPPI

SEPTEMBER 2022



LOCATION MAP

★ DENOTES PROJECT LOCATION



VICINITY MAP
NTS

DETAILED INDEX

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MUNICIPAL OFFICIALS

NANCY DEPREO - MAYOR
MIKE RESO - CITY MANAGER
GERARD MAHER - COUNCIL MEMBER-AT-LARGE
SHANE FINLEY - WARD 1
ANNA LIESE - WARD 2
JOHN CUMBERLAND - WARD 3
CHUCK CLARK - WARD 4

_____ DATE : _____

JASON P. CHINICHE, P.E.
MISSISSIPPI LICENSE NO. 19732

CHINICHE ENGINEERING & SURVEYING
ESTABLISHED 1971
407 Hwy. 90
Bay St. Louis, MS, 39520
Office - (228) 467-6755
Email - jason@jjc-eng.com
Website - www.jjc-eng.com

OWNER INFORMATION

KAYAK LAUNCH
BAYOU DRIVE
DIAMONDHEAD, MISSISSIPPI 39520

SHEET TITLE

BAYOU DRIVE
KAYAK LAUNCH IMPROVEMENTS

COVER SHEET

PRELIMINARY FOR REVIEW!

MARK	DATE	DESCRIPTION
-	–	–
-	–	–
-	–	–
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ISSUE:	
PROJECT NO:	17-057
DATE:	9/2/2022
DRAWN BY:	JN
CHECKED BY:	JPC
SCALE:	NOTED

SHEET NUMBER
1/5

SHEET DESIGNATION
GN-01

GENERAL NOTES

GENERAL NOTES

1. CONTRACTOR SHALL ADHERE TO ALL REGULATORY PERMITTING REQUIREMENTS.
2. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH APPROVED ENVIRONMENTAL PERMITS, US COAST GUARD, AND US COE REQUIREMENTS.
3. FOR DRIVEWAYS REQUIRING PAVEMENT REMOVAL, CONTRACTOR SHALL PLAN TO REMOVE PAVEMENT TO THE APPARENT RIGHT-OF-WAY AS SHOWN ON THE PLANS. IF AN EXISTING JOINT PROVIDES FOR A CLEANER CUT AND IS WITHIN THE RIGHT-OF-WAY, THE CONTRACTOR IS ALLOWED TO USE THIS JOINT AS A LIMIT FOR REMOVAL, IF PRE-APPROVED BY THE ENGINEER.
4. CONTRACTOR IS REQUIRED TO SAWCUT JAGGED EDGES OF ASPHALT PAVEMENT AND REPLACE WITH ASPHALT PATCH (INCLUDING STRIPING) TO PROVIDE A SMOOTH EDGE TO INSTALL ADJACENT SIDEWALK.
5. CONTRACTOR SHALL COORDINATE WITH HOMEOWNERS AND BUSINESS OWNERS PRIOR TO DISRUPTING OR INHIBITING ACCESS TO HOMEOWNERS PROPERTY DUE TO CONSTRUCTION ACTIVITIES.
6. CONTRACTOR SHALL CONNECT ALL NEW HDPE DRAIN PIPES TO EXISTING CULVERTS.
7. THERE WILL BE NO SEPARATE PAYMENT FOR STRUCTURAL EXCAVATION.
8. CONTRACTOR SHALL ABSORB COST OF TREE AND ROOT TRIMMING IN COST OF SIDEWALK. ANY TREES/ BUSHES OR PLANTS THAT SUSTAIN DAMAGE DUE TO CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.
9. ALL ELEMENTS OF CONSTRUCTION SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2017 EDITION, UNLESS NOTED OTHERWISE, AND SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
10. CONTRACTOR SHALL DISPOSE OFF-SITE ALL MISCELLANEOUS TRASH & DEBRIS FROM ALL AREAS WITHIN THE LIMITS OF WORK. ALL SUCH WORK AND DISPOSAL SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS.
11. WHEN ANY SERVICES OR MATERIALS ARE REQUIRED TO COMPLETE THE PROJECT AND DO NOT HAVE A SEPARATE PAY ITEM LISTED, THE CONTRACTOR SHALL ACCEPT AND ABSORB ANY AND ALL COSTS INVOLVED TO COMPLETE THE PROJECT.
12. EXISTING UNDERGROUND UTILITY LINES ARE SHOWN ON THE DRAWINGS BASED UPON THE BEST INFORMATION AVAILABLE TO THE ENGINEER. THE ENGINEER CAN NOT AND DOES NOT WARRANT THAT THIS INFORMATION IS COMPLETE OR ACCURATE. THE CONTRACTOR MUST COORDINATE DIRECTLY WITH THE INVOLVED UTILITY OWNERS TO HAVE UNDERGROUND UTILITY LINES FIELD LOCATED IN ADVANCE OF CONSTRUCTION. CONTRACTOR MUST CALL IN MS811 LOCATES TO PHYSICALLY LOCATE AND VISUALLY VERIFY LOCATIONS OF ALL UTILITIES.
13. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING GRADES AND MAKING ADJUSTMENTS AS NECESSARY WITH THE APPROVAL OF THE PROJECT ENGINEER.
14. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT EXISTING STRUCTURES SUCH AS PIPES, INLETS, APRONS, BRIDGES, ETC. FROM DAMAGE WHICH MIGHT OCCUR DURING CONSTRUCTION. EXTREME CARE SHOULD BE EXERCISED IN THE UNDERCUT AREA AND THE UNDERCUT DEPTH MAY BE ADJUSTED AT CROSS DRAINS, AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL REPLACE OR REPAIR, AS DIRECTED BY THE ENGINEER, ANY STRUCTURES DAMAGED DURING THE LIFE OF THE CONTRACT. NO PAYMENT WILL BE MADE FOR REPLACEMENT OR REPAIR OF DAMAGED ITEMS.
15. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING BRACING, SHORING, OR ANY GROUND SUPPORT SYSTEM REQUIRED TO PREVENT A FAILURE FROM OCCURRING DURING EXCAVATION. ALL COST FOR ANY PROTECTIVE MEASURES, INCLUDING THE MATERIALS AND LABOR FOR DESIGNING AND CONSTRUCTING THE FACILITY, SHALL BE ABSORBED IN THE APPLICABLE PAY ITEMS.
16. THE CONTRACTOR SHALL RELOCATE ANY MAILBOXES NECESSARY TO COMPLETE THIS WORK. REMOVAL, STORAGE AND REPLACEMENT OF BOXES SHALL BE ABSORBED IN THE PRICE BID FOR REMOVAL OF OBSTRUCTIONS AND SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE CODES & REQUIREMENTS.
17. CONTRACTOR SHALL NOT DEVIATE FROM SUBMITTED CONSTRUCTION SCHEDULE WITHOUT PRIOR WRITTEN APPROVAL FROM ENGINEER.
18. PAY ITEM 202-A, "REMOVAL OF OBSTRUCTIONS," - LUMP SUM SHALL INCLUDE THE REMOVAL OF ANY STRUCTURES AND OBSTRUCTION ENCOUNTERED ABOVE AND BELOW GRADE WHICH INTERFERE WITH THE CONSTRUCTION AS DIRECTED BY THE ENGINEER.
19. PAY ITEM 202-B, "REMOVAL OF PIPE 8" AND ABOVE," SHALL INCLUDE ALL ASSOCIATED COSTS OF THE PIPE REMOVAL, INCLUDING BUT NOT LIMITED TO, THE REMOVAL OF THE PIPE, END SECTIONS, FITTING, COLLARS, CONNECTORS, AND BACKFILL/COMPACTION OF THE VOID LEFT FROM THE REMOVAL.
20. IF IT IS NECESSARY TO HOLD ANY UTILITY POLES, THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY. ANY FEE OR CHARGE FOR THIS SERVICE SHALL BE COST ABSORBED BY THE CONTRACTOR.
21. CONTRACTOR SHALL ADHERE TO PRE-APPROVED MDOT SAMPLING AND TESTING PROPOSAL FOR TESTING INTERVALS. ANY DEVIATION FROM THE APPROVED PROPOSAL WHICH INCURS ADDITIONAL COST, SHALL BE PAID FOR BY CONTRACTOR.
22. ANY DEVIATION FROM CONTRACT DOCUMENTS WITHOUT PRIOR APPROVAL BY ENGINEER/OWNER, CONTRACTOR SHALL ASSUME ALL COSTS ASSOCIATED WITH DEVIATION.
23. GUARDRAIL TO BE ABSORBED IN OTHER PAY ITEMS.
24. BID PRICES SHALL INCLUDE SALES TAXES AND OTHER APPLICABLE TAXES AND FEES. QUANTITIES ARE ESTIMATED AND THERE SHALL BE NO INCREASE IN UNIT PRICE COST TO THE OWNER SHOULD AN INCREASE OR DECREASE IN QUANTITIES BE REQUIRED.
25. ALL MATERIAL/EQUIPMENT SHALL BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS.
26. CONTRACTOR SHALL PROVIDE PRE AND POST CONSTRUCTION VIDEO OF ENTIRE JOB SITE. TO ENGINEER PRIOR TO WORK COMMENCING AND PRIOR TO FINAL PAYMENT. COORDINATE WITH ENGINEER ON VIDEO FORMAT.
27. CONTRACTOR SHALL COORDINATE WITH CITY PERSONNEL ON ALL LOCAL EVENTS AND SHALL ADJUST SCHEDULE TO PROHIBIT INTERFERENCE DURING CONSTRUCTION ACTIVITIES.
28. ALL LOAD TICKETS/ DELIVERY TICKETS SHALL BE SIGNED BY CONTRACTOR AND INSPECTOR. NO DELIVERIES SHALL BE MADE WITHOUT PRIOR (24 HOUR) NOTICE TO INSPECTOR.
29. CONTRACTOR IS REQUIRED TO COORDINATE WITH HANCOCK COUNTY REGARDING PERMITTING INSPECTIONS AND APPROVED HAUL ROUTES.
30. 48 HOUR NOTICE IS REQUIRED FOR ALL TESTING. CONTRACTOR SHALL PROVIDE ALL TESTING FROM A PRE-APPROVED TESTING LAB AND SHALL HANDLE ALL COORDINATION WITH TESTING LAB BOTH EMERGENCY AND NON-EMERGENCY TESTING.
31. CONTRACTOR SHALL INSTALL REGULATED RAIN GAGE ON JOB SITE AND SHALL ALLOW ENGINEER ACCESS FOR MONITORING AT ALL TIMES.
32. ALL NEW WATER OR SEWER SERVICES SHALL REQUIRE CONTRACTOR TO VERIFY WITH CURRENT HOMEOWNER FOR PREFERRED LOCATION OF SERVICE PRIOR TO COMMENCEMENT OF WORK.
33. CONTRACTOR SHALL VERIFY LOCATION OF ROW. ALL WORK SHALL BE PERFORMED WITHIN THE ROW UNLESS OTHERWISE NOTED IN THE PLANS.
34. IF WORK IS REQUIRED ON PRIVATE PROPERTY, THE CONTRACTOR SHALL COORDINATE WITH THE PROPERTY OWNER FOR ACCESS PRIOR TO COMMENCING WORK AND SHALL PROVIDE WRITTEN AUTHORIZATION FROM THE PROPERTY OWNER TO THE ENGINEER FOR REVIEW.
35. CONTRACTOR SHALL GIVE PRIOR NOTICE TO THE RPR (MIN 24 HOURS) BEFORE ANY NEWLY INSTALLED OR EXPOSED ITEMS ARE BACKFILLED, COMPACTED, OR COVERED. FAILURE TO COMMUNICATE WITH THE RPR SHALL RESULT IN CONTRACTOR LIABILITY FOR ALL COSTS ASSOCIATED WITH RE-EXCAVATION OF WORK.
36. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL LANE AND ROAD CLOSURES WITH THE OWNER 48 HOURS PRIOR TO CLOSING.
37. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ENGINEER WITH A 48 HOUR NOTICE PRIOR TO CONDUCTING ALL HOLIDAY AND WEEKEND WORK.
38. CONTRACTOR REQUIRED TO VERIFY FIELD MEASUREMENTS AND MAKE ADJUSTMENTS PRIOR TO COMMENCEMENT OF FABRICATIONS AND COORDINATE ADJUSTMENTS WITH ENGINEER.
39. CONTRACTOR SHALL REPAIR ALL PROPERTY TO PRE-CONSTRUCT CONDITIONS OR BETTER.
40. ALL RAISED ROADSIDE APPURTENANCES TO BE PLACED A MINIMUM OF 2' BEHIND FACE OF CURB UNLESS OTHERWISE SPECIFIED ON PLANS.

ROADWAY & CONCRETE WORK

1. FOR DRIVEWAYS REQUIRING PAVEMENT REMOVAL, CONTRACTOR SHALL PLAN TO REMOVE PAVEMENT TO THE APPARENT RIGHT-OF-WAY.
2. BASE AND PAVEMENT FOR STREET INTERSECTION AND LOCAL ROAD TURNOUTS SHALL MATCH THE PROPOSED ROADWAY. SEE TRANSITION DETAIL.
3. WHERE MILLING OF THE ROADWAY IS REQUIRED, THE CONTRACTOR SHALL PROVIDE OUTLETS IN THE EXISTING SHOULDERS AT SUFFICIENT INTERVALS TO PREVENT POOLING OR STANDING WATER ON THE MILLED SURFACE. ANY ASSOCIATED COST SHALL BE ABSORBED IN MILLING.
4. CONTRACTOR SHALL MATCH EXISTING PAVEMENT IN GRADE AND ALIGNMENT AT CONNECTIONS TO EXISTING PAVEMENT. CONTRACTOR SHALL HAVE SMOOTH TRANSITION FROM PAVEMENT TO UTILITIES.
5. ALL RADII ARE TO BE FIELD DETERMINED. RADII SHOWN ON THE PLANS ARE APPROXIMATE.
6. ALL CONCRETE SHALL BE CLASS "B", 3500 PSI UNLESS OTHERWISE NOTED. ALL EXPOSED CONCRETE EDGES SHALL BE CHAMFERED 3/4". MATERIALS, PLACEMENT, AND CURING SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS. REINFORCING STEEL SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS.
7. EXPANSION JOINTS & SEALANT SHALL CONFORM TO MDOT SPECIFICATIONS. IN LOCATIONS WHERE NEW CONCRETE IS CAST AGAINST EXISTNG CONCRETE OF MORE THAN 28 DAYS OF AGE, AN EXPANSION JOINT IS REQUIRED.

EARTHWORK

1. VOIDS CREATED BY THE REMOVAL OF POSTS, CONCRETE ANCHORS, FOOTINGS, ETC. SHALL BE BACKFILLED AND TAMPED IN ACCORDANCE WITH SECTION 203 OF THE SPECIFICATIONS.
2. EXCAVATION FOR STRUCTURES SHALL BE ABSORBED IN THE APPLICABLE PAY ITEM.
3. 30% SHRINKAGE FACTOR USED IN THE EARTHWORK CALCULATIONS IS FOR DESIGN ESTIMATING PURPOSES ONLY.
4. VEGETATIVE MATERIAL WILL BE REMOVED PRIOR TO PLACEMENT OF GRANULAR MATERIAL. COST TO BE ABSORBED IN OTHER ITEMS.
5. PAY ITEM 203-A,"UNCLASSIFIED EXCAVATION - PER CUBIC YARD" SHALL CONSIST OF EXCAVATED MATERIALS THAT ARE SUITABLE FOR PLACEMENT IN OTHER FURNISHED PORTIONS OF THE PROJECT. PAYMENT FOR UNCLASSIFIED EXCAVATION SHALL INCLUDE THE EXCAVATION OF THE MATERIAL AND THE PROPER PLACEMENT OF THE MATERIAL. MATERIALS SUITABLE FOR PLACEMENT IN OTHER AREAS OF THE PROJECT SHALL BE STOCKPILED UNTIL THE MATERIAL IS NEEDED. SUITABLE MATERIALS THAT CAN BE USED IN OTHER AREAS OF THE PROJECT WILL NOT BE REMOVED AS EXCESS EXCAVATION. BORROW EXCAVATION WILL NOT BE ACCEPTED WHEN SUITABLE UNCLASSIFIED EXCAVATION IS AVAILABLE.
6. TOPSOIL STRIPPING, STOCKPILING, AND PLACING WILL BE PAID UNDER UNCLASSIFIED EXCAVATION AT THE TIME OF PLACEMENT.
7. PAY ITEM 203-G, "EXCESS EXCAVATION - PER CUBIC YARD" SHALL BE PAID FOR EXCAVATED MATERIAL THAT IS NOT SUITABLE FOR REUSE ON THE PROJECT SITE AND MUST BE REMOVED FROM THE PROJECT SITE. UNDERCUT AND EXCAVATION AT OR BELOW THE PLANNED EXCAVATION LIMIT THAT ARE UNSUITABLE FOR PLACEMENT WITHIN THE PROJECT SITE SHALL ALSO BE MEASURED AND PAID FOR AS EXCESS EXCAVATION.
8. WHERE DIRECTED TO PLACE RIP-RAP, THE RIP-RAP SHALL BE PLACED 18" DEEP AND THE TOP OF THE RIP-RAP SHALL BE FLUSH WITH THE SURROUNDING GRADE LEVEL. ALL COST ASSOCIATED WITH THE INSTALLATION OF THE RIP-RAP INCLUDING EXCAVATION AND BACKFILL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR RIP-RAP.
9. BACK OF CURBS SHALL BE BACKFILLED TO TOP OF CURB ELEVATIONS.
10. CONTRACTOR REQUIRED TO SEPARATE AND STOCKPILE RE-USABLE MATERIAL.

DRAINAGE & UTILITIES

1. TOE WALLS ARE REQUIRED AT ALL UPSTREAM AND DOWNSTREAM FLARED END SECTIONS, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
2. ALL PIPE JOINTS ARE TO BE WRAPPED IN TYPE V GEOTEXTILE FABRIC, 36" WIDTH. THE COST OF THE FABRIC SHALL BE ABSORBED IN THE UNIT PRICE BID FOR THE PIPE.
3. FLARED END SECTIONS (ALL SIZES) MAY BE FURNISHED WITH EITHER BELL & SPIGOT OR TONGUE & GROOVE JOINTS. PAYMENT SHALL BE MADE UNDER PAY ITEM ASSOCIATED W/PIPE SIZE.
4. EXISTING UTILITY APPURTENANCES SHALL BE ADJUSTED TO FINISHED GRADE IN ROADWAY AREAS OR ABOVE FINISHED GRADE OUTSIDE ROADWAY AREAS AS DIRECTED BY THE ENGINEER. PAYMENT SHALL BE MADE UNDER THE APPLICABLE UTILITY ADJUSTMENT PAY ITEM AND SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NEEDED TO COMPLETE THE ADJUSTMENT.
5. PRIVATE UTILITY APPURTENANCE ADJUSTMENTS WILL BE DONE BY OTHERS. CONTRACTOR SHALL COORDINATE ADJUSTMENTS WITH THE PRIVATE UTILITY COMPANIES.
6. AT ALL LOCATIONS WHERE PIPE AND/OR FITTINGS COME IN CONTACT WITH CONCRETE, THE TWO MATERIALS SHALL BE SEPARATED BY 1/8" SHEET RUBBER.
7. EXISTING SANITARY SEWER MANHOLE TOPS, WATER VALVES/BOXES, METERS, OR OTHER RELATED APPURTENANCES SHALL BE ADJUSTED TO FINISH GRADE BY CONTRACTOR. PAYMENT PER APPURTENANCE SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIAL NEEDED FOR THE ADJUSTMENT.
8. ALL VARIES DIMENSIONS DEPEND DIRECTLY ON PIPE SIZE, THICKNESS AND DEPTH OF PIPE.
9. PIPE LENGTHS ARE MEASURED FROM INSIDE FACE OF BOX TO INSIDE FACE OF BOX.
10. ALL PIPES SHALL BE FLUSH WITH THE INTERIOR FACE OF THE BOX.
11. CONTRACTOR SHALL RECORD VIDEO ALL NEW STORM DRAIN LINES 42" AND SMALLER AND ALL NEW ARCH STORM DRAIN LINES 65"X40" AND SMALLER."IF REQUIRED BY THE ENGINEER." ALL PIPES SHALL BE FLUSHED CLEAN OF DEBRIS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH VIDEOTAPING. ADDITIONAL VIDEO COVERAGE OF SUSPECT DISCREPANT AREAS SHALL BE PROVIDED THROUGH THE USE OF ROTATING CAMERA. DISCREPANCIES INCLUDE BUT ARE NOT LIMITED TO: PIPE JOINT SEPARATIONS OR ROLLED GASKETS, CRACKS OR BREAKS IN THE WALL OF THE PIPE, DEFORMATION OF THE PIPE WALL, PENETRATION OF THE WALL BY VEGETATION OF FOREIGN OBJECTS, OR EXCESSIVE DEBRIS. CONTRACTOR SHALL PROVIDE COLOR VIDEO INCLUDING LOCATION, DATE AND TIME, REFERENCE END POINTS OF PIPE INSPECTED AS IDENTIFIED ON DRAWINGS, NOTING THE DIRECTION OF INSPECTION. CONTRACTOR SHALL PROVIDE A WRITTEN REPORT IDENTIFYING LOCATION, LENGTH, SIZE OF ALL PIPE INSPECTED. THE REPORT SHALL IDENTIFY ALL AREAS WHERE THE INTEGRITY OF THE PIPE SYSTEM IS SUSPECT.
12. PICK-UP HOLES WILL NOT BE ALLOWED IN ANY PIPE. CONTRACTOR SHALL POUR CONCRETE INVERTS IN ALL DRAINAGE STRUCTURES AS DIRECTED BY THE ENGINEER OR HIS AUTHORIZED REPRESENTATIVE. (COST ABSORBED IN 907-601-A, CLASS B STRUCTURAL CONCRETE.
13. NO IMPROVEMENT SHALL INTERFERE OR BLOCK DRAINAGE.
14. EXISTING FIRE HYDRANTS SHALL BE ADJUSTED AS REQUIRED TO PROVIDE 18" OF CLEARANCE BETWEEN THE NEW GRADE LEVEL AND THE BOTTOM OF THE PUMPER NOZZLE. ADJUSTMENT OR RELOCATION OF FIRE HYDRANTS SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NEEDED AND SHALL BE PAID UNDER 907-265-F, "FIRE HYDRANT ASSEMBLY".
15. WATER MAINS FOUND TO CONFLICT WITH THE NEW CONSTRUCTION SHALL BE REROUTED ABOVE OR BELOW THE CONFLICT. REROUTING WATER MAIN, DISINFECTION, AND TESTING SHALL COMPLY WITH THE STATE OF MISSISSIPPI HEALTH DEPARTMENT REGULATIONS. REROUTING WATER MAINS SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY INCLUDING, BUT NOT LIMITED TO: PIPE FITTINGS, RESTRAINTS, EXCAVATION, BACKFILL, CONCRETE, GASKETS, HARDWARE, DISINFECTION, TESTING, AND REPORTING.
16. WATER AND SEWER SERVICES FOUND TO CONFLICT WITH THE NEW CONSTRUCTION SHALL BE REROUTED AS APPROVED BY THE ENGINEER. REROUTING WATER SERVICES, DISINFECTION, AND TESTING SHALL COMPLY WITH THE STATE OF MISSISSIPPI HEALTH DEPARTMENT REGULATIONS. REROUTING SERVICES SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY INCLUDING, BUT NOT LIMITED TO: PIPE FITTINGS, RESTRAINTS, EXCAVATION, BACKFILL, CONCRETE, GASKETS, HARDWARE, CLEAN OUTS, METER BOXES, DISINFECTION, TESTING, AND REPORTING.
17. ADJUSTMENT OF UTILITY APPURTENANCE, 613-D WILL BE USED FOR PAYMENT AS AUTHORIZED BY THE ENGINEER FOR ANY UTILITY APPURTENANCE NEEDING ADJUSTING TO FINISHED GRADE FOR WHICH A SEPARATE PAY ITEM IS NOT LISTED.
18. TOP ELEVATIONS OF INLETS AND BOXES ARE APPROXIMATE. FINAL GRADES SHALL BE FIELD DETERMINED.
19. PRE-CAST DRAINAGE STRUCTURES SHALL NOT BE ALLOWED FOR THIS PROJECT. ALL DRAINAGE STRUCTURES, INCLUDING INLETS AND JUNCTION BOXES SHALL BE CAST-IN-PLACE ON SITE OR PRE-FORMED PLASTIC.
20. PAYMENT FOR STEPS AND INSTALLATION OF STEPS IN DRAINAGE STRUCTURES SHALL BE INCLUDED IN PAY ITEM NO. 907-601-A. STEPS ARE REQUIRED IN ANY BOX DEEPER THAN 3'.
21. REPAIR TO EXISTING DRAINAGE STRUCTURES TO TIE IN NEW DRAINAGE LINES SHALL BE ABSORBED IN THE COST OF THE NEW PIPE.
22. RECONNECTING EXISTING PIPES TO NEW UTILITY STRUCTURES SHALL BE ABSORBED IN 907-601-A. THIS INCLUDES ANY DISCOVERED PIPES THAT NEED TO BE TIED IN.
23. EXISTING PRIVATE DRAIN LINES SHALL BE TIED INTO THE NEW SUBSURFACE DRAINAGE SYSTEM. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL EXISTING PRIVATE DRAIN LINES. (COST ABSORBED IN THE PRICE BID FOR PIPE OR STRUCTURAL CONCRETE).
24. THE COST OF CONCRETE COLLARS WILL BE IN PAY ITEMS, COLLARS WITH REINFORCEMENTS WILL BE REQUIRED WHERE TYING NEW DRAINAGE PIPE TO EXISTING DRAINAGE PIPE, OR CONNECTION OF END TREATMENTS TO CUT ENDS OF PIPES, SUCH AS FLARED END SECTIONS.
25. THE AREA AROUND A NEW DRAINAGE INLET SHALL HAVE SOD PLACED 18" AROUND ALL SIDES OF IT.

DEWATERING NOTES

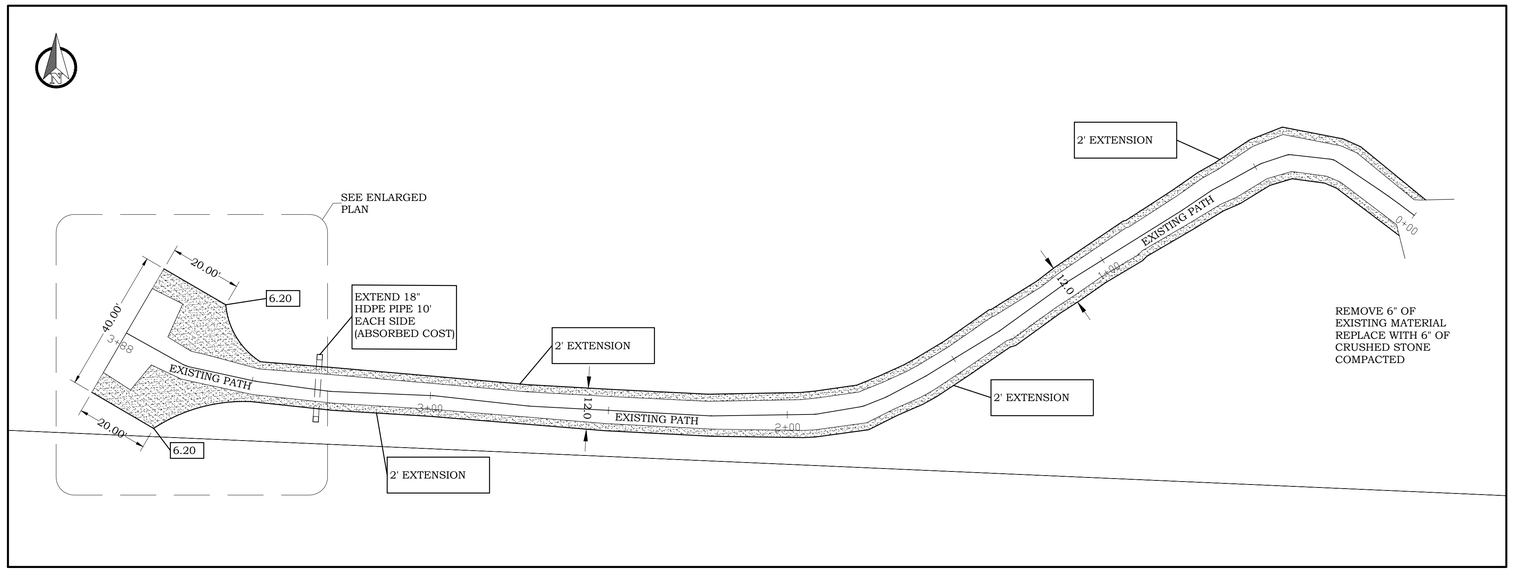
1. UTILIZE APPROPRIATE DEWATERING SYSTEMS AND TECHNIQUES TO MAINTAIN THE EXCAVATED AREA SUFFICIENTLY DRY FROM GROUNDWATER AND/ OR SURFACE RUNOFF SO AS NOT TO ADVERSELY AFFECT CONSTRUCTION PROCEDURES OR CAUSE EXCESSIVE DISTURBANCE OF UNDERLYING NATURAL GROUND.
2. PROVIDE AND STORE AUXILIARY DEWATERING EQUIPMENT ON SITE IN THE EVENT OF BREAKDOWN. PROVIDE NON-WOVEN FILTER FABRIC WHERE REQUIRED FOR UNDERDRAIN SYSTEM. THE NON-WOVEN FILTER FABRIC SHALL BE SPECIFICALLY DESIGNED FOR SUBSURFACE DRAINAGE APPLICATIONS.
3. WATER FROM TRENCHES AND EXCAVATIONS SHALL BE DISPOSED OF IN A MANNER AS TO AVOID PUBLIC NUISANCE, INJURY TO PUBLIC HEALTH OR THE ENVIRONMENT, OR DAMAGES TO PUBLIC OR PRIVATE PROPERTY, OR DAMAGE TO THE WORK COMPLETED OR IN PROGRESS. DO NOT DISCHARGE WATER INTO ANY SANITARY SEWER SYSTEM. SILTATION BARRIERS SHALL BE UTILIZED AS NECESSARY.
4. WATER FROM TRENCHES AND EXCAVATIONS SHALL NOT BE DISCHARGED DIRECTLY TO STORM DRAIN SYSTEM. PROPER TREATMENT TO A SEDIMENTATION AREA IS TO TAKE PLACE PRIOR TO DISCHARGE TO ANY DRAINAGE SYSTEMS.
5. THE CONTRACTOR SHALL REPAIR ANY DAMAGE RESULTING FROM THE FAILURE OF THE DEWATERING OPERATIONS OR FROM FAILURE TO MAINTAIN ALL THE AREAS OF WORK IN SUITABLE DRY CONDITION.

PERMANENT & TEMPORARY TRAFFIC CONTROL

1. ALL TRAFFIC CONTROL SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD). THE OWNER WILL HAVE THE AUTHORITY TO SUSPEND ALL WORK AND/OR WITHHOLD PAYMENTS FOR FAILURE OF THE CONTRACTOR TO MAINTAIN/FOLLOW PROPER TRAFFIC CONTROL.
2. ALL TEMPORARY TRAFFIC CONTROL DEVICES ON THIS PROJECT SHALL COMPLY WITH PART VI OF THE MUTCD (LATEST EDITION).
3. THE LOCATION AND SPACING OF SIGNS AS SHOWN ON THE TRAFFIC CONTROL PLANS ARE APPROXIMATE AND MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
4. ALL SIGNS THAT CONFLICT WITH THE CONSTRUCTION OF THIS PROJECT SHALL BE COVERED/REMOVED AND RESET BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER. (THIS IS NOT A SEPARATE PAY ITEM). (ALL ASSOCIATED COST SHALL BE ABSORBED IN MAINTENANCE OF TRAFFIC.)
5. WORK ON STRUCTURES FOR THIS PROJECT REQUIRES EXCAVATION IN THE IMMEDIATE VICINITY OF TRAFFIC AND ADJACENT PROPERTIES. THEREFORE, THE RISK OF A FAILURE OCCURRING DURING THE EXCAVATION REQUIRES THAT EXTREME CAUTION BE EXERCISED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE WHAT BRACING, SHORING, OR GROUND SUPPORT SYSTEM THAT IS DEEMED NECESSARY TO PREVENT A FAILURE AND PROTECT THE PERSONS WORKING NEAR THE EXCAVATION, THE PUBLIC THAT MAY BE ABOVE THE EXCAVATION, OR ANY STRUCTURE ADJACENT TO THE EXCAVATION. ALL COST FOR ANY PROTECTIVE MEASURES INCLUDING THE MATERIALS AND LABOR FOR DESIGNING, DRAWING, AND CONSTRUCTING THE FACILITY SHALL BE ABSORBED IN MAINTENANCE OF TRAFFIC.
6. REMOVAL OF RAISED PAVEMENT MARKERS. SHALL BE ABSORBED IN MAINTENANCE OF TRAFFIC.
7. EXISTING BLUE RAISED PAVEMENT MARKERS INDICATING THE LOCATION OF FIRE HYDRANTS SHALL BE REINSTALLED OR REPLACED ONCE FINAL ROADWAY SURFACE IS INSTALLED. ALL ASSOCIATED COSTS SHALL BE ABSORBED IN MAINTENANCE OF TRAFFIC.
8. REMOVAL OF OBJECT MARKERS SHALL BE ABSORBED IN MAINTENANCE OF TRAFFIC.
9. TEMPORARY STRIPING SHALL CONFORM TO FINISHED STRIPE SPECIFICATIONS FOR ALIGNMENT AND STRAIGHTNESS.
10. ORANGE FLUORESCENT SHEETING SHALL BE USED ON ALL CONSTRUCTION AND TRAFFIC CONTROL SIGNS EXCEPT FOR THOSE DESIGNATED IN PLANS TO BE BLACK LEGENDS AND BORDER ON WHITE BACKGROUND.
11. ALL POST LENGTHS FOR SIGNS SHALL BE VERIFIED IN THE FIELD PRIOR TO FABRICATION.
12. ALL PLASTIC DRUMS SHALL HAVE A BALLASTING COLLAR MADE FROM RECYCLED TRUCK TIRES OR OTHER SUITABLE MATERIAL.
13. REMOVAL OF OBSOLETE SIGNAGE OR REMOVAL OF OLD SIGNS TO BE REPLACED SHALL BE COST ABSORBED IN THE COST OF MAINTENANCE OF TRAFFIC.
14. ALL RAISED ROADSIDE APPURTENANCES TO BE PLACED A MINIMUM OF 2' BEHIND FACE OF CURB UNLESS OTHERWISE SPECIFIED ON PLANS.
15. ACCESS TO ALL BUSINESSES AND RESIDENCES WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED BY THE CONTRACTOR AT ALL TIMES. (COST TO BE ABSORBED IN PAY ITEM NO. 618-A, MAINTENANCE OF TRAFFIC).

EROSION CONTROL

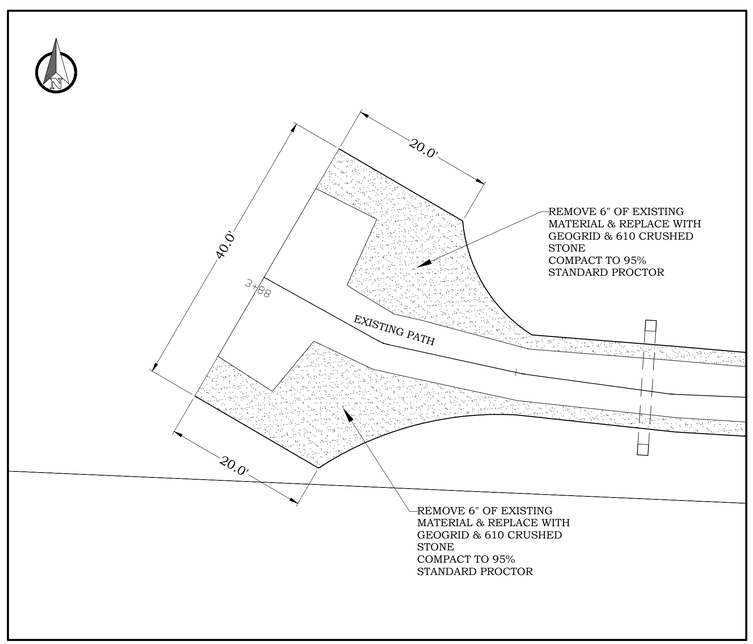
1. THE EROSION CONTROL DEVICES REFERENCED IN THESE PLANS ARE A MINIMUM REQUIREMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT SILT DOES NOT LEAVE THE RIGHT OF WAY OR CONTAMINATE WATERS OF THE U. S. DURING CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT AN EROSION CONTROL PLAN PRIOR TO COMMENCEMENT OF WORK AND MAINTAIN THE PLAN DURING CONSTRUCTION.
2. TEMPORARY SEEDING IS REQUIRED FOR SOILS THAT REMAIN STOCKPILED OR ARE NOT SCHEDULED FOR ANY ACTIVITY FOR MORE THAN THIRTY (30) CALENDAR DAYS. AREAS SHALL BE SEEDED WITHIN SEVEN (7) DAYS OF DISTURBANCE. TEMPORARY SEEDING SHALL BE APPLIED IN ACCORDANCE WITH THE PLANTING SCHEDULE AND THE RATE OF APPLICATION/PLANTING PREPARATION OUTLINED IN THE MDEQ SEEDING CHART.
3. THE CONTRACTOR SHALL BE REQUIRED TO FURNISH ALL MATERIALS AND PERFORM ALL WORK FOR THE PROPER INSTALLATION, MAINTENANCE AND REMOVAL OF TEMPORARY EROSION CONTROL MEASURE NECESSARY TO CONTROL SILTATION. IF THERE IS NO SEPARATE PAY ITEM FOR TEMPORARY EROSION CONTROL MEASURES, THE COST OF TEMPORARY EROSION CONTROL SHALL BE ABSORBED IN OTHER ITEMS BID.
4. THE OWNER HAS OBTAINED A STORM WATER PERMIT FOR CONSTRUCTION THROUGH THE MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY. THE CONTRACTOR IS REQUIRED TO SIGN THE LARGE CONSTRUCTION NOTICE OF INTENT (LCNOI) AND COMPLY WITH THE REQUIREMENTS OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND PERMIT THROUGHOUT CONSTRUCTION. A COPY OF THE SWPPP AND PERMIT ARE AVAILABLE UPON REQUEST TO THE ENGINEER DURING BIDDING. THE CONTRACTOR WILL BE GIVEN A COPY OF THE SWPPP AND PERMIT AT THE PRECONSTRUCTION CONFERENCE. THE SWPPP AND PERMIT SHALL REMAIN ON-SITE AND BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES DURING THE ENTIRE CONSTRUCTION DURATION.
5. SILT FENCES SHALL BE INSTALLED AROUND ALL STOCKPILED MATERIALS.
6. ALL DISTURBED AREAS SHALL BE SEEDED OR SODDED IMMEDIATELY ONCE FINISHED GRADING IS COMPLETE IN AN AREA. SEEDING AND SODDING LOCATIONS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER TO MATCH EXISTING ADJACENT CONDITIONS.
7. NO ADDITIONAL PAYMENT WILL BE MADE FOR WATERING. WATERING SHALL BE DONE IN ACCORDANCE WITH THE PLANS AND SPECIFICATION. THE COST SHALL BE ABSORBED IN GRASSING. THE WATERING SCHEDULE SHOWN ON THE VEGETATION SCHEDULE SHALL BE ADHERED TO UNLESS APPROVED OTHERWISE BY THE ENGINEER OR AS DIRECTED OTHERWISE BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE VEGETATION THROUGHOUT THE LIFE OF THE PROJECT AND THROUGH THE MAINTENANCE PERIOD. THE CONTRACTOR SHALL NOT BE PAID FOR ANY ADDITIONAL WATERING REQUIRED ABOVE AND BEYOND WHAT IS REQUIRED IN THE VEGETATION SCHEDULE.
8. THE PLACEMENT OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPS) SHALL BE IN ACCORDANCE WITH THE MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY'S DESIGN MANUAL FOR THE PLANNING AND CONTROL OF EROSION, SEDIMENT AND STORMWATER.
9. NATURAL VEGETATION SHALL BE MAINTAINED AND PROTECTED WHEREVER POSSIBLE.
10. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EROSION CONTROLS THROUGHOUT THE DURATION OF THE PROJECT.
11. TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL NOT BE REMOVED UNTIL PERMANENT EROSION CONTROLS (SUCH AS GRASSING) ARE ESTABLISHED.
12. ALL EQUIPMENT REPAIR AND MAINTENANCE SHALL BE DONE OFFSITE.
13. RECEPTACLES SHALL BE PROVIDED TO PROPERLY DISPOSE OF ALL TRASH AND WASTE. ALL CONSTRUCTION DEBRIS SHALL BE PICKED UP AT THE END OF EACH DAY AND SHALL BE REMOVED COMPLETELY FROM THE SITE AT THE END OF THE PROJECT



SITE PLAN

0' 10' 20' 40' 60'

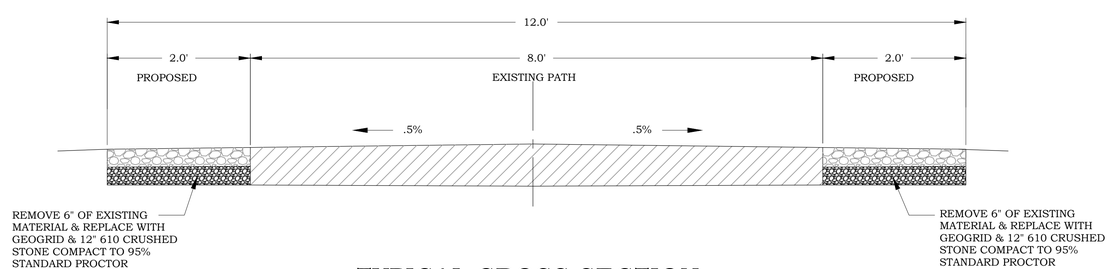
SCALE: 1:20'



ENLARGED PLAN

0' 5' 10' 20' 30'

SCALE: 1:10'



TYPICAL CROSS SECTION

N.T.S.

CHINICHE
ENGINEERING & SURVEYING
ESTABLISHED 1971

407 Hwy. 90
Bay St. Louis, MS, 39520

Office - (228) 467-6755
Email - jason@jjc-eng.com
Website - www.jjc-eng.com

OWNER INFORMATION

KAYAK LAUNCH
BAYOU DRIVE
BAY ST. LOUIS, MISSISSIPPI 39520

SHEET TITLE

KAYAK LAUNCH IMPROVEMENTS
SITE AND DETAILS

PRELIMINARY FOR REVIEW!

MARK	DATE	DESCRIPTION
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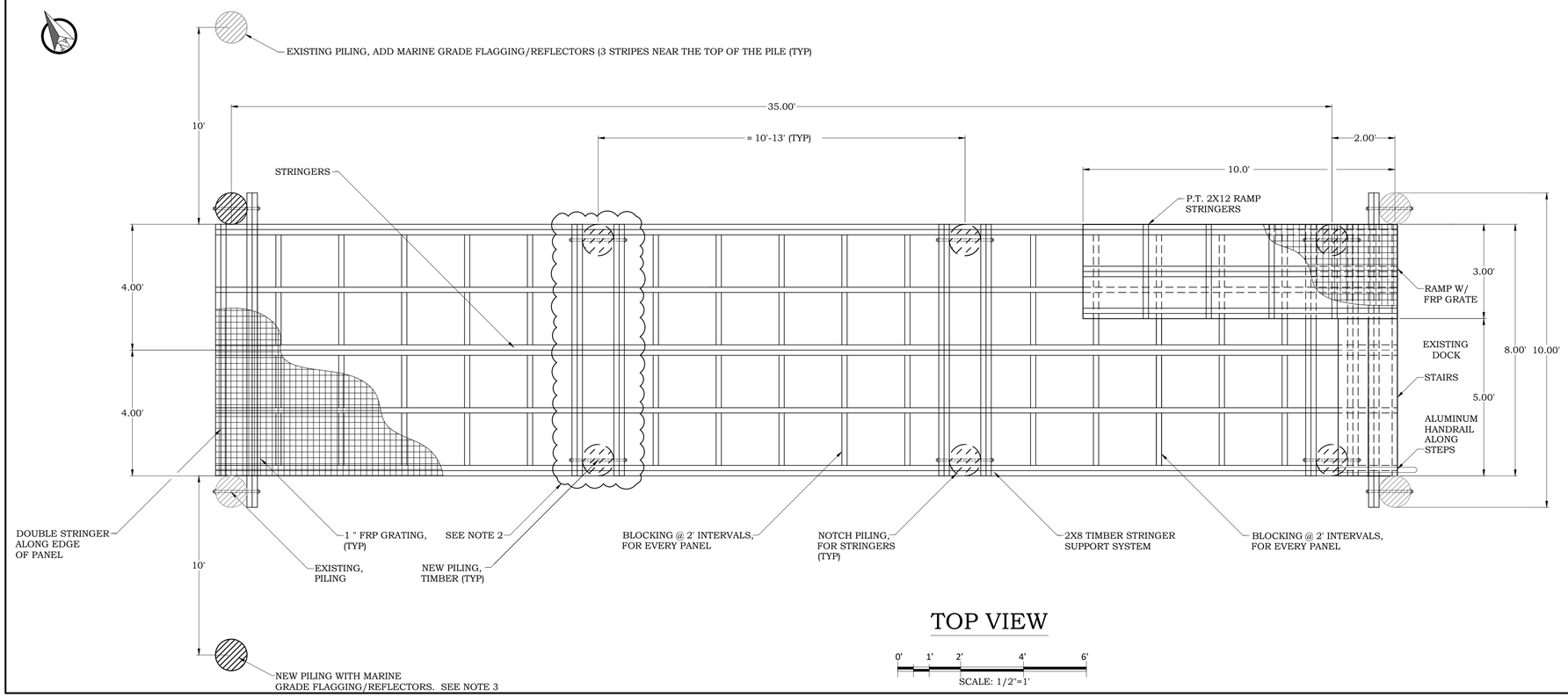
ISSUE:	
PROJECT NO:	17-057
DATE:	9/2/2022
DRAWN BY:	JN
CHECKED BY:	JPC
SCALE:	NOTED

SHEET NUMBER
3/5

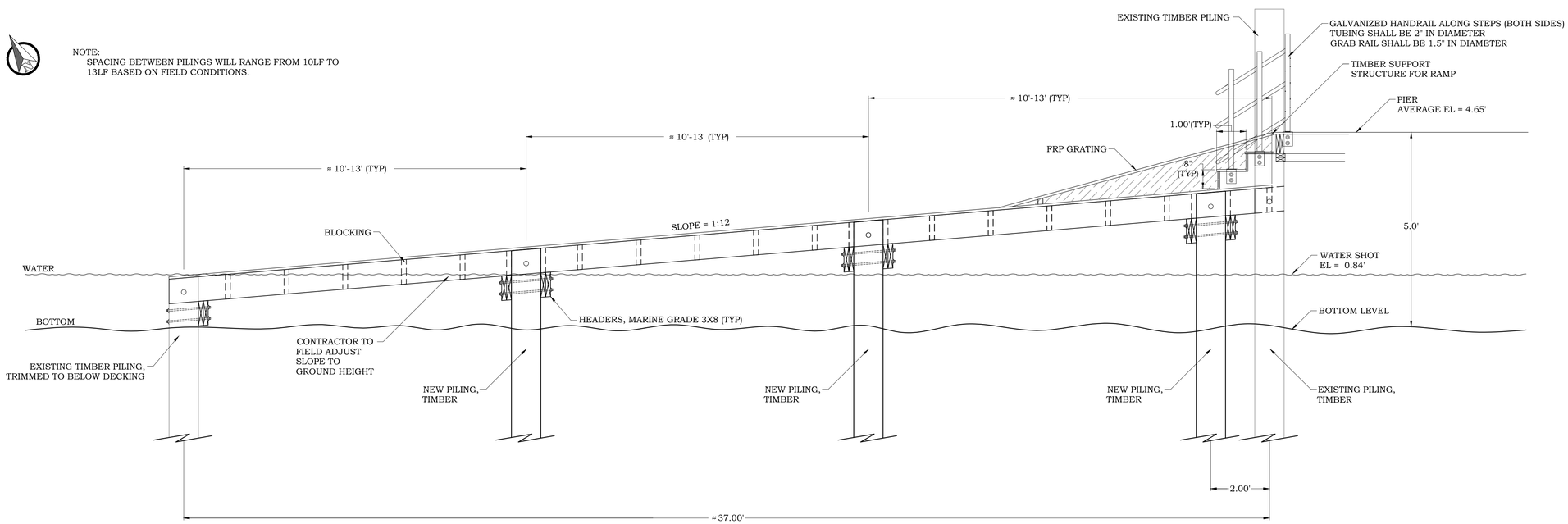
SHEET DESIGNATION
C-100



TOP VIEW

NOTE:

1. FRP GRATING COMES IN LARGE PANEL SIZES. CONTRACTOR SHALL CUT FRP GRATING TO NECESSARY LENGTH BASED ON FINAL SLOPE AND PIER DIMENSIONS FROM FIELD CONDITIONS.
2. EDGES OF FRP PANELS SHALL FALL BETWEEN THE PILINGS. THEREFORE PANEL LENGTH SHALL BE FIELD ADJUSTED BY CONTRACTOR.
3. PILING SHALL MATCH EXISTING PILING HEIGHT.
4. CONTRACTOR SHALL TRIM AND NOTCH RAMP AND LAUNCH FRP GRATING TO ALLOW FOR SMOOTH TRANSITION.
5. RAMP BLOCKING SHALL BE SPACED 2' ON CENTERS
6. TIMBER PILING EMBEDMENT DEPTH SHALL BE A MINIMUM OF 25'
7. FRP PANEL FASTENERS SHALL BE HDGV.
8. TIMBER BOLTS SHALL BE USED AT ALL EXPOSED TIMBER STRUCTURE CONNECTIONS.
9. THE BOLTS USED FOR THE STRINGERS SHALL BE 5/8" DIAMETER.
10. THE BOLTS USED FOR THE HEADERS SHALL BE 3/4" DIAMETER.



SIDE VIEW

CHINICHE
ENGINEERING & SURVEYING
ESTABLISHED 1971
407 Hwy. 90
Bay St. Louis, MS, 39520
Office - (228) 467-6755
Email - jason@jjc-eng.com
Website - www.jjc-eng.com

OWNER INFORMATION

KAYAK LAUNCH
BAYOU DRIVE
BAY ST. LOUIS, MISSISSIPPI 39520

SHEET TITLE

KAYAK LAUNCH IMPROVEMENTS
PATH

PRELIMINARY FOR REVIEW!

MARK	DATE	DESCRIPTION
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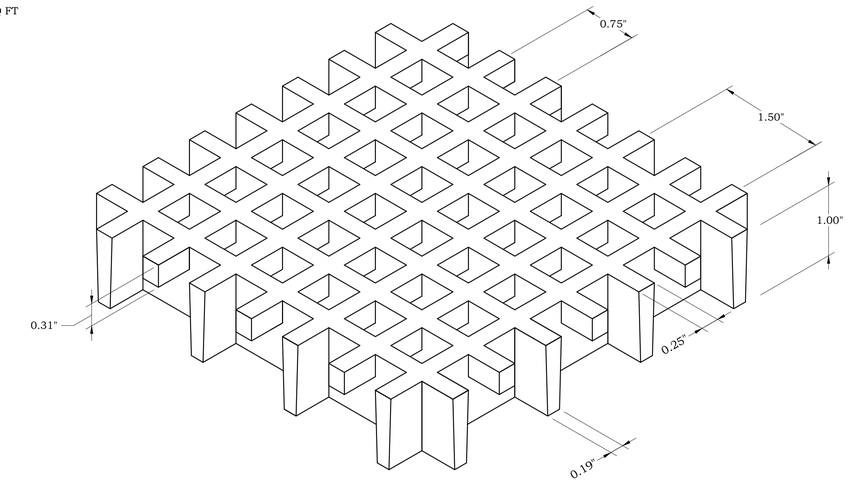
ISSUE:	
PROJECT NO:	17-057
DATE:	9/2/2022
DRAWN BY:	JN
CHECKED BY:	JPC
SCALE:	NOTED

SHEET NUMBER
4/5

SHEET DESIGNATION
C-200

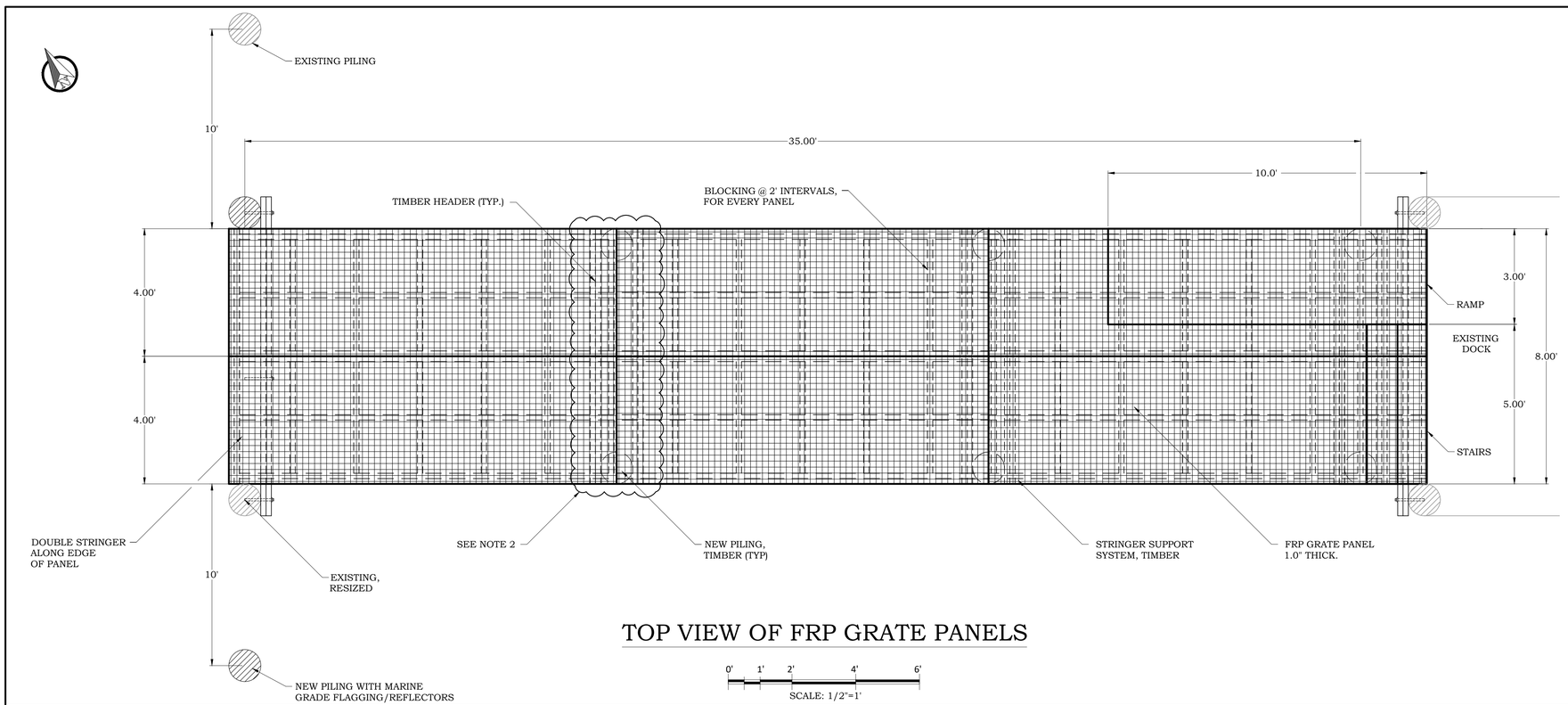
HEIGHT: 1.0" MESH SIZE: .74 X .74" X .50 /1.5" X 1.5"
-STANDARD PANEL SIZE: 4 FT X 13.13 FT
-OPEN AREA: 44%
-WEIGHT: 3 LB/SQ FT



FRP GRATE PANEL DETAIL

0' 1' 2' 3'
SCALE: 1"=1'

NOTE:
1. FRP GRATING COMES IN LARGE PANEL SIZES. CONTRACTOR SHALL CUT FRP GRATING TO NECESSARY DIMENSIONS BASED ON FINAL SLOPE AND PIER DIMENSIONS FROM FIELD CONDITIONS.
2. EDGES OF FRP PANELS SHALL FALL BETWEEN THE PILINGS. THEREFORE PANEL LENGTH SHALL BE FIELD ADJUSTED BY CONTRACTOR.
3. FRP PANELS SHALL BE SECURED TO TIMBER SUPPORT STRUCTURE WITH CLIPS RECOMMENDED BY FRP PANEL MANUFACTURER.



TOP VIEW OF FRP GRATE PANELS

0' 1' 2' 4' 6'
SCALE: 1/2"=1'

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BAYOU DRIVE
BAY ST. LOUIS, MISSISSIPPI 39520

SHEET TITLE

KAYAK LAUNCH IMPROVEMENTS
TOP VIEW OF FRP GRATE PANELS AND
FRP GRATE PANEL DETAIL

PRELIMINARY FOR REVIEW!

MARK	DATE	DESCRIPTION
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ISSUE:	
PROJECT NO:	17-057
DATE:	9/2/2022
DRAWN BY:	JN
CHECKED BY:	JPC
SCALE:	NOTED

SHEET NUMBER
5/5

SHEET DESIGNATION
C-300