JOINT
PUBLIC NOTICE

CHARLESTON DISTRICT, CORPS OF ENGINEERS
69A Hagood Avenue
Charleston, South Carolina 29403-5107
and
THE S. C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
Office of Environmental Quality Control
Water Quality Certification and Wetlands Programs Section
2600 Bull Street
Columbia, South Carolina 29201

REGULATORY DIVISION — MARCH 14, 2003
Refer to: P/N #2003-1D-075-W

Pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403), Sections 401 and 404 of the Clean Water Act (33 U.S.C. 1341), and the S.C. Construction in Navigable Waters Permit Program (R. 19-450, et. Seq., 1976 S.C. Code of Laws, as amended), an application has been submitted to the Department of the Army and the State of South Carolina by

CITY OF COLUMBIA
c/o John J. Dooley, Jr.
P.O. BOX 147
COLUMBIA, SC 29217

for a permit to install an effluent discharge pipe and temporary construction access cofferdams in the

CONGAREE RIVER

at a location immediately upstream of the Interstate I-77 bridge crossing in Lexington and Richland Counties, South Carolina.

In order to give all interested parties an opportunity to express their views

N O T I C E

is hereby given that written statements regarding the proposed work will be received by both of the above mentioned offices until

12 O'CLOCK NOON, MONDAY, APRIL 14, 2003

from those interested in the activity and whose interests may be affected by the proposed work.

The proposed work consists of installing an effluent diffuser discharge pipes and constructing a temporary construction access cofferdam. Proposed is the installation of twin 48" ductile iron pipes a minimum of 2' below the river bottom. The effluent diffuser will consist of 50 Tideflex flexible rubber valves installed 2'-3' below the low water elevation of the river. To facilitate the installation of the diffuser system, the applicant proposes to construct temporary sectional sheet pile cofferdams. Construction will begin on the Richland County side of the river and proceed to the Lexington County side. The cofferdams will be constructed in at least 3 sections such that no more than 1/3 of the river will be impeded at any one time. All materials placed in the river will be removed in their entirety upon completing the installation of the pipes. To insure that safe navigation is maintained during the construction phase, floating lighted buoys will mark the location of the proposed

cofferdams and the location of the deeper waterside of the river. Permanent signs will be erected on the river's banks to warn boaters not to anchor in this area. Four permanent lighted floating buoys will also installed to delineate the diffuser area. The purpose of this work is to replace the existing bank discharge located on the Richland County side of the river at the City of Columbia Metro Wastewater Treatment Plant. This effluent discharge is presently permitted by NPDES Permit #SC0020940 and the South Carolina Department of Health and Environmental Control (SCDHEC) is requiring the applicant to improve the mixing of the effluent by installing the proposed diffuser system.

NOTE: Plans depicting the work described in this notice are available and will be provided, upon receipt of a written request, to anyone that is interested in obtaining a copy of the plans for the specific project. The request must identify the project of interest by public notice number and a self-addressed stamped envelope must also be provided for mailing the drawings to you. Your request for drawings should be addressed to the

U.S. Army Corps of Engineers
ATTN: REGULATORY DIVISION
69A Hagood Avenue
Charleston, South Carolina 29403-5107

The District Engineer has concluded that the discharges associated with this project, both direct and indirect, should be reviewed by the South Carolina Department of Health and Environmental Control in accordance with provisions of Section 401 of the Clean Water Act. As such, this notice constitutes a request, on behalf of the applicant, for certification that this project will comply with applicable effluent limitations and water quality standards (Section 401 of the Clean Water Act). The District Engineer will not process this application to a conclusion until such certification is received. This activity may also require evaluation for compliance with the S. C. Construction in Navigable Waters Permit Program. State review, permitting and certification is conducted by the S. C. Department of Health and Environmental Control. The applicant is hereby advised that supplemental information may be required by the State to facilitate the review. Persons wishing to comment or object to State certification or the navigable waters permit must submit all comments in writing to the S. C. Department of Health and Environmental Control at the above address within thirty (30) days of the date of this notice.

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. Implementation of the proposed project would impact 0.09 acres of freshwater lake habitat associated with downstream estuarine substrates and emergent wetlands utilized by various life stages of species comprising the red drum, shrimp, and snapper-grouper management complexes. Our initial determination is that the proposed action would not have a substantial individual or cumulative adverse impact on EFH or fisheries managed by the South Atlantic Fishery Management Council and the National Marine Fisheries Service (NMFS). Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NMFS.

The District Engineer has consulted the most recently available information and has determined that the project will have no effect on any Federally endangered, threatened, or proposed species and will not result in the destruction or adverse modification of designated or proposed critical habitat. This public notice serves as a request to the U.S. Fish and Wildlife Service and the National Marine Fisheries Service for any additional information they may have on whether any listed or proposed endangered or threatened species or designated or proposed critical habitat may be present in the area which would be affected by the activity, pursuant to Section 7(c) of the Endangered Species Act of 1973 (as amended).

The District Engineer has consulted the latest published version of the National Register of Historic Places for the presence or absence of registered properties, or properties listed as being eligible for inclusion therein, and this worksite is not included as a registered property or property listed as being eligible for inclusion

in the Register. Consultation of the National Register constitutes the extent of cultural resource investigations by the District Engineer, and he is otherwise unaware of the presence of such resources. Presently unknown archaeological, scientific, prehistorical, or historical data may be lost or destroyed by the work to be accomplished under the requested permit.

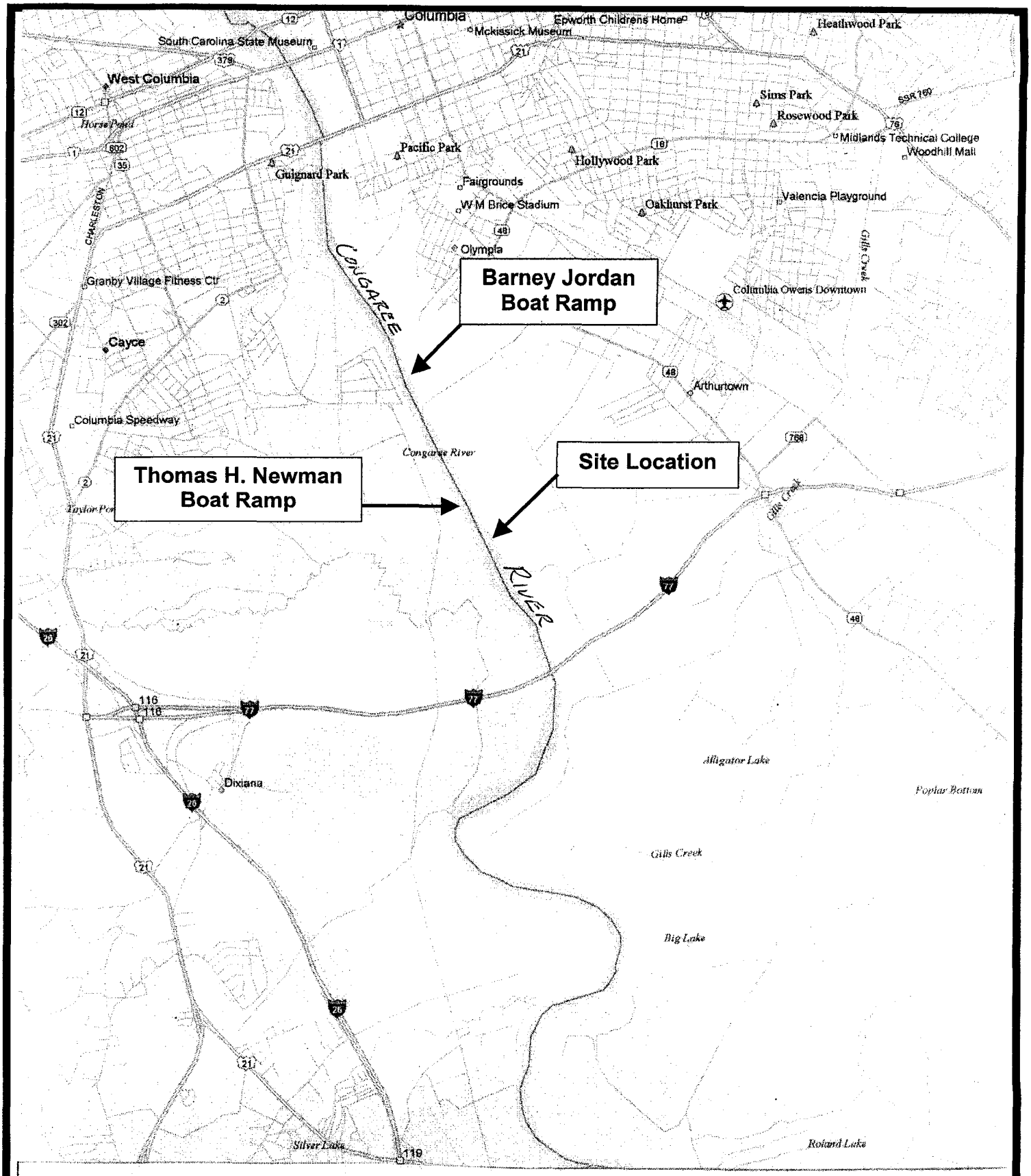
Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for a public hearing shall state, with particularity, the reasons for holding a public hearing.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the activity on the public interest and will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency (EPA), under authority of Section 404(b) of the Clean Water Act and, as appropriate, the criteria established under authority of Section 102 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the project must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the project will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production and, in general, the needs and welfare of the people. A permit will be granted unless the District Engineer determines that it would be contrary to the public interest. In cases of conflicting property rights, the Corps of Engineers cannot undertake to adjudicate rival claims.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this project. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the activity.

If there are any questions concerning this public notice, please contact me at 843-329-8044 or toll free at 1-866-329-8187.

S. Dean Herndon
Project Manager
Regulatory Division
U.S. Army Corps of Engineers



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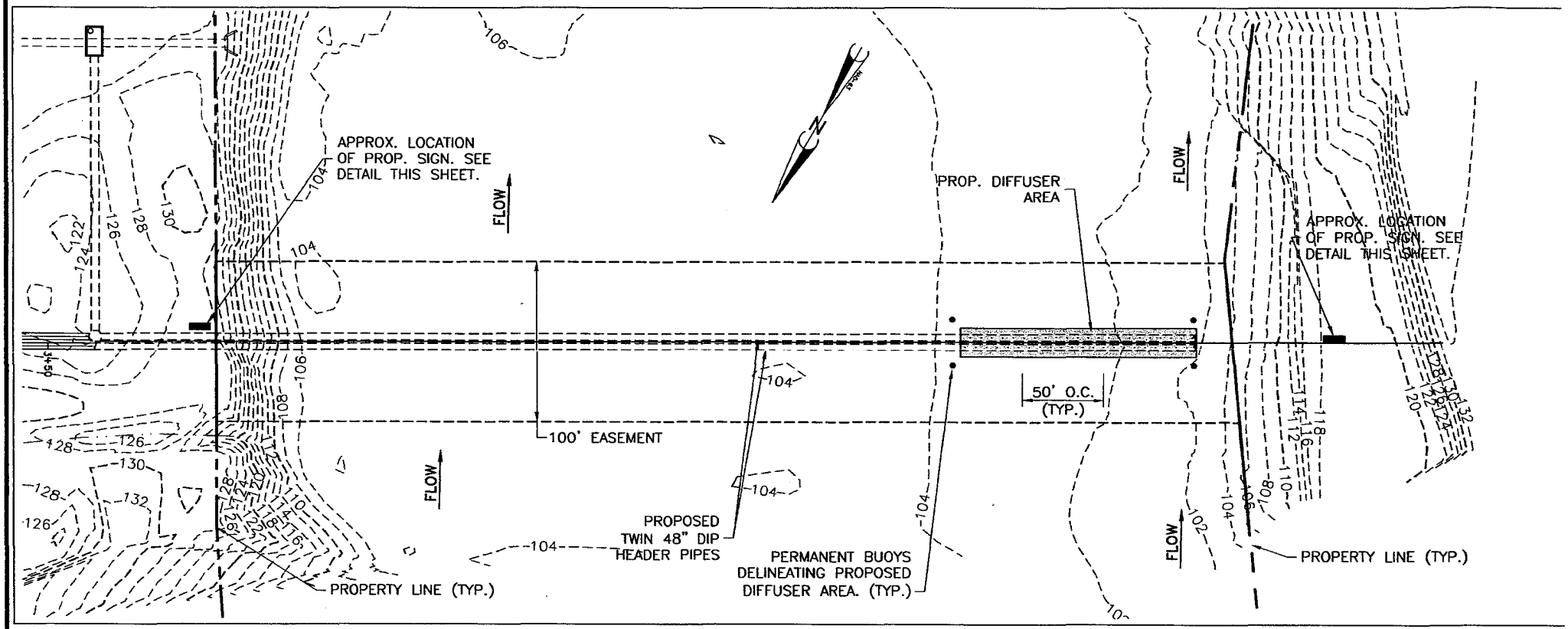
1300 12th Street • PO Box 2299 • Cayce, SC 29171
Tel: (803) 791-1400 • Fax: (803) 791-8110

EXHIBIT A
SITE LOCATION
Columbia Metro WWTP
Diffuser / Pump Station
Columbia, SC

DATE: 3/4/03
SCALE: NTS
PROJECT: 02-014
CAD FILE:PERMITS
DRAWN BY: JHP

Sh. 1 of 13



OPERATIONAL PHASE

Horiz. Scale 1"=60'

60 0 60 120

10 0 10 20

Vert. Scale 1"=10'

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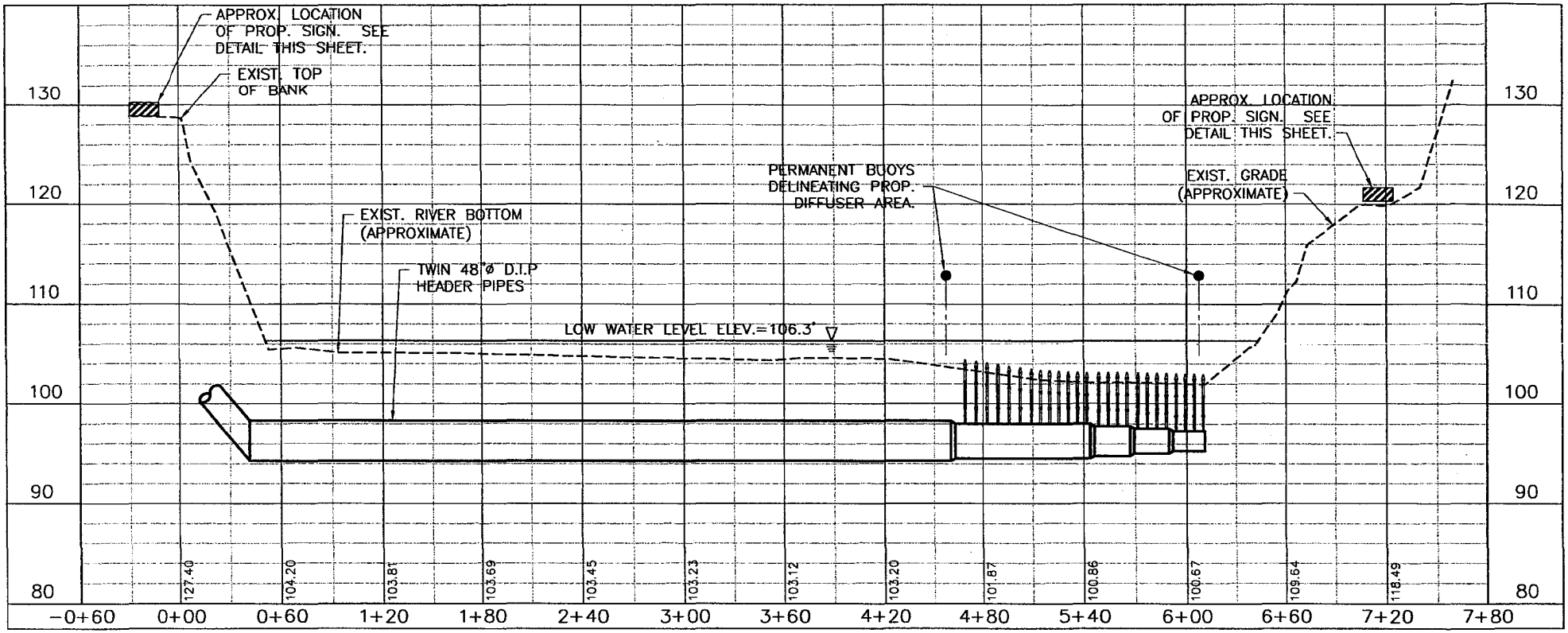
METRO WASTEWATER TREATMENT PLANT
DIFFUSER AND PUMP STATION - PHASE I
PREPARED FOR
CITY OF COLUMBIA

DATE 02/28/03
SCALE AS SHOWN
DRAWN RMC
JOB NO. 02-014
CAD FILE CORP

DRAWING 2 OF 1



OPERATIONAL PHASE

NOTES:

1. ALL CONTOURS SHOULD BE RETURNED TO PRE-CONSTRUCTION CONTOURS.

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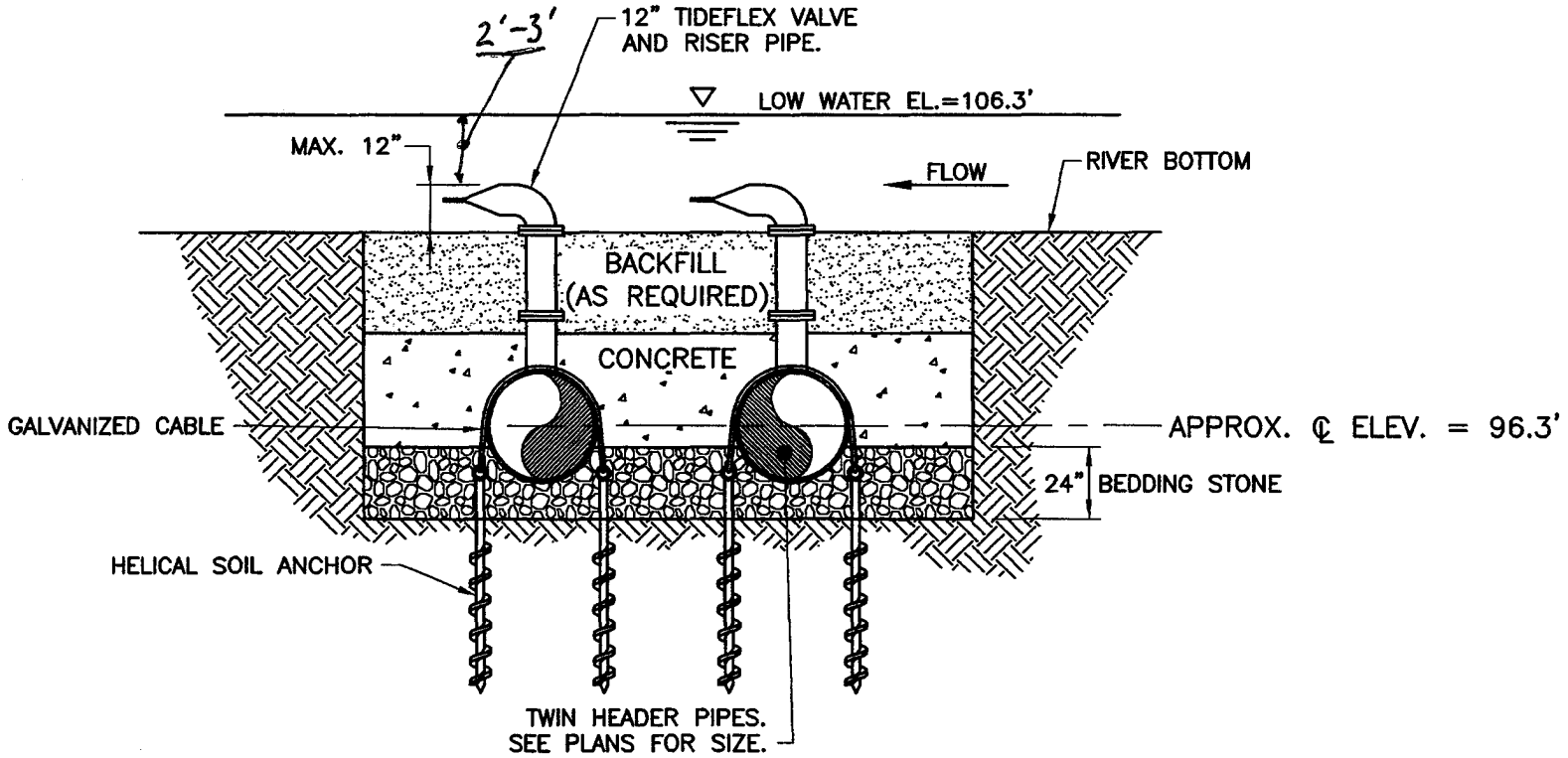
DRAWING 3 OF 1



DIFFUSER SECTION

NOT TO SCALE

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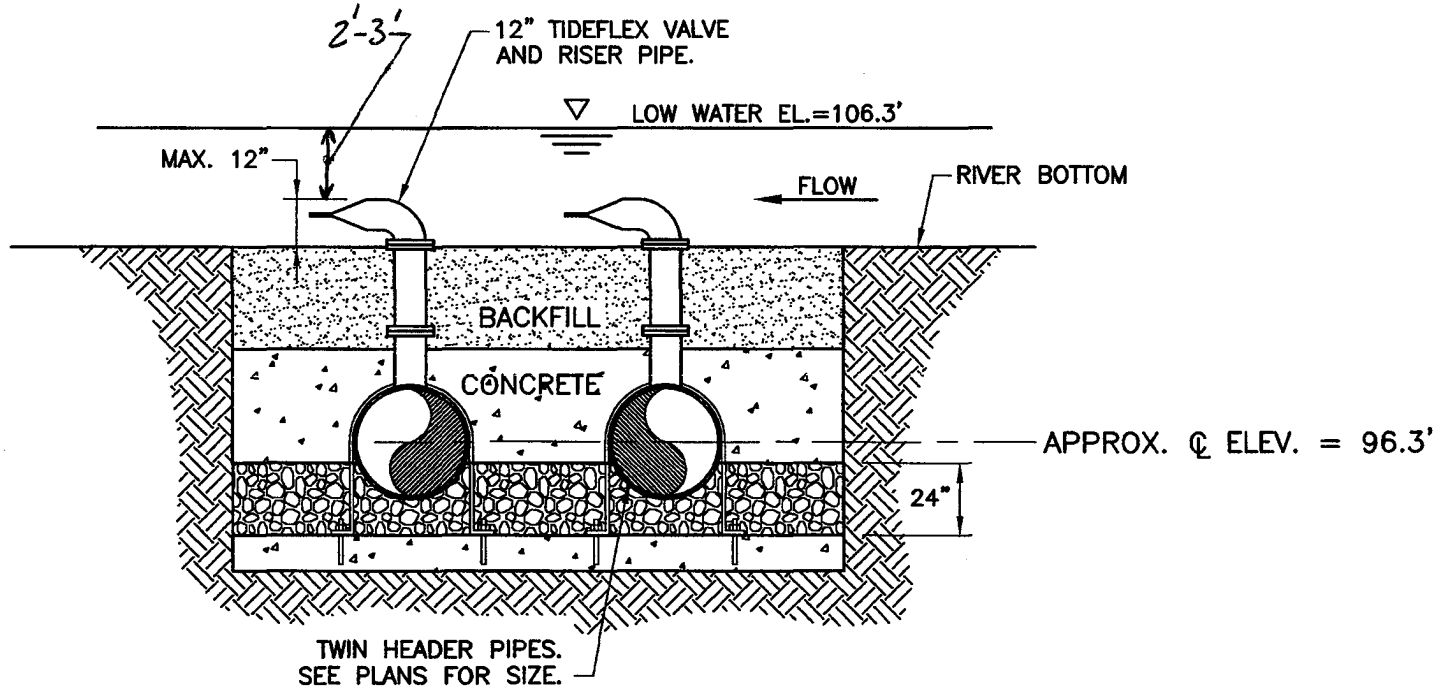

DIFFUSER SECTION
(IF CONC. SEAL IS REQUIRED)

NOT TO SCALE

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CITY OF COLUMBIA

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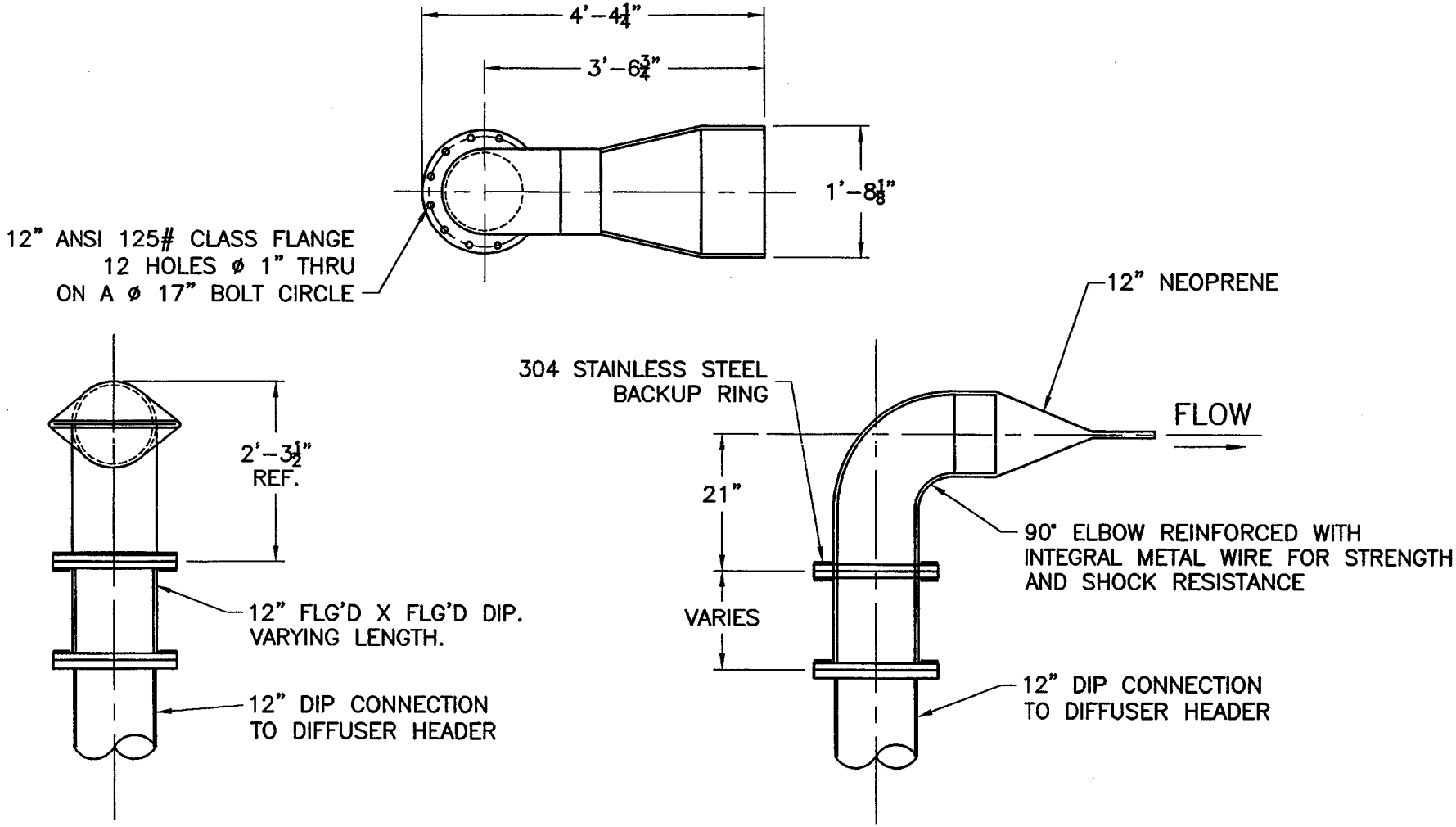

NOTE:
PROVIDE RED VALVE TIDE FLEX 12" SER 35D DIFFUSER VALVE (CATALOG NO. 926), OR APPROVED EQUAL.

DIFFUSER ASSEMBLY DETAIL

NOT TO SCALE

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METRO WASTEWATER TREATMENT PLANT
DIFFUSER AND PUMP STATION - PHASE I
PREPARED FOR
CITY OF COLUMBIA

DATE 02/28/03
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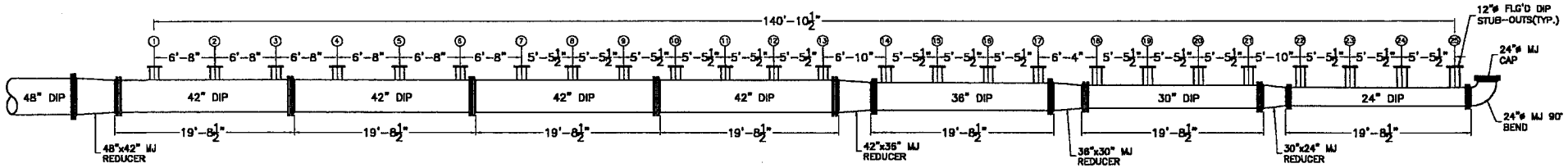
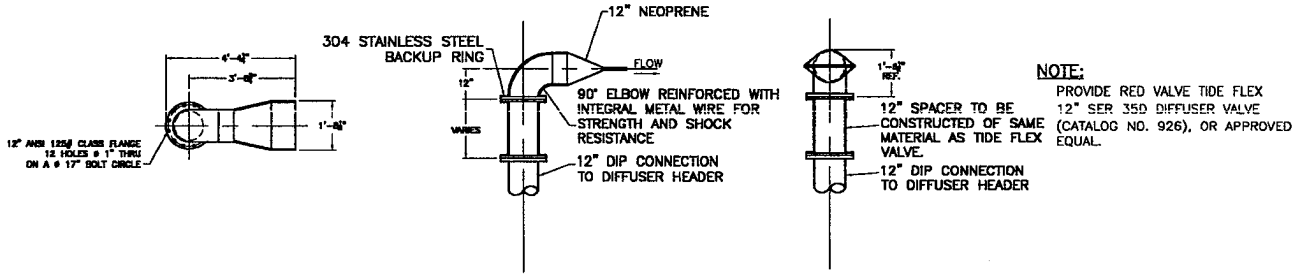
DRAWN RMC
JOB NO. 02-014
CAD FILE CORP



DIFFUSER PIPE LAYOUT

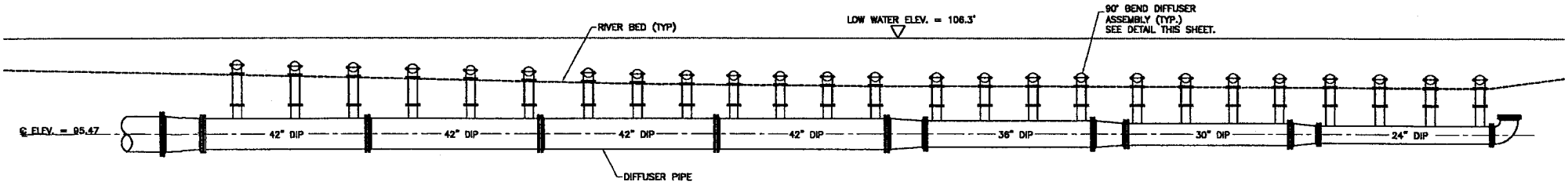
SCALE: 3/16" = 1'-0"



NOTE:
PROVIDE RED VALVE TIDE FLEX 12" SER 35D DIFFUSER VALVE (CATALOG NO. 926), OR APPROVED EQUAL.

DIFFUSER ASSEMBLY DETAIL

SCALE: 1/2" = 1'-0"



DIFFUSER LAYOUT

SCALE: 3/16" = 1'-0"

NO	DATE	REVISION	BY

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ENGINEERING CONSULTANTS, INC.

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION

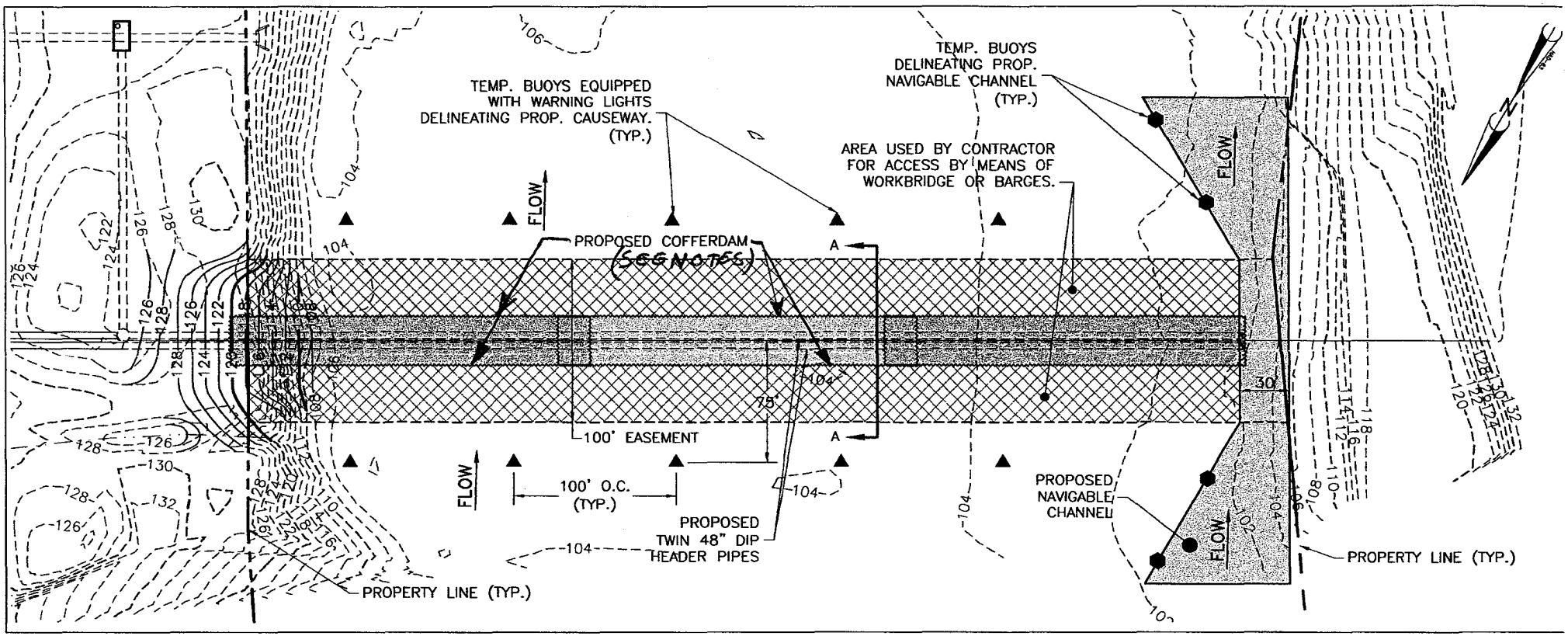
SOUTH CAROLINA PROFESSIONAL ENGINEER JOSEPH H. PRIVETTE

DATE 12-09-08
SCALE AS SHOWN
DRAWN RMD
CHECKED JHP
APPROVED JHP
JOB NO 08-014
CAD FILE DIFFUSER.DWG

Metro Wastewater Treatment Plant
Diffuser and Pump Station
Phase I
PREPARED FOR
City of Columbia
Richland County, South Carolina
Diffuser Layout

DRAWING NO.
OF
FILE NO.

Sh. 7 of 13



CONSTRUCTION PHASE

NOTES:

1. NO MORE THAN 1/3 OF THE RIVER CAN BE IMPEDED BY A COFFERDAM AT ANY TIME. NO LESS THAN 3 COFFERDAM CELLS WILL BE USED TO INSURE THAT SUBSTANTIAL AREA REMAINS AVAILABLE FOR RIVER FLOW. THE EXACT NUMBER OF COFFERDAM CELLS TO BE USED IS THE RESPONSIBILITY OF THE CONTRACTOR.
2. ANY ACCESS STRUCTURE TO THE COFFERDAM MUST NOT COMPLETELY BLOCK THE RIVER, BUT ALLOW FOR ADEQUATE HYDRAULIC AREA AND A NAVIGATIONAL CHANNEL AS SHOWN.

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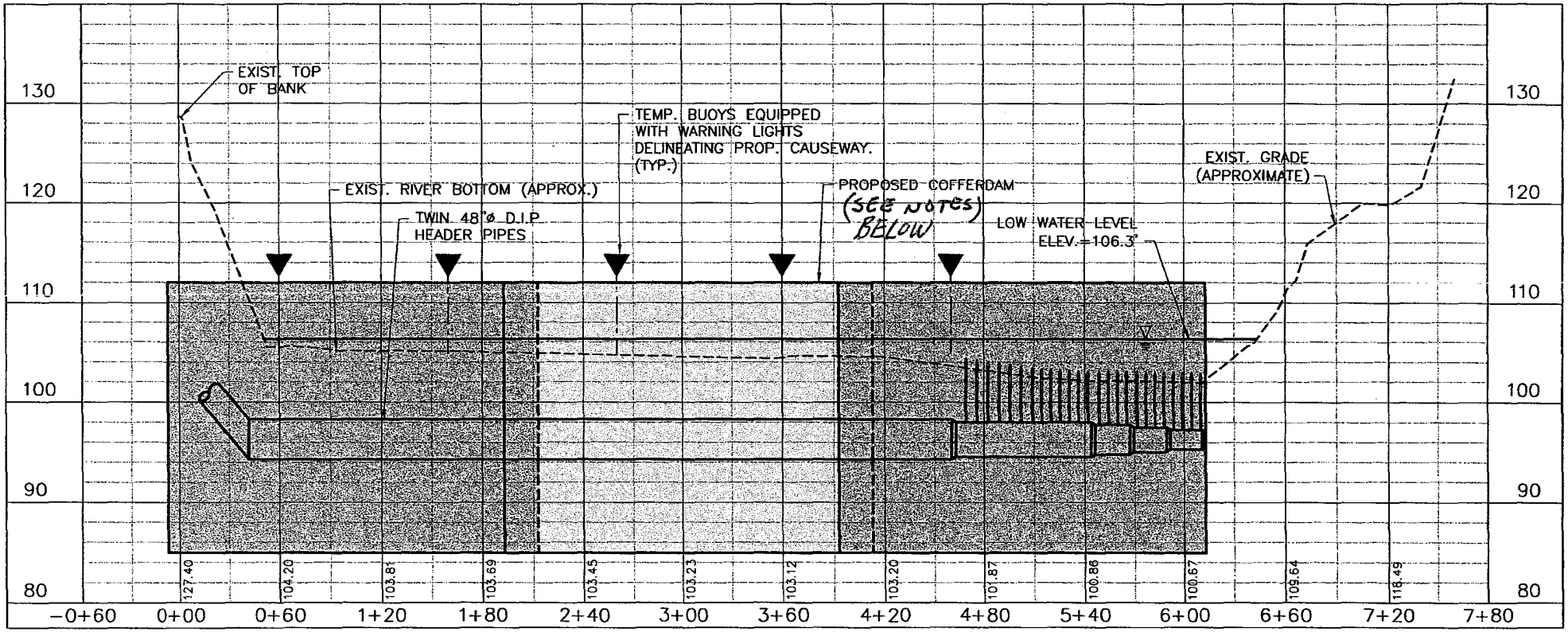
METRO WASTEWATER TREATMENT PLANT
DIFFUSER AND PUMP STATION - PHASE I
PREPARED FOR
CITY OF COLUMBIA

DATE	02/28/03
SCALE	AS SHOWN
DRAWN	RMC
JOB NO.	02-014
CAD FILE	CORP

DRAWING 8 OF



CONSTRUCTION PHASE

NOTES:

1. ELEVATIONS OF TOP AND BOTTOM OF SHEETING ARE APPROXIMATE, AND WILL BE DETERMINED BY CONTRACTOR AT TIME OF CONSTRUCTION.
2. SHADED AREAS REPRESENT A POSSIBLE COFFERDAM SCENARIO. NOT MORE THAN 1/3 OF THE RIVER SHALL BE BLOCKED BY COFFERDAM AT ANY ONE TIME. THE COFFERDAM WILL BE BUILT IN A MINIMUM OF 3 SECTIONS.

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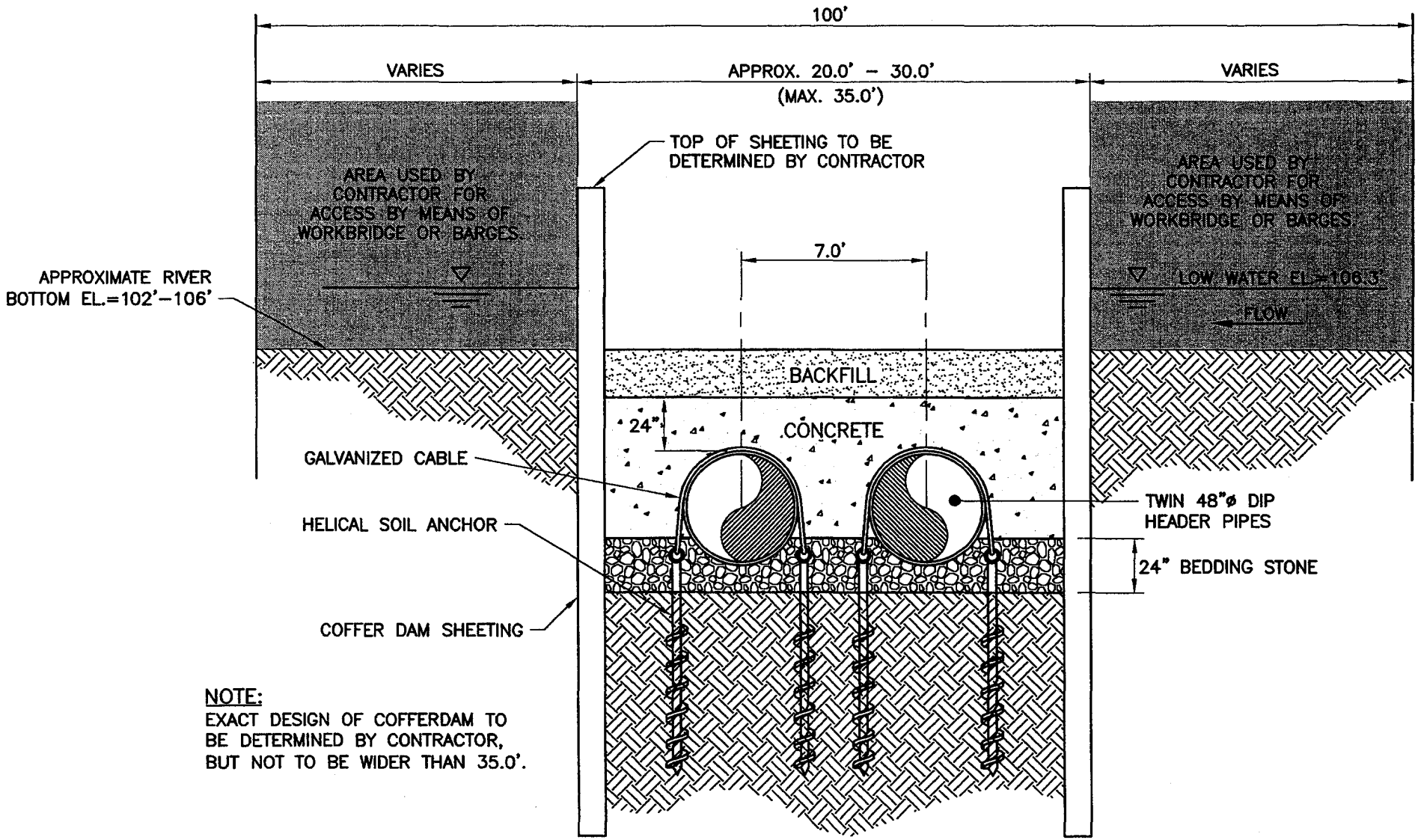
METRO WASTEWATER TREATMENT PLANT
DIFFUSER AND PUMP STATION - PHASE I
PREPARED FOR
CITY OF COLUMBIA

DATE 02/28/03
SCALE AS SHOWN
DRAWN RMC
JOB NO. 02-014
CAD FILE CORP

DRAWING 9 OF 1



NOTE:
EXACT DESIGN OF COFFERDAM TO BE DETERMINED BY CONTRACTOR, BUT NOT TO BE WIDER THAN 35.0'.

SECTION A–A
NOT TO SCALE

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METRO WASTEWATER TREATMENT PLANT
DIFFUSER AND PUMP STATION - PHASE I
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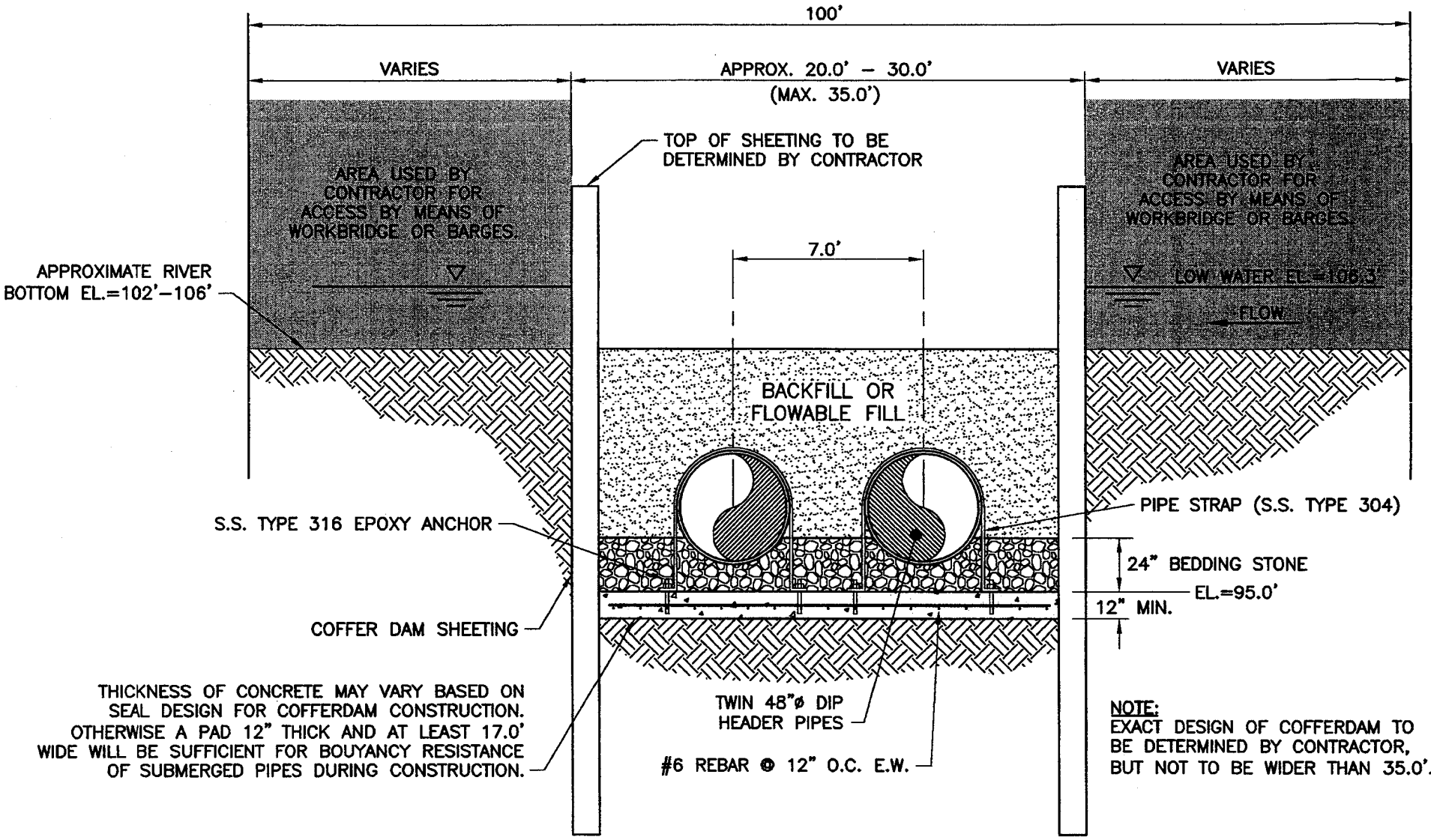
DATE	02/28/03
SCALE	AS SHOWN
DRAWN	AFH
JOB NO.	02–014
CAD FILE	CORP



SECTION A–A
(IF CONC. SEAL IS REQUIRED)

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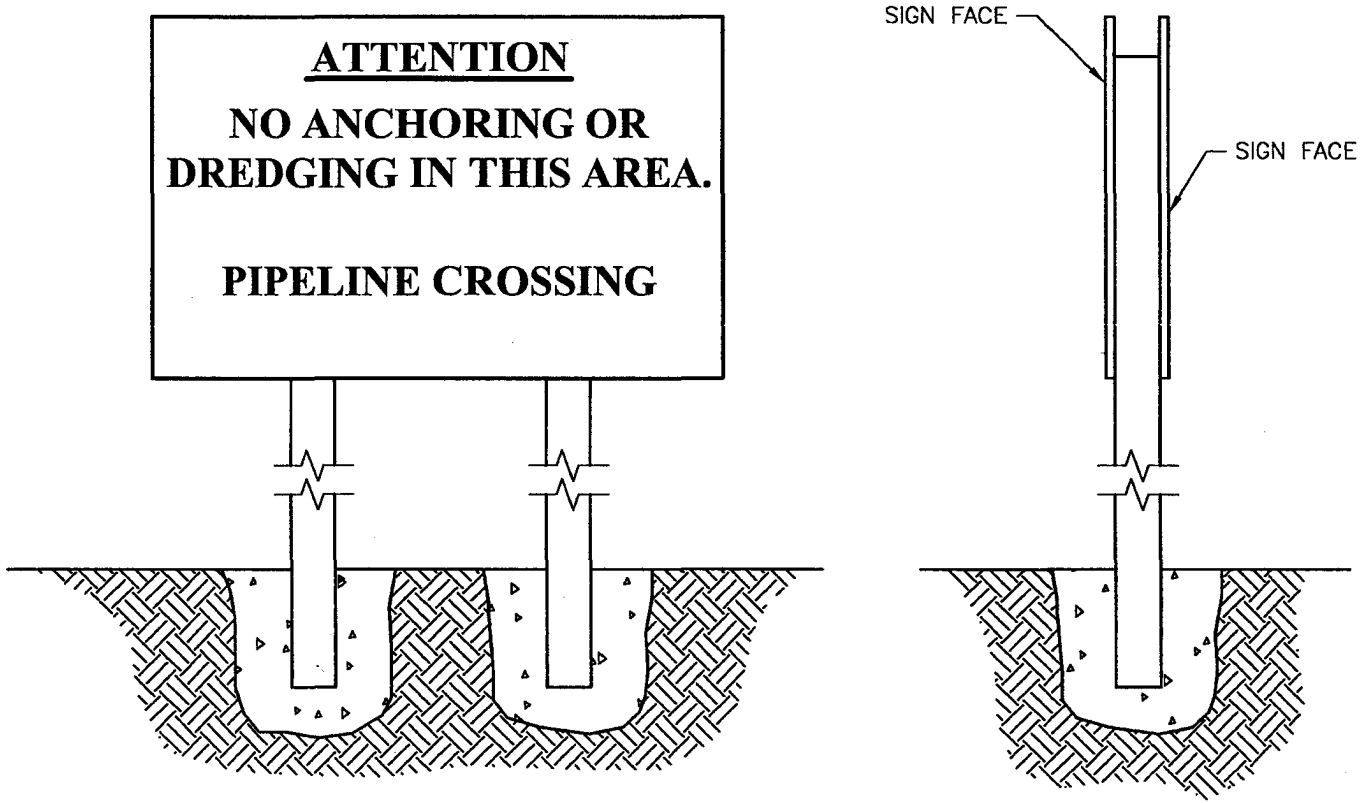
DATE	02/28/03
SCALE	AS SHOWN
DRAWN	AFH
JOB NO.	02–014
CAD FILE	CORP

NOTE:

SIGN TO HAVE THIS WORDING ON BOTH SIDES.



FRONT VIEW

SIDE VIEW

SIGN DETAIL

NOT TO SCALE

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METRO WASTEWATER TREATMENT PLANT
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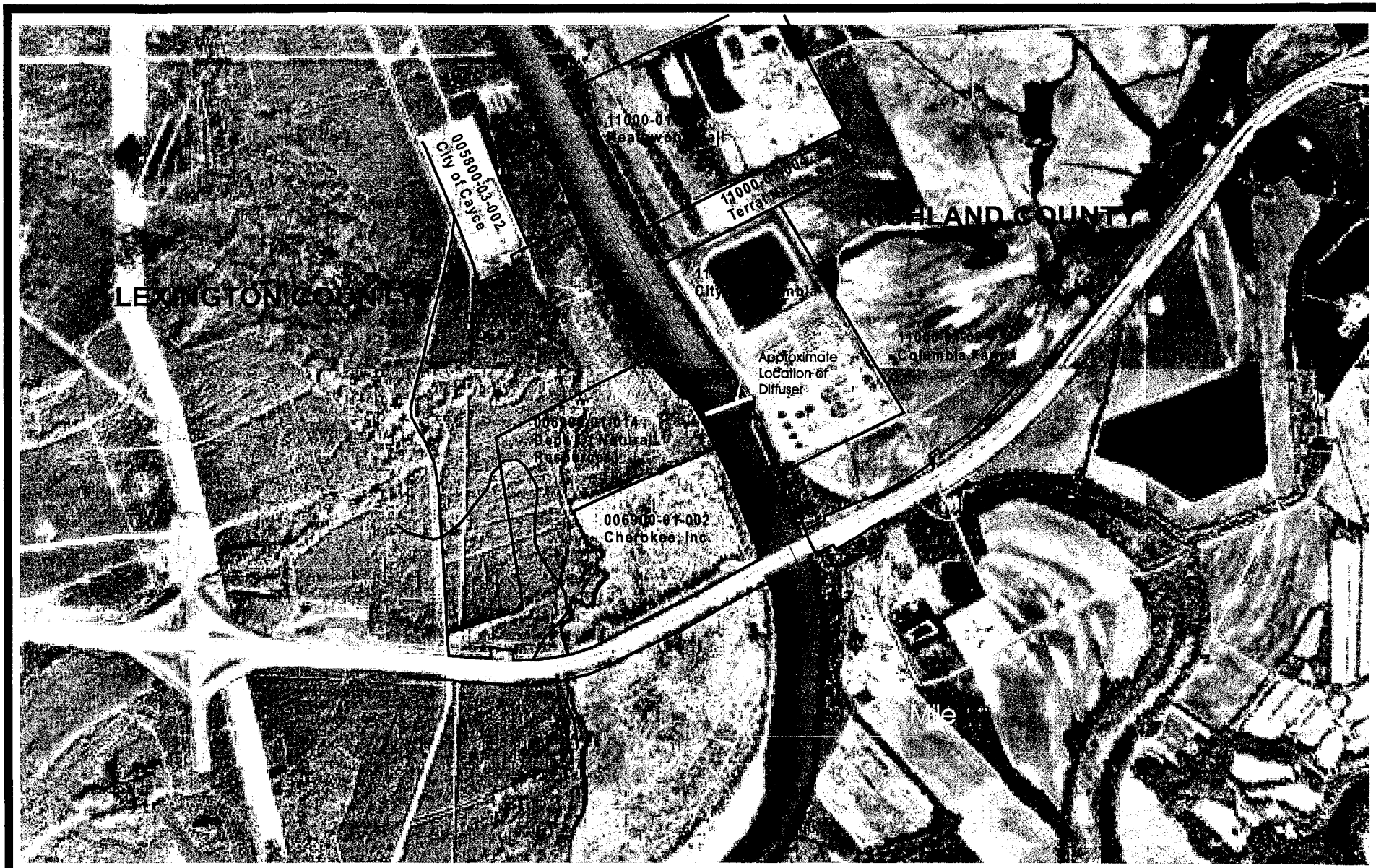
CITY OF COLUMBIA

DATE	02/28/03
SCALE	AS SHOWN
DRAWN	RMC
JOB NO.	02-014
CAD FILE	CORP



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ADJACENT PROPERTY MAP

CITY OF COLUMBIA
METRO WWTP
EFFLEUNT DIFFUSER & PUMP STATION

DATE	3/4/03
SCALE:	As Shown
JOB NO.	02-014
CAD FILE:	PERMITS

Sh. 13 of 13

ATTACHMENT A

PROJECT NARRATIVE

CITY OF COLUMBIA – METRO WWTP
EFFLUENT DIFFUSER & PUMP STATION

This project involves the construction of an effluent diffuser for the City of Columbia Metro Wastewater Treatment Plant into the Congaree River. The diffuser will replace the plants existing bank discharge which is covered under NPDES Permit #SC0020940. The existing bank discharge provides limited mixing of the plant effluent with the river water. The primary purpose of the effluent diffuser is to improve the mixing of the plants effluent with the Congaree River by spreading the discharge over a larger area thus reducing the effluent toxicity limitations and monitoring requirements in the NPDES Permit.

The Metro WWTP is currently permitted for an average daily flow of 60 Million Gallons Per Day (MGD) with a peak daily discharge of 120 MGD. The facility has plans for expansion to an average daily flow of 80 MGD and a subsequent peak daily discharge of 160 MGD. The effluent diffuser system will be designed to handle 160 MGD, however, the effluent toxicity limits will be established based on 80 MGD.

In addition to the effluent diffuser, a pump station and post aeration basin will be designed as an integral system. The pump station will be designed to provide protection to the plant during times of elevated river levels and flooding. The pump station and post aeration basin will be configured so that during normal river levels, the discharge from the plant through the effluent diffuser will be controlled by gravity.

The design and construction of the effluent diffuser is limited by the cross-section of the Congaree River and low river levels in the vicinity of the WWTP. Field observations and a topographic survey of the river bottom indicted that a more

defined channel is located along the Lexington County side of the river. Based on calculations and discussions with the South Carolina Department of Health and Environmental Control (SCDHEC), it was determined that the low flow water elevation in the river in the vicinity of the WWTP is 106.3'. This level is based on a HEC-RAS model and field observations. A review of the cross-sections indicated that the river is approximately 600 feet wide with the river level at 106.3'. However, approximately 60% of the river width has a water depth of less than two (2) feet. As discussed above, the main river channel is located on the Lexington County side of the river. The channel has an approximate depth ranging from three (3) to four (4) feet. A small channel is located along the Richland County riverbank, however, it is speculated that the channel exists primarily due to the treatment plants bank discharge and will be filled with sediments once the flow is routed through the diffuser.

To minimize the potential impact to navigation in this section of the river, the header pipes for the diffuser will be installed a minimum of two (2) feet below the river bottom. The header pipes for the diffuser will consist of twin 48-inch ductile iron pipe (DIP) until they reach the diffuser section. The header will reduce to 42-inches at the beginning of the diffuser and continue to step down until the pipe is only 24-inch diameter. The effluent diffuser system will consist of 50 diffusers divided between the two (2) header pipes and spaced approximately 2.8 feet apart. As shown on the attached drawing, the diffusers will be installed two (2) to three (3) below the water surface to minimize potential impact to boat traffic. The valves will be constructed of a flexible rubber composite which will allow the unit to bend over then spring back if struck by an object, thus minimizing the potential damage to any boat or the diffuser valves. The exposed diffuser valves can be conceivable replaced with divers if this should ever become necessary.

To facilitate installation of the diffuser system, sheet pile cofferdams will be constructed. The construction of the cofferdams will begin at the Richland County side of the river and proceed towards the Lexington County side. The

cofferdams will be constructed in at least three (3) sections such that no more than 1/3 of the river will be impeded at any one time. A portion of the sediments removed from the river bottom will be used to backfill around the diffuser as shown, if practical. Any excess sediment will be removed from the site to an appropriate fill site. Permanent bank stabilization will be installed to minimize potential erosion in the future. Best Management Practices will be employed during construction to provide erosion and sediment control. It is the intent of these construction methods to prevent any adverse affects to the environment.

By limiting each cofferdam length to 1/3 of the width of the river or less, a substantial river channel can be maintained. This will allow sufficient hydraulic area for the water to flow through. The exact sizing and design of the cofferdam shall be the responsibility of the selected contractor. Access to the cofferdams shall be accomplished by means of barges or a work bridge. This access will extend across the majority of the river and should have minimal effect on the flow of the river. At a minimum a navigable channel at least 30 feet wide will be maintained along the Lexington County side of the river to allow boat traffic to pass the work area. The cofferdams will greatly reduce the potential for any sediment entering the Congaree River in comparison to a causeway type construction and this method should minimize any impact to the environment. The attached drawings outline the procedures that will be used during construction.

Warning lights & buoys, channel markers and signs will be used to provide notification that construction is being conducted within the river. The warning lights and buoys will indicated the location of the cofferdams while the channel markers will indicate the location and route for bypassing the cofferdams. The South Carolina Department of Natural Resources (SCDNR) recommended that the same type of buoy be used for both construction and operation as well as marking the channel markers. Sergeant Mills with the SCDNR recommended the Figure 29: Fast Water/Shallow Water Can Buoys. The buoys will be marked with

a standard, diamond-warning symbol (safety orange) with lettering stating "Buried Pipeline". In addition the buoys will be fitted with Carmanah Lights, which are self-contained solar LED lights. Information regarding the type of buoys and warning lights is provided as Attachment 1. In addition signs will be posted at the boat ramps in the vicinity of the project site indicating the location of the construction activities. In addition, these signs will indicate the type of construction, caution should be taken in the project area, the location of the navigation channel along the Lexington County side of the river and provide illustration of the types and meaning of the buoys.