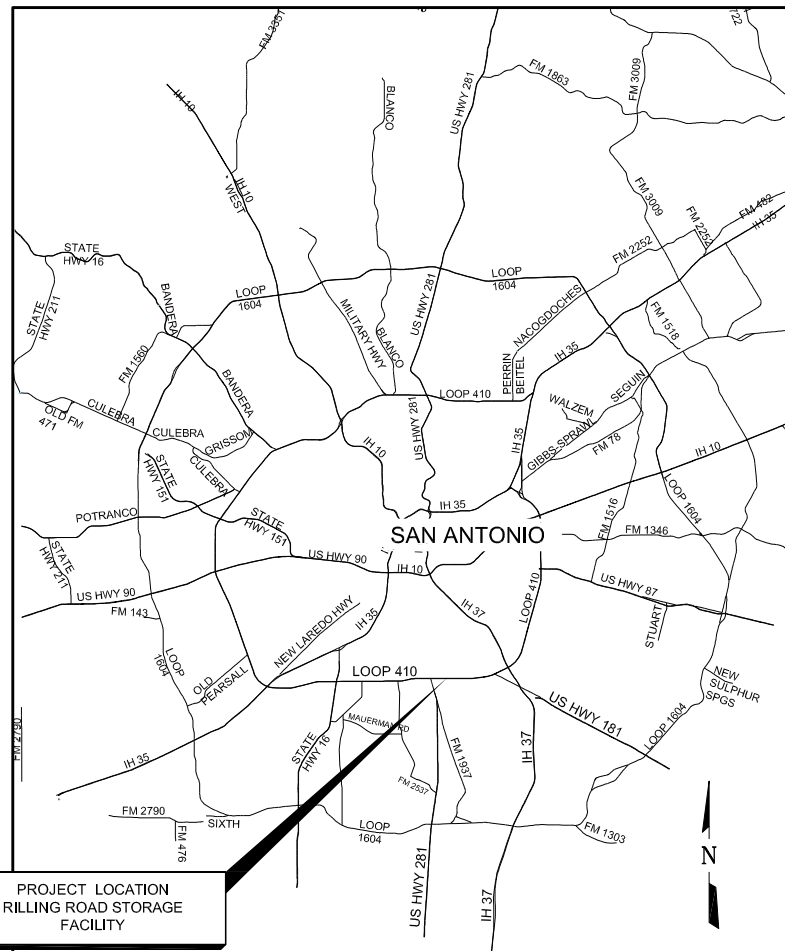


SAN ANTONIO WATER SYSTEM

CENTRAL BASIN: RILLING ROAD STORAGE FACILITY SAWS JOB NO. PRO-10148 CONTRACT NO. PS-00012-01 30% SUBMITTAL



VICINITY MAP

PROJECT LOCATION
RILLING ROAD STORAGE
FACILITY

FNI PROJECT NO. SWB16406
OCTOBER 2018

FREESE & NICHOLS SEALS

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Texas Registered Engineering Firm F-2144
9601 McAllister Freeway, Suite 1008
San Antonio, Texas 78709
Phone - (210) 298-3800
Fax - (210) 298-3801

CIVIL ENGINEER



Texas Registered Engineering Firm F-3699
911 Central Parkway N. Suite 425,
San Antonio, Texas 78232

GEOTECHNICAL ENGINEER



142 Chula Vista Dr
San Antonio, Texas 78232

ENVIRONMENTAL CONSULTANT



12500 San Pedro Ave. Suite 450,
San Antonio, Texas 78216

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SAWS JOB NO. 10148
BASIN PLANNING PROJECT, CENTRAL
BASIN CAPACITY CONSTRAINTS
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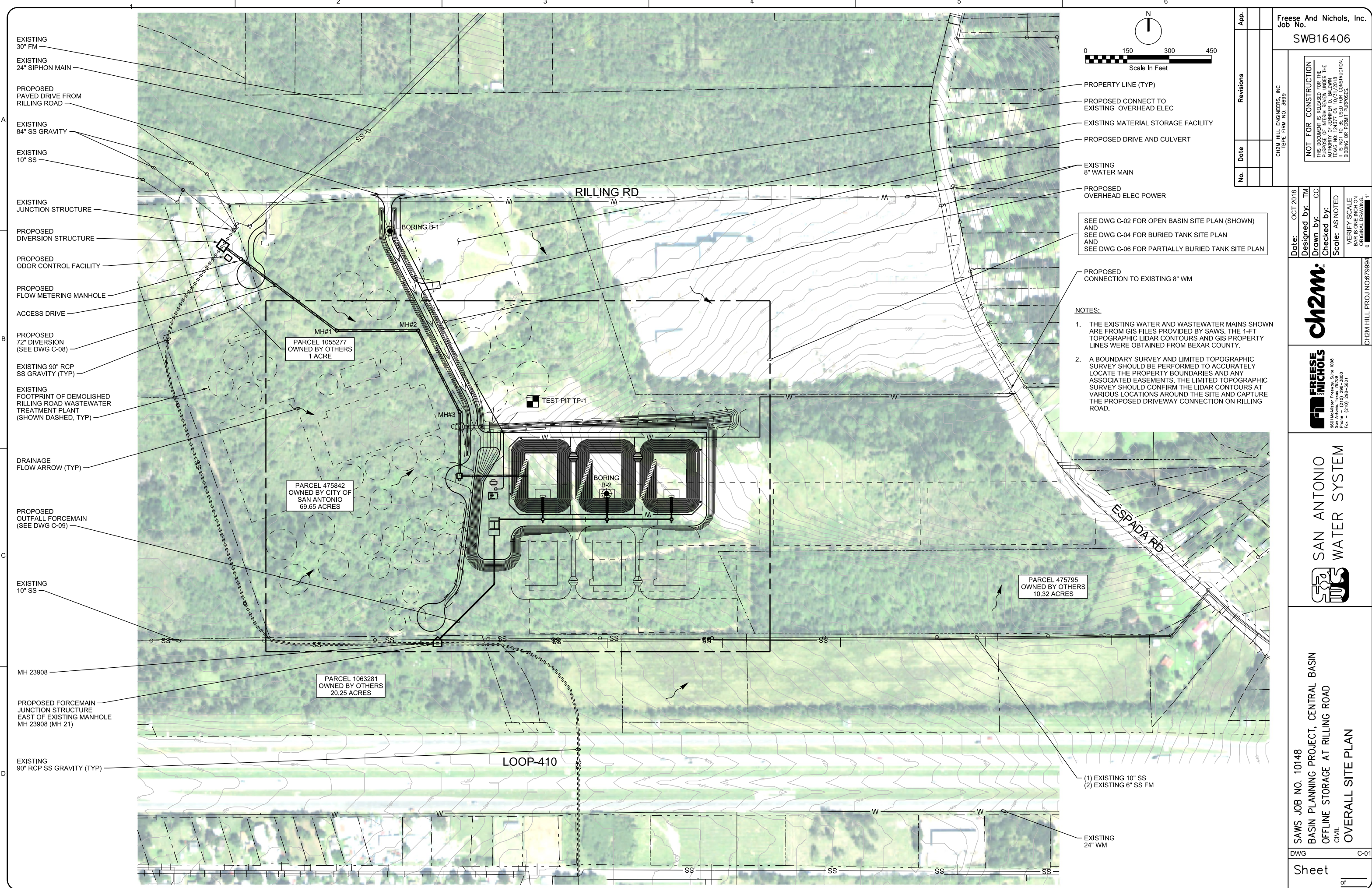
SAWS JOB NO. 10148
BASIN PLANNING PROJECT, CENTRAL BASIN
OFFLINE STORAGE AT RILLING ROAD
DRAWING INDEX

DWG G-01

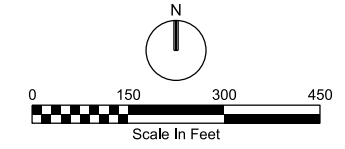
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of

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C-02	OPEN BASIN PLAN
C-03	CROSS SECTIONS OPEN BASIN
C-04	BURIED TANK SITE PLAN
C-05	CROSS SECTIONS BURIED TANK
C-06	OPEN/COVERED TANK SITE PLAN
C-07	CROSS SECTIONS OPEN/COVERED TANK
C-08	PROFILE DIVERSION GRAVITY MAIN
C-09	PROFILE OUTFALL FORCEMAIN
S-01	DIVERSION STRUCTURE TOP PLAN
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S-03	DIVERSION STRUCTURE SECTIONS
S-04	PUMP STATION TOP PLAN
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S-07	BELOW GRADE TANK TOP PLAN OPTION 1
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S-09	BELOW GRADE TANK SECTIONS OPTION 1
S-10	BELOW GRADE TANK TOP PLAN OPTION 2
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S-12	BELOW GRADE TANK SECTIONS OPTION 2
S-13	BELOW GRADE TANK TOP PLAN OPTION 3
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D-05	DIVERSION STRUCTURE SECTIONS
D-06	PUMP STATION PLAN
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D-08	BELOW GRADE TANK TOP PLAN
D-09	BELOW GRADE TANK SECTION
D-10	ODOR CONTROL PLAN AND SECTIONS
D-11	ODOR CONTROL LIQUID TREATMENT CHEMICAL SYSTEM PLAN AND SECTION
N-01	DIVERSION STRUCTURE
N-02	SPLITTER MANHOLE AND EARTHEN BASINS
N-03	PUMP STATION
N-04	SPLITTER MANHOLE AND BELOW GRADE TANK
N-05	ODOR CONTROL CHEMICAL SYSTEM
N-06	VAPOR PHASE ODOR CONTROL CHEMICAL SYSTEM
E-01	ONE-LINE DIAGRAM
E-02	PUMP STATION ELECTRICAL BUILDING PLAN



- EXISTING 30" FM
- EXISTING 24" SIPHON MAIN
- PROPOSED PAVED DRIVE FROM RILLING ROAD
- EXISTING 84" SS GRAVITY
- EXISTING 10" SS
- EXISTING JUNCTION STRUCTURE
- PROPOSED DIVERSION STRUCTURE
- PROPOSED ODOR CONTROL FACILITY
- PROPOSED FLOW METERING MANHOLE
- ACCESS DRIVE
- PROPOSED 72" DIVERSION (SEE DWG C-08)
- EXISTING 90" RCP SS GRAVITY (TYP)
- EXISTING FOOTPRINT OF DEMOLISHED RILLING ROAD WASTEWATER TREATMENT PLANT (SHOWN DASHED, TYP)
- DRAINAGE FLOW ARROW (TYP)
- PROPOSED OUTFALL FORCEMAIN (SEE DWG C-09)
- EXISTING 10" SS
- MH 23908
- PROPOSED FORCEMAIN JUNCTION STRUCTURE EAST OF EXISTING MANHOLE MH 23908 (MH 21)
- EXISTING 90" RCP SS GRAVITY (TYP)



- PROPERTY LINE (TYP)
- PROPOSED CONNECT TO EXISTING OVERHEAD ELEC
- EXISTING MATERIAL STORAGE FACILITY
- PROPOSED DRIVE AND CULVERT
- EXISTING 8" WATER MAIN
- PROPOSED OVERHEAD ELEC POWER
- SEE DWG C-02 FOR OPEN BASIN SITE PLAN (SHOWN) AND SEE DWG C-04 FOR BURIED TANK SITE PLAN AND SEE DWG C-06 FOR PARTIALLY BURIED TANK SITE PLAN
- PROPOSED CONNECTION TO EXISTING 8" WM

- NOTES:**
1. THE EXISTING WATER AND WASTEWATER MAINS SHOWN ARE FROM GIS FILES PROVIDED BY SAWS. THE 1-FT TOPOGRAPHIC LIDAR CONTOURS AND GIS PROPERTY LINES WERE OBTAINED FROM BEXAR COUNTY.
 2. A BOUNDARY SURVEY AND LIMITED TOPOGRAPHIC SURVEY SHOULD BE PERFORMED TO ACCURATELY LOCATE THE PROPERTY BOUNDARIES AND ANY ASSOCIATED EASEMENTS. THE LIMITED TOPOGRAPHIC SURVEY SHOULD CONFIRM THE LIDAR CONTOURS AT VARIOUS LOCATIONS AROUND THE SITE AND CAPTURE THE PROPOSED DRIVEWAY CONNECTION ON RILLING ROAD.

- (1) EXISTING 10" SS
- (2) EXISTING 6" SS FM
- EXISTING 24" WM

PARCEL 1055277 OWNED BY OTHERS 1 ACRE

PARCEL 475842 OWNED BY CITY OF SAN ANTONIO 69.65 ACRES

PARCEL 1063281 OWNED BY OTHERS 20.25 ACRES

PARCEL 475795 OWNED BY OTHERS 10.32 ACRES

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Job No. SWB16406

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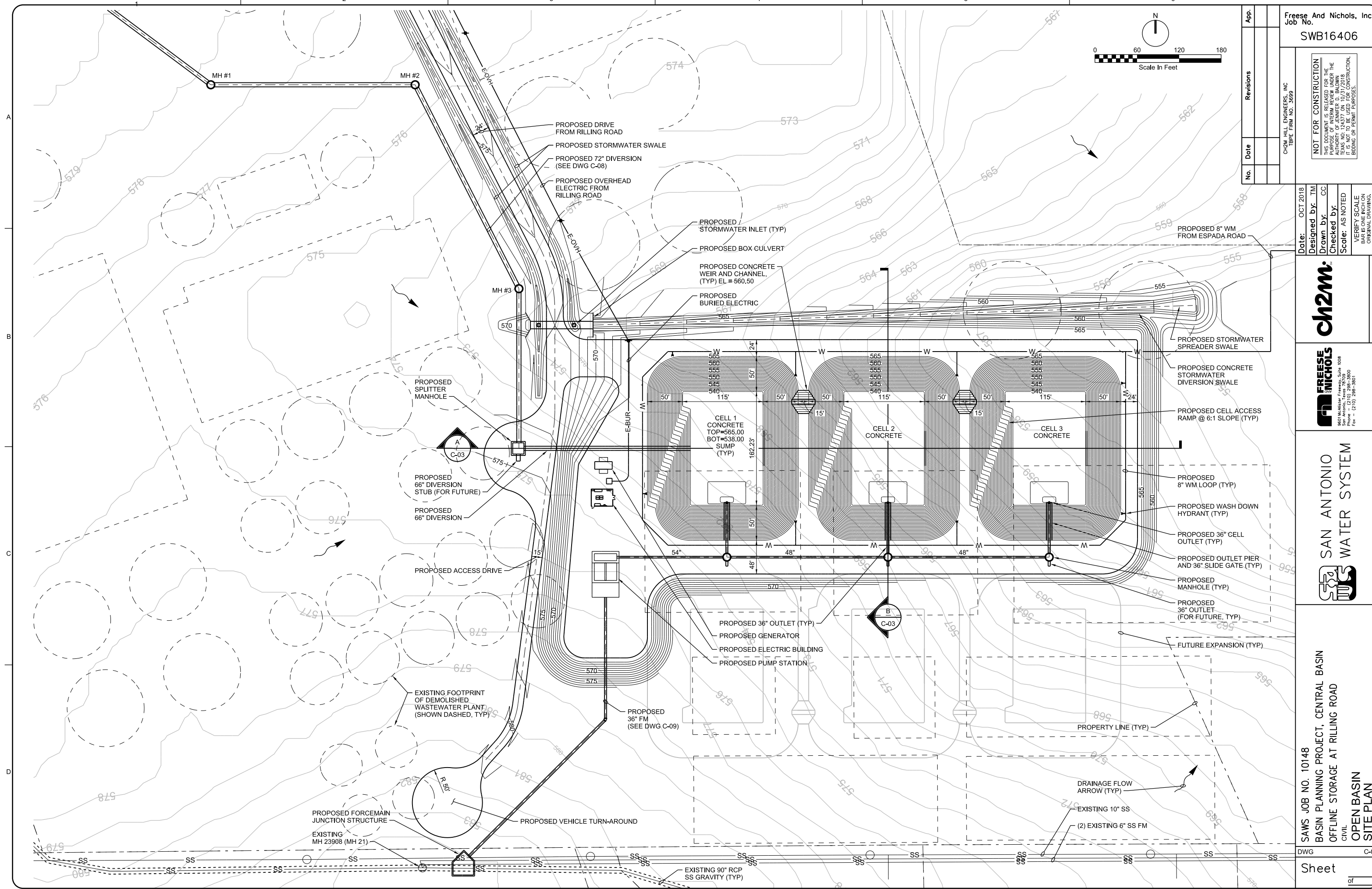
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SAWS JOB NO. 10148
BASIN PLANNING PROJECT, CENTRAL BASIN
OFFLINE STORAGE AT RILLING ROAD
CIVIL
OVERALL SITE PLAN

DWG C-01
Sheet

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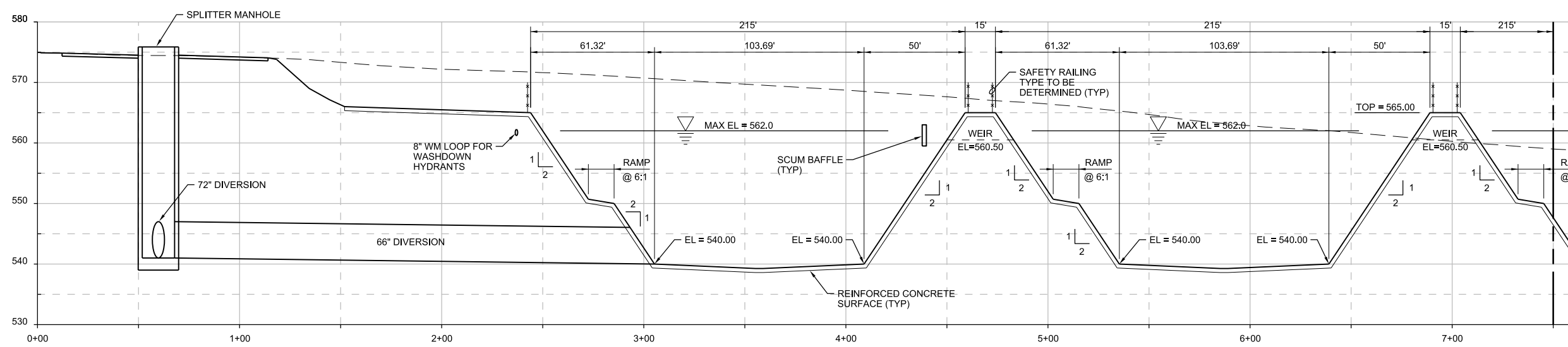
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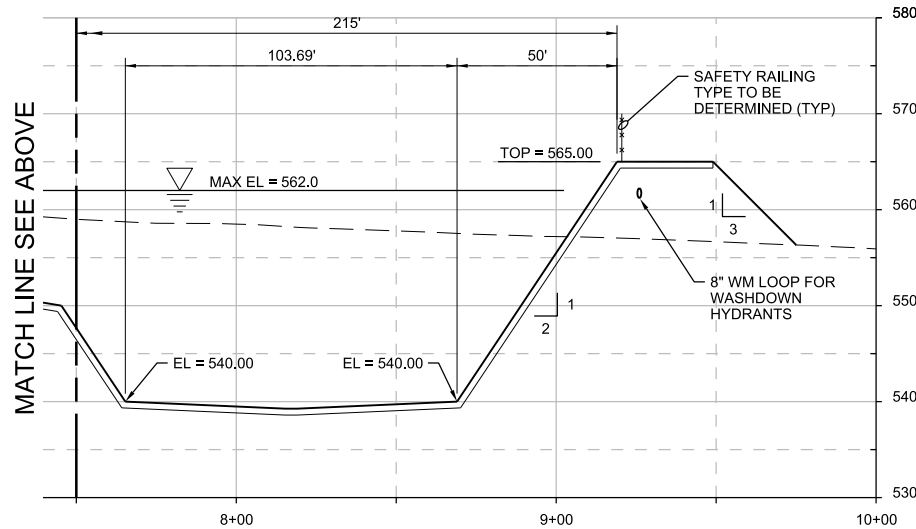
SAN ANTONIO WATER SYSTEM
 SAN ANTONIO WATER SYSTEM

SAWS JOB NO. 10148
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 OFFLINE STORAGE AT RILLING ROAD
 CIVIL
 OPEN BASIN
 SITE PLAN
 DWG C-02
 Sheet

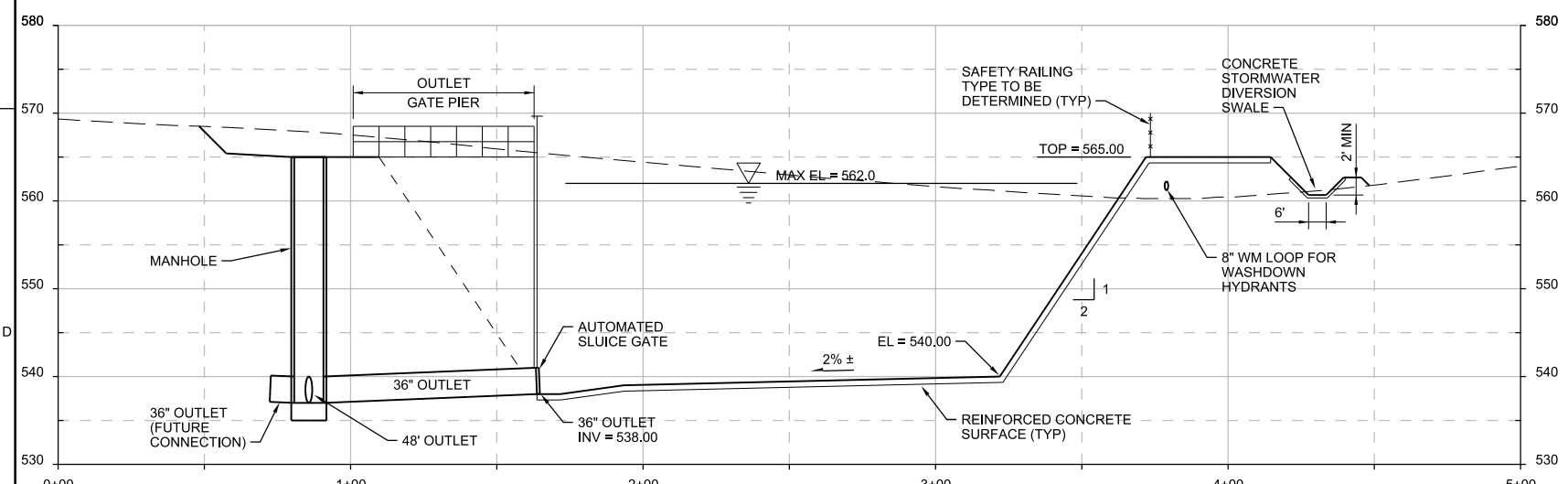
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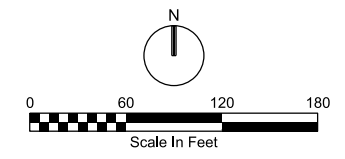
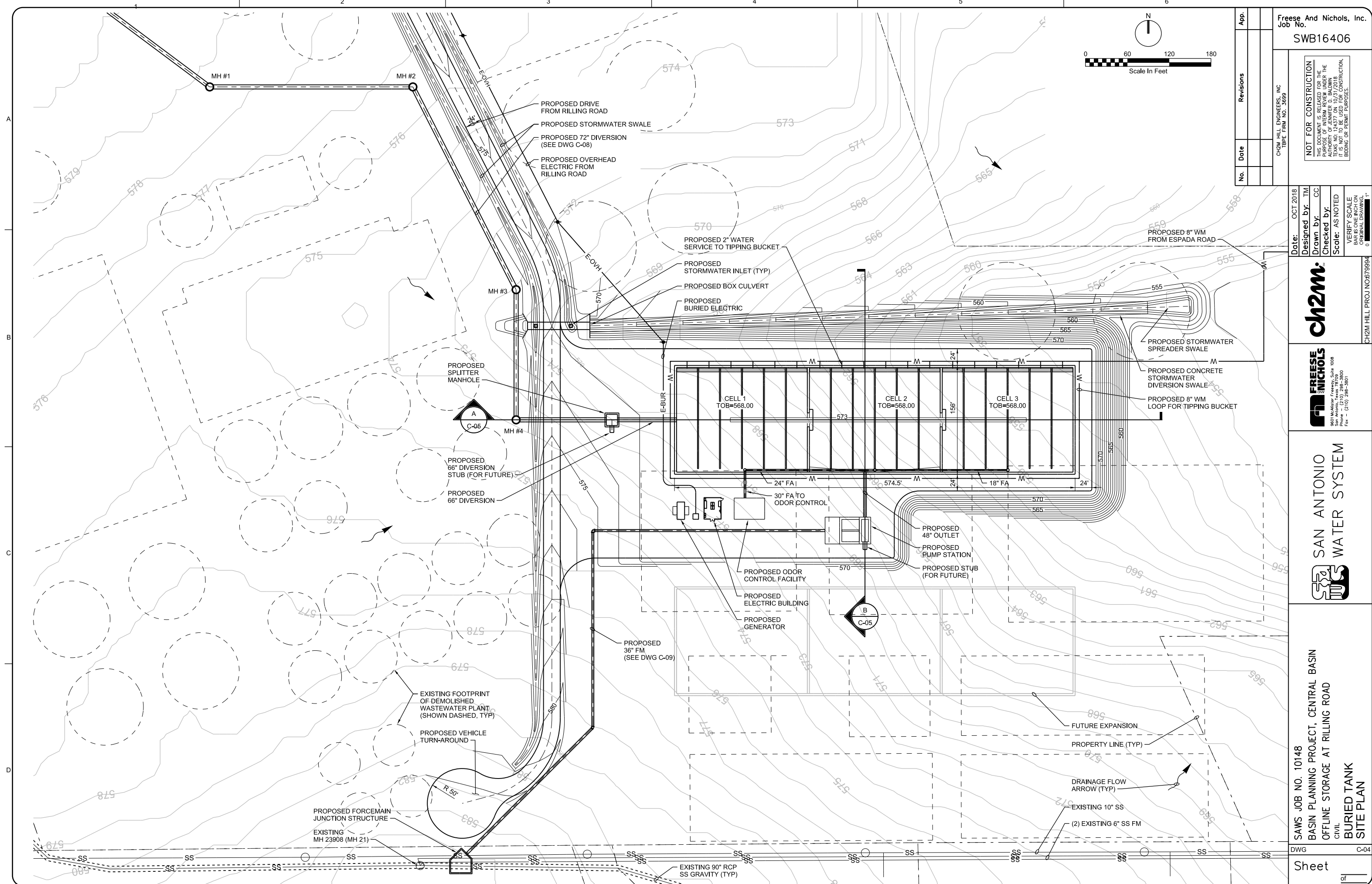
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SAWS JOB NO. 10148
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OFFLINE STORAGE AT RILLING ROAD
CIVIL
CROSS SECTIONS
OPEN BASIN

DWG C-03
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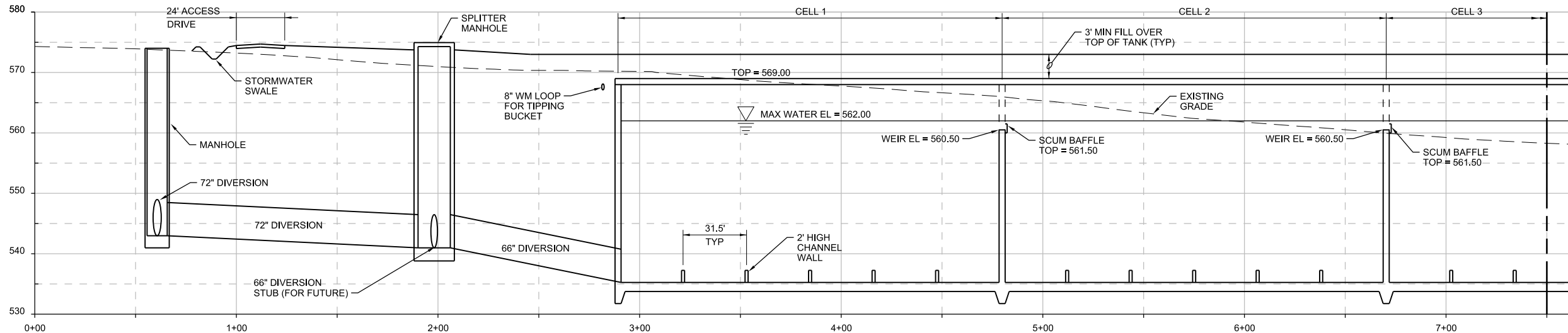
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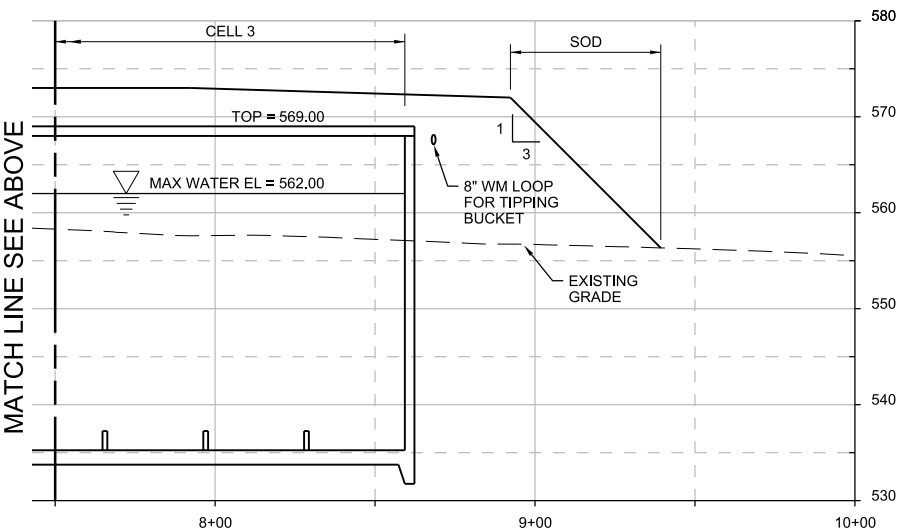
SAN ANTONIO
WATER SYSTEM

SAWS JOB NO. 10148
 BASIN PLANNING PROJECT, CENTRAL BASIN
 OFFLINE STORAGE AT RILLING ROAD
 CIVIL
 BURIED TANK
 SITE PLAN
 DWG C-04
 Sheet

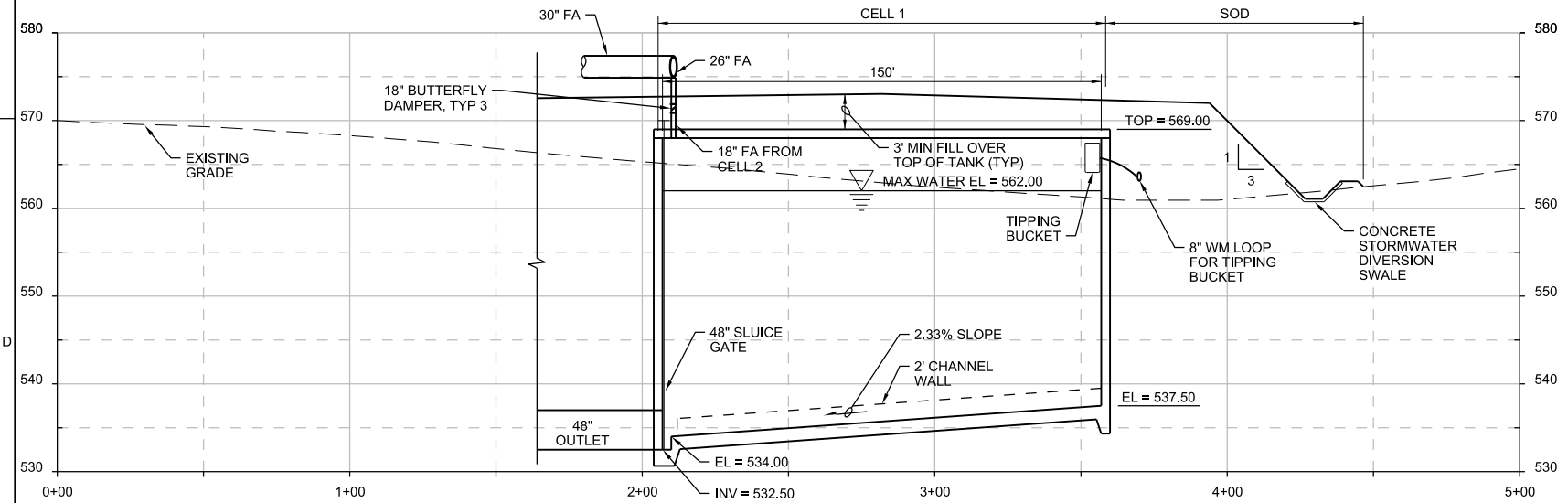
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OFFLINE STORAGE AT RILLING ROAD
CIVIL
CROSS SECTIONS
BURIED TANK

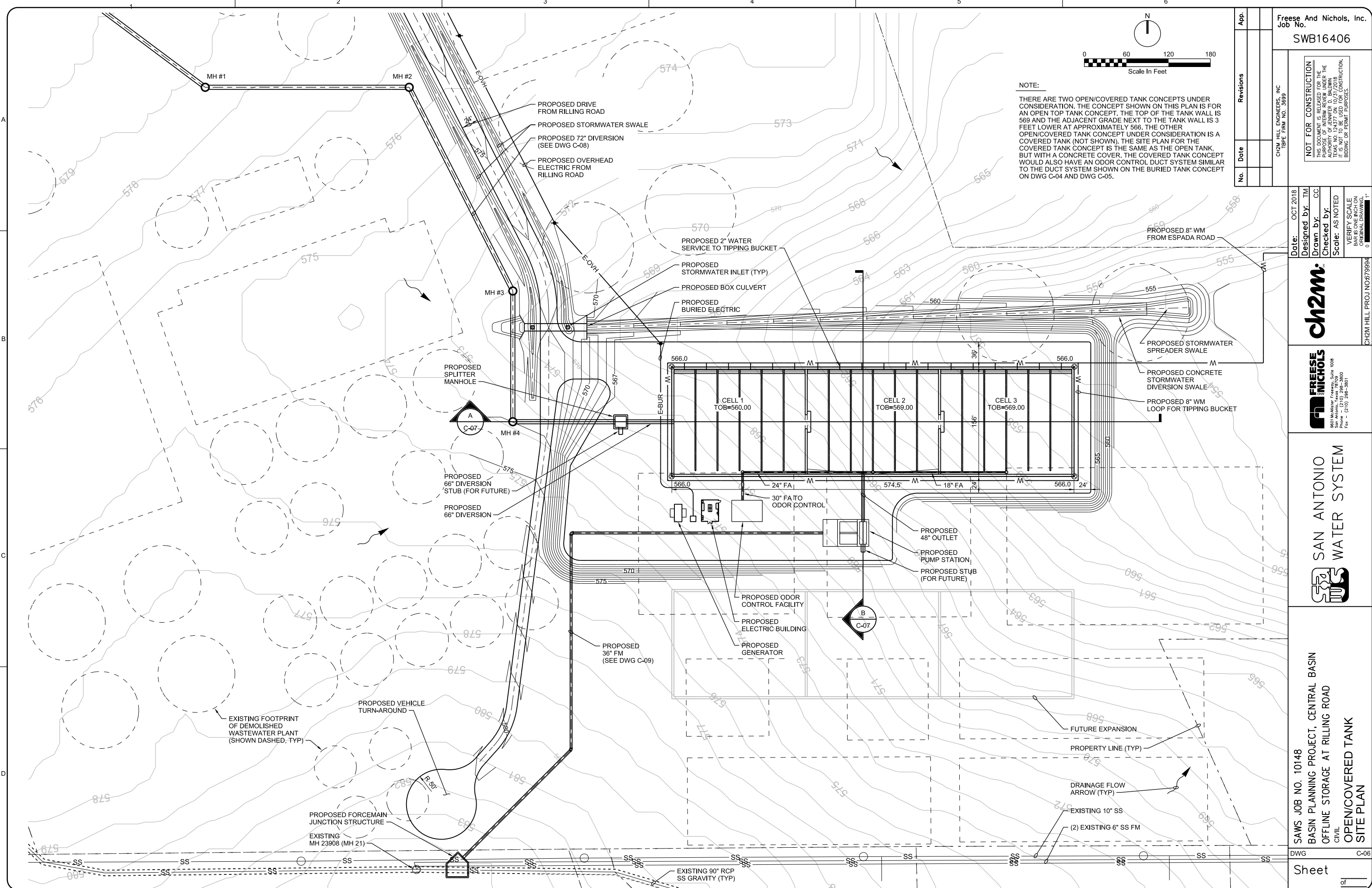
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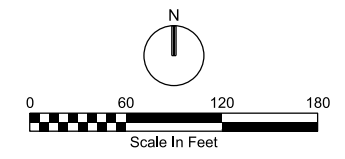
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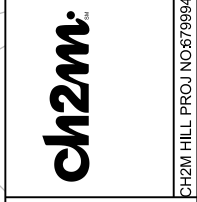


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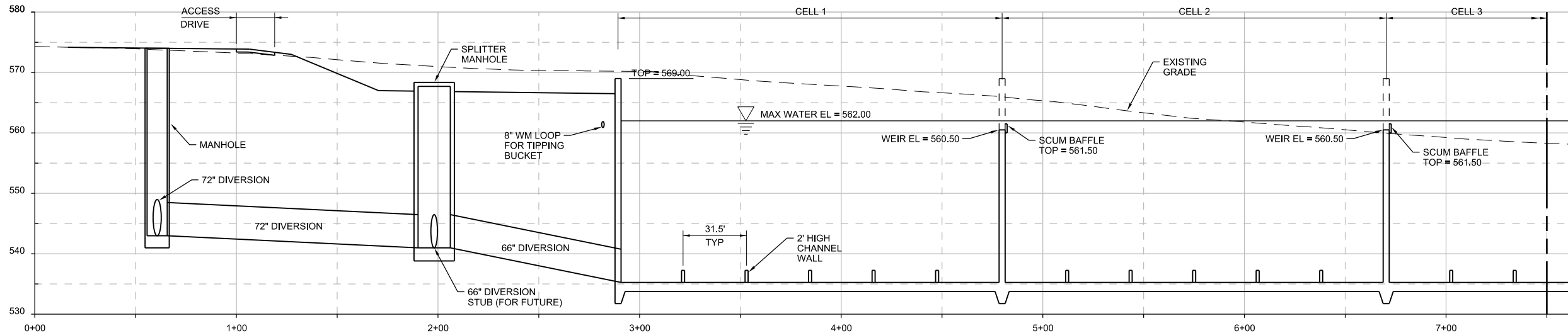
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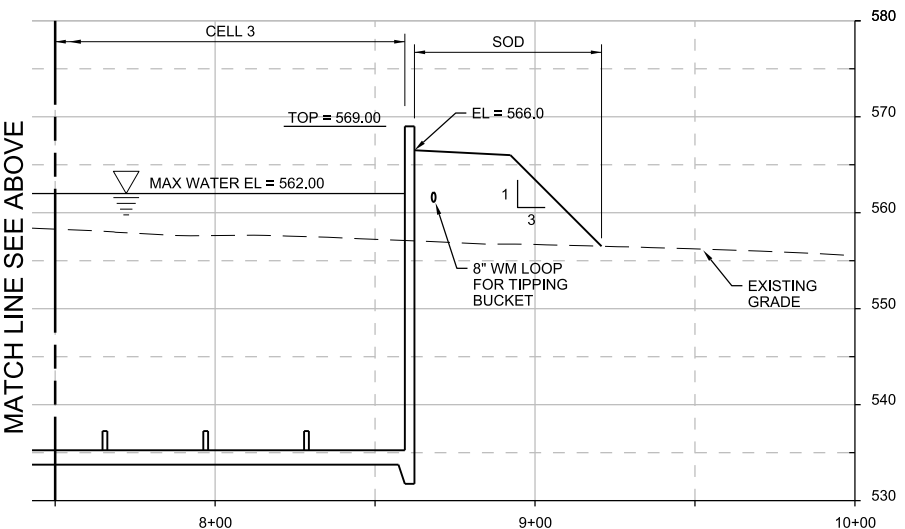


SAWS JOB NO. 10148
 BASIN PLANNING PROJECT, CENTRAL BASIN
 OFFLINE STORAGE AT RILLING ROAD
 CIVIL
 OPEN/COVERED TANK
 SITE PLAN
 DWG C-06
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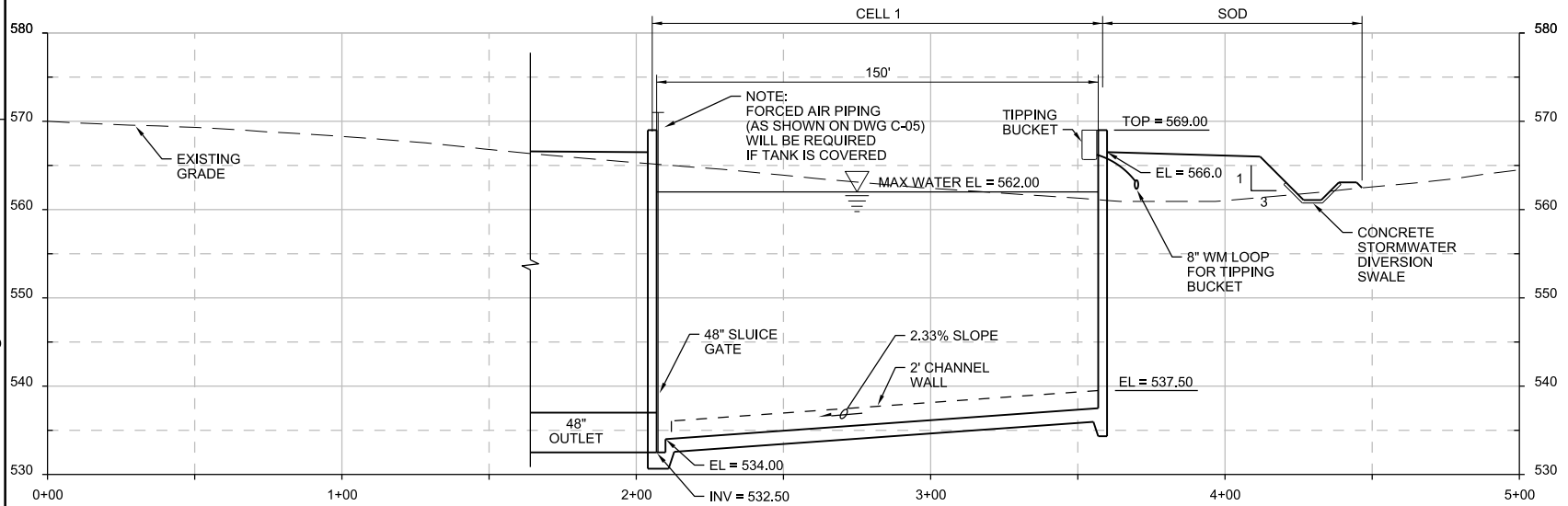


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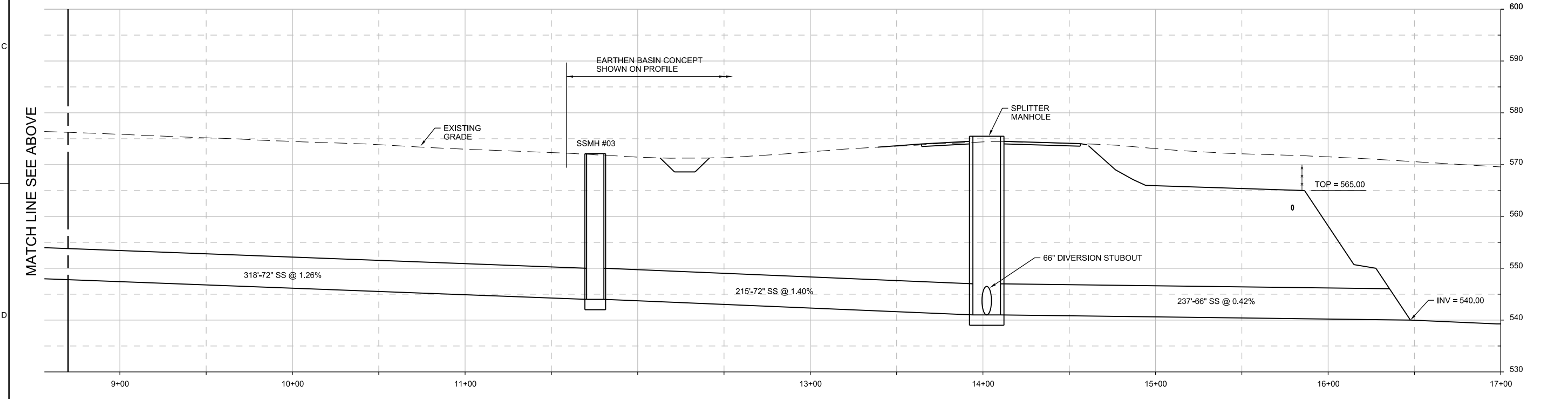
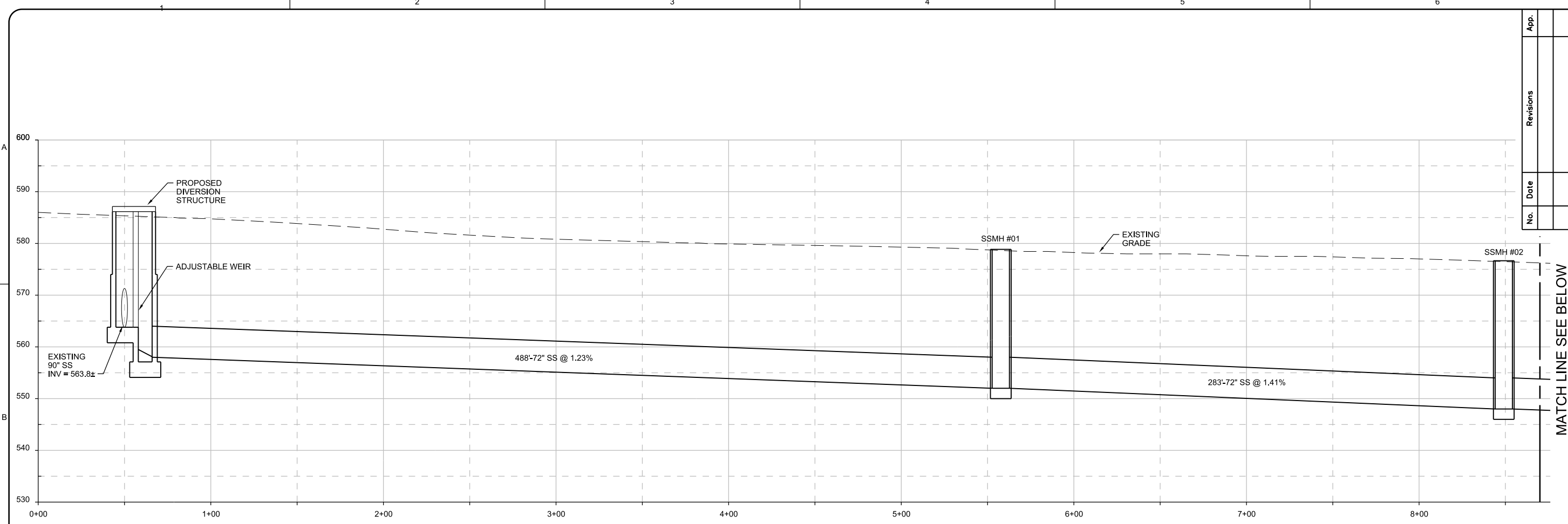
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SAWS JOB NO. 10148
BASIN PLANNING PROJECT, CENTRAL BASIN
OFFLINE STORAGE AT RILLING ROAD
CIVIL
CROSS SECTIONS
OPEN/COVERED TANK

DWG C-07
Sheet

SCHEMATIC DESIGN



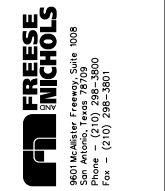
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Job No. SWB16406

CH2M HILL ENGINEERS, INC.
1875 FARM NO. 3659

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SAN ANTONIO
WATER SYSTEM

SAWS JOB NO. 10148
BASIN PLANNING PROJECT, CENTRAL BASIN
OFFLINE STORAGE AT RILLING ROAD
CIVIL
PROFILE
DIVERSION GRAVITY MAIN

SCALE: 1" = 30' HORIZ
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DWG 08
Sheet

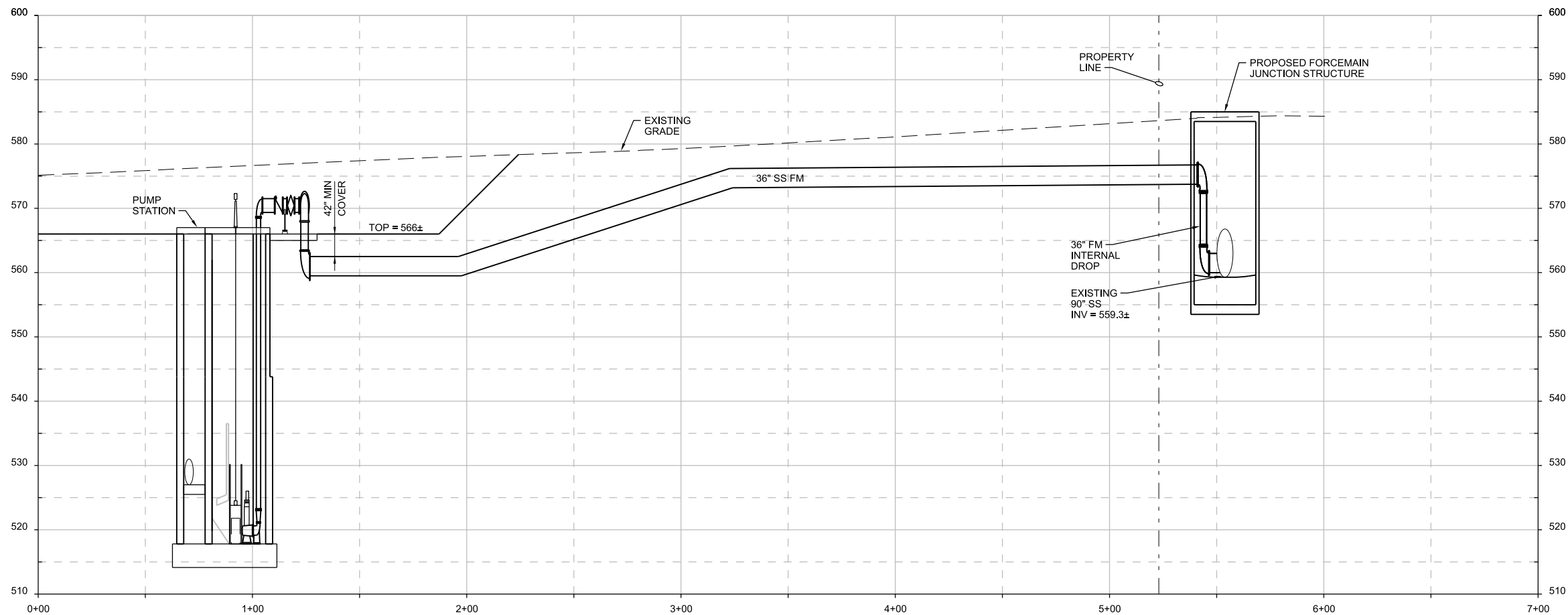
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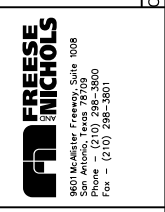
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Scale: AS NOTED
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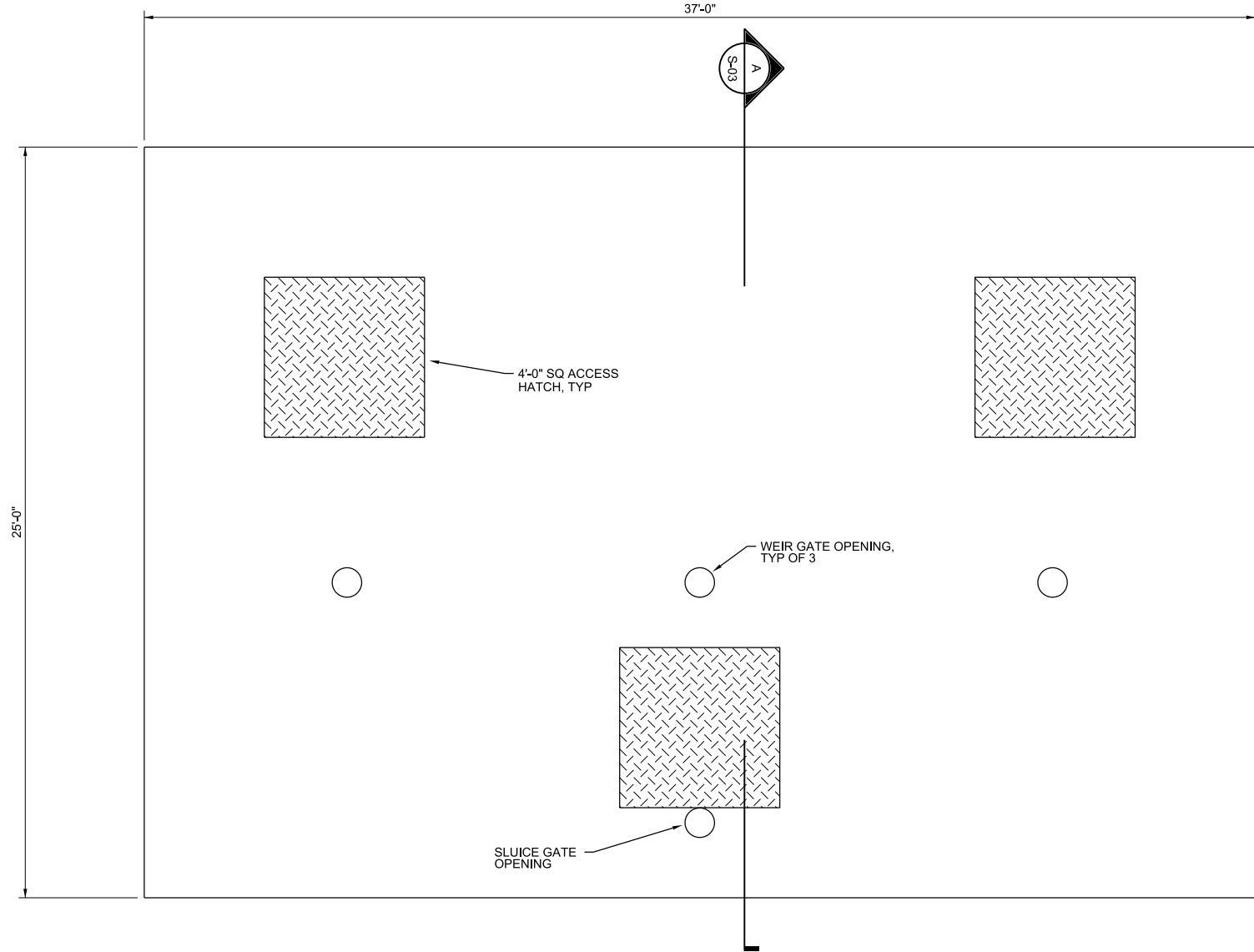
SAWS JOB NO. 10148
BASIN PLANNING PROJECT, CENTRAL BASIN
OFFLINE STORAGE AT RILLING ROAD
CIVIL
PROFILE
OUTFALL FORCEMAIN

DWG 09
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of

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SCALE: 1" = 30' HORIZ
1" = 10' VERT

A
B
C
D



 **TOP PLAN**
3/8"=1'-0"

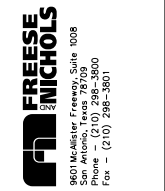
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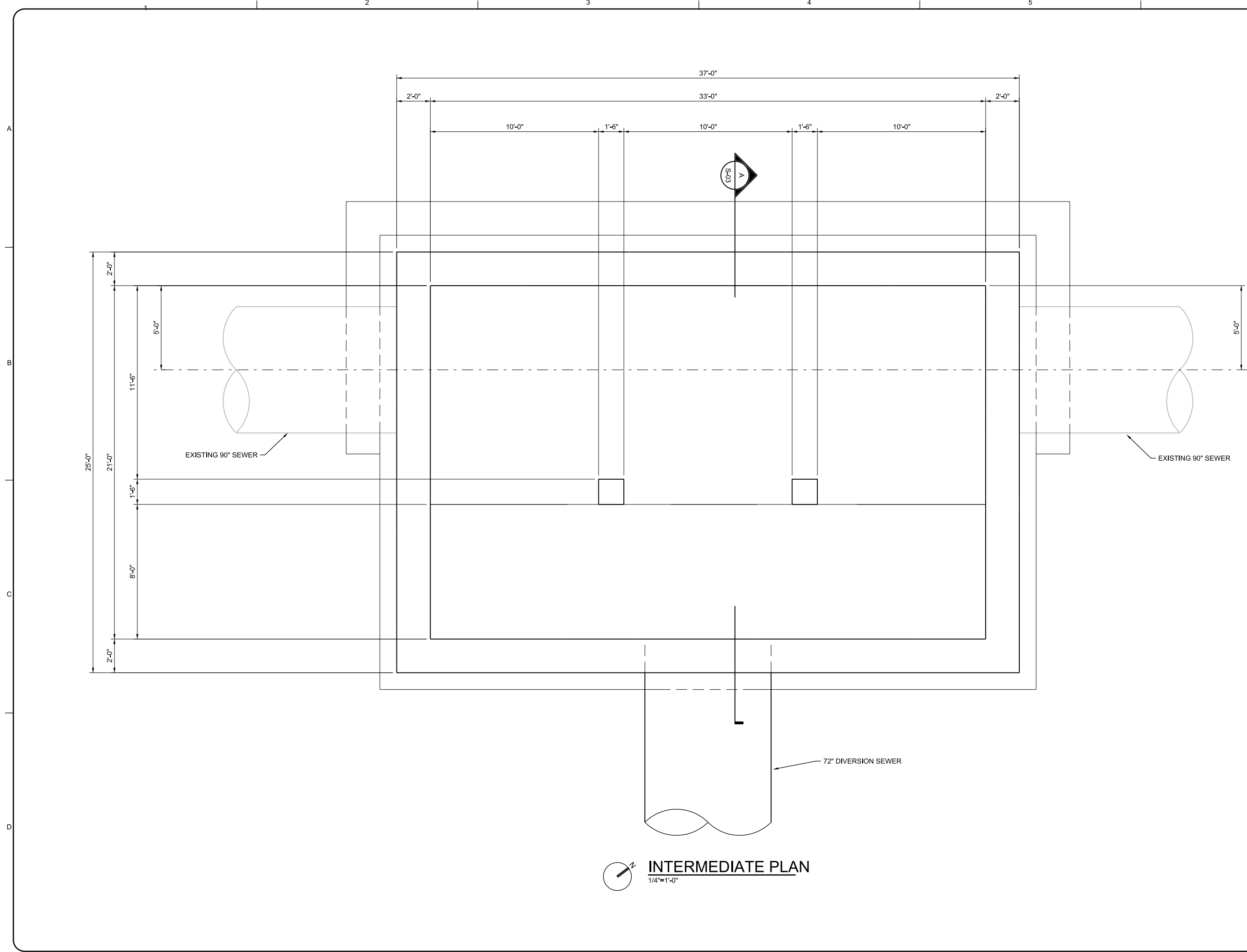
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SAWS JOB NO. 10148
BASIN PLANNING PROJECT, CENTRAL BASIN
OFFLINE STORAGE AT RILLING ROAD
STRUCTURAL
DIVERSION STRUCTURE
TOP PLAN

DWG 901
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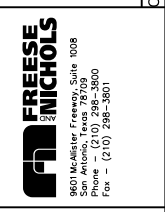



INTERMEDIATE PLAN
 1/4"=1'-0"

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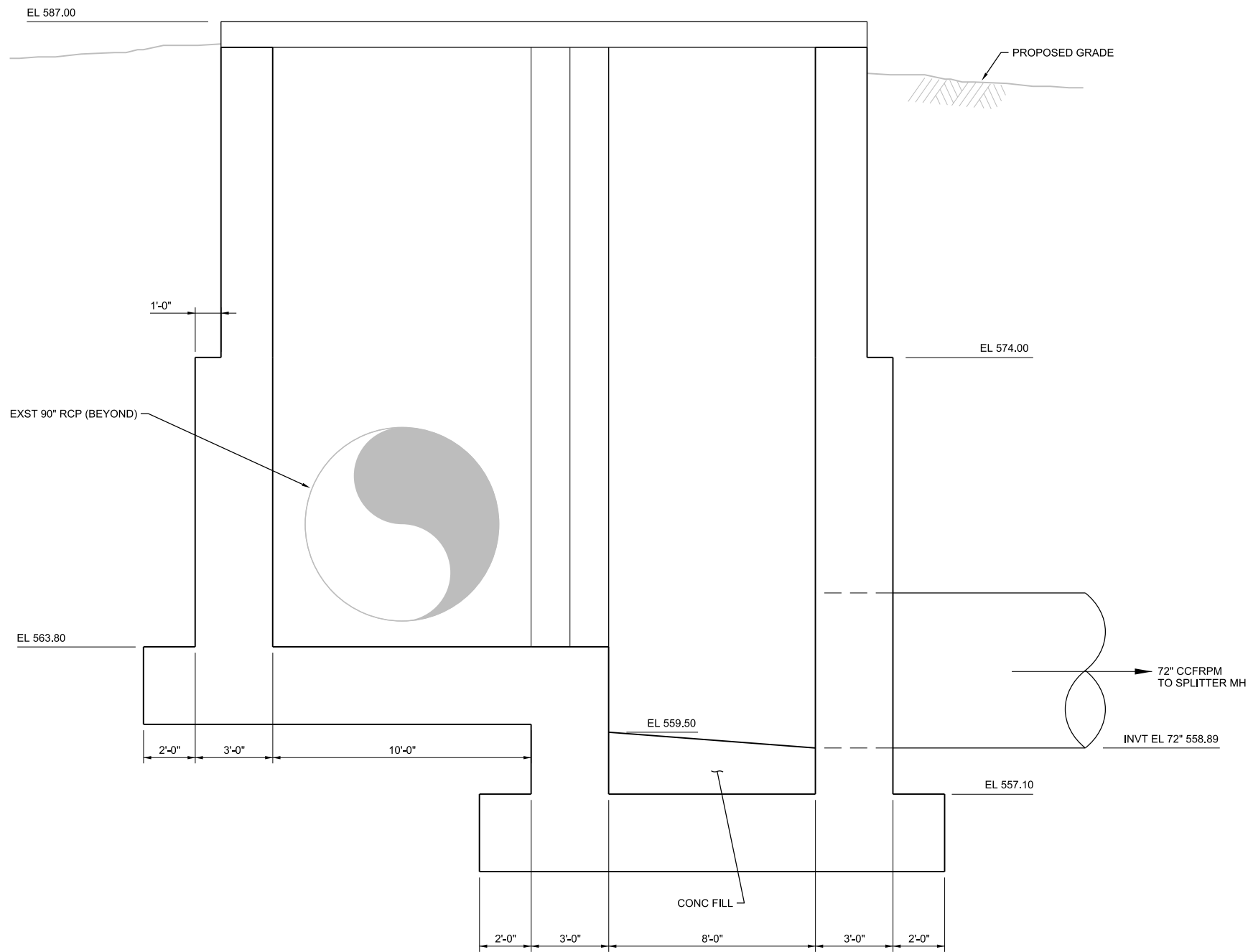
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 BASIN PLANNING PROJECT, CENTRAL BASIN
 OFFLINE STORAGE AT RILLING ROAD
 STRUCTURAL
**DIVERSION STRUCTURE
 INTERMEDIATE PLAN**

DWG 02
 Sheet

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A SECTION
 1/4"=1'-0"
 S-01, S-02

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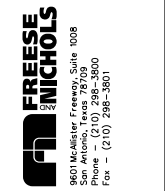
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SAWS JOB NO. 10148
 BASIN PLANNING PROJECT, CENTRAL BASIN
 OFFLINE STORAGE AT RILLING ROAD
 STRUCTURAL
 DIVERSION STRUCTURE
 SECTIONS

DWG 03
 Sheet 01

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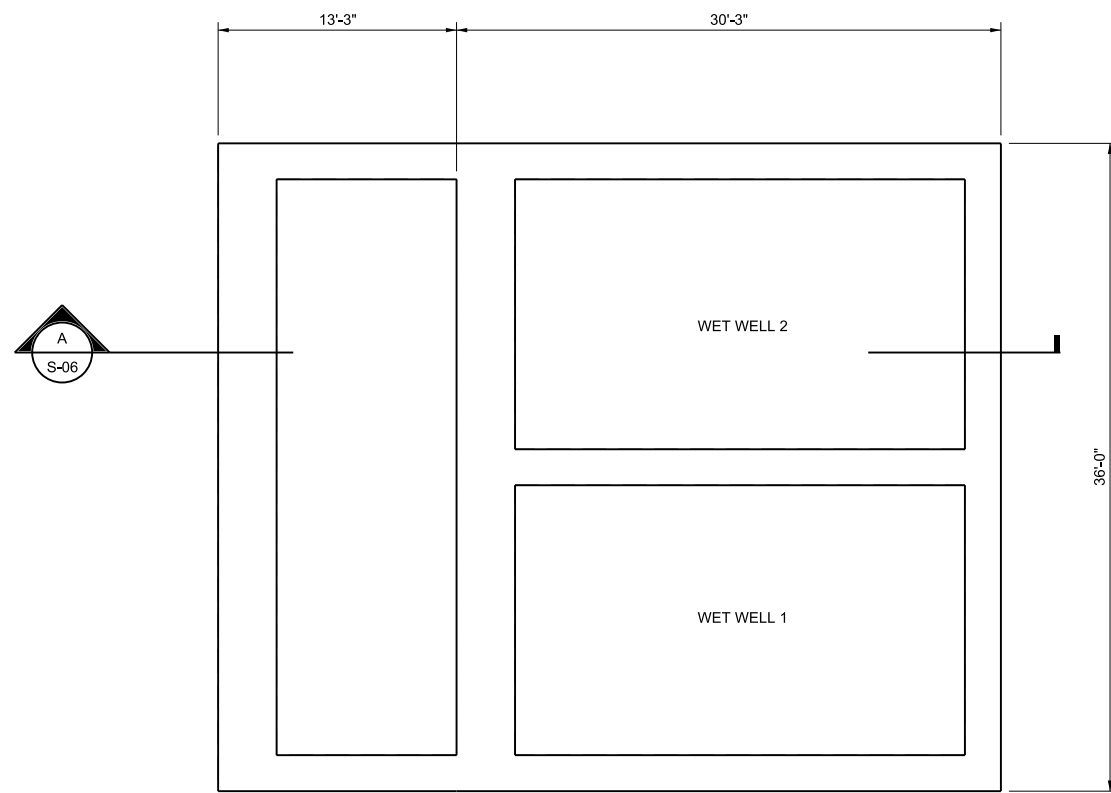
2

3


4

5

6



NOTE:
PUMP STATION LAYOUT SHOWN
REFLECTS TANK OPTION

 **TOP PLAN**
3/32"=1'-0"

No.	Date	Revisions	App.

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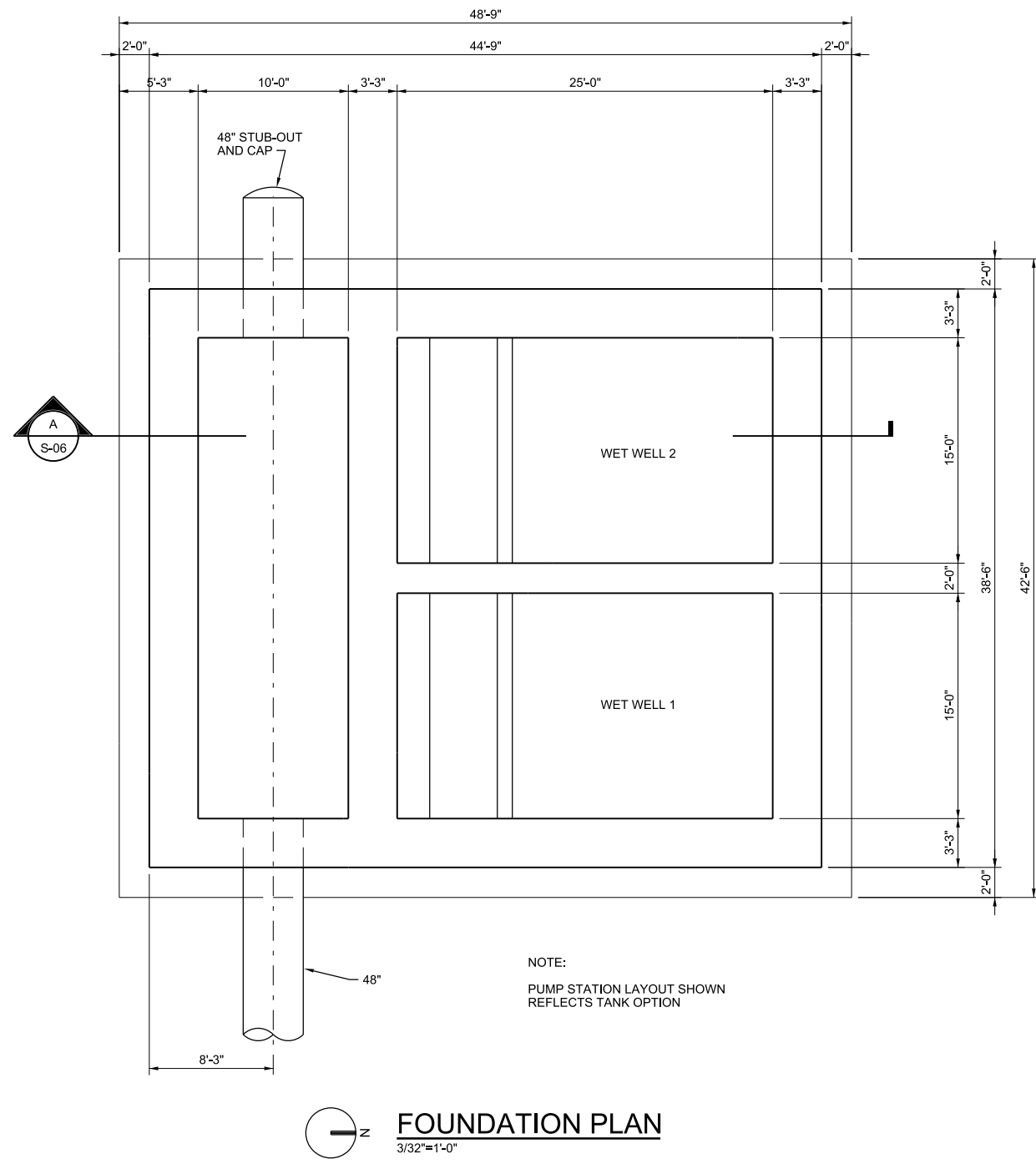
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SAWS JOB NO. 10148
BASIN PLANNING PROJECT, CENTRAL BASIN
OFFLINE STORAGE AT RILLING ROAD
STRUCTURAL
PUMP STATION
TOP PLAN

DWG 04
Sheet

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B
C
D

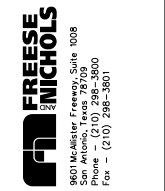
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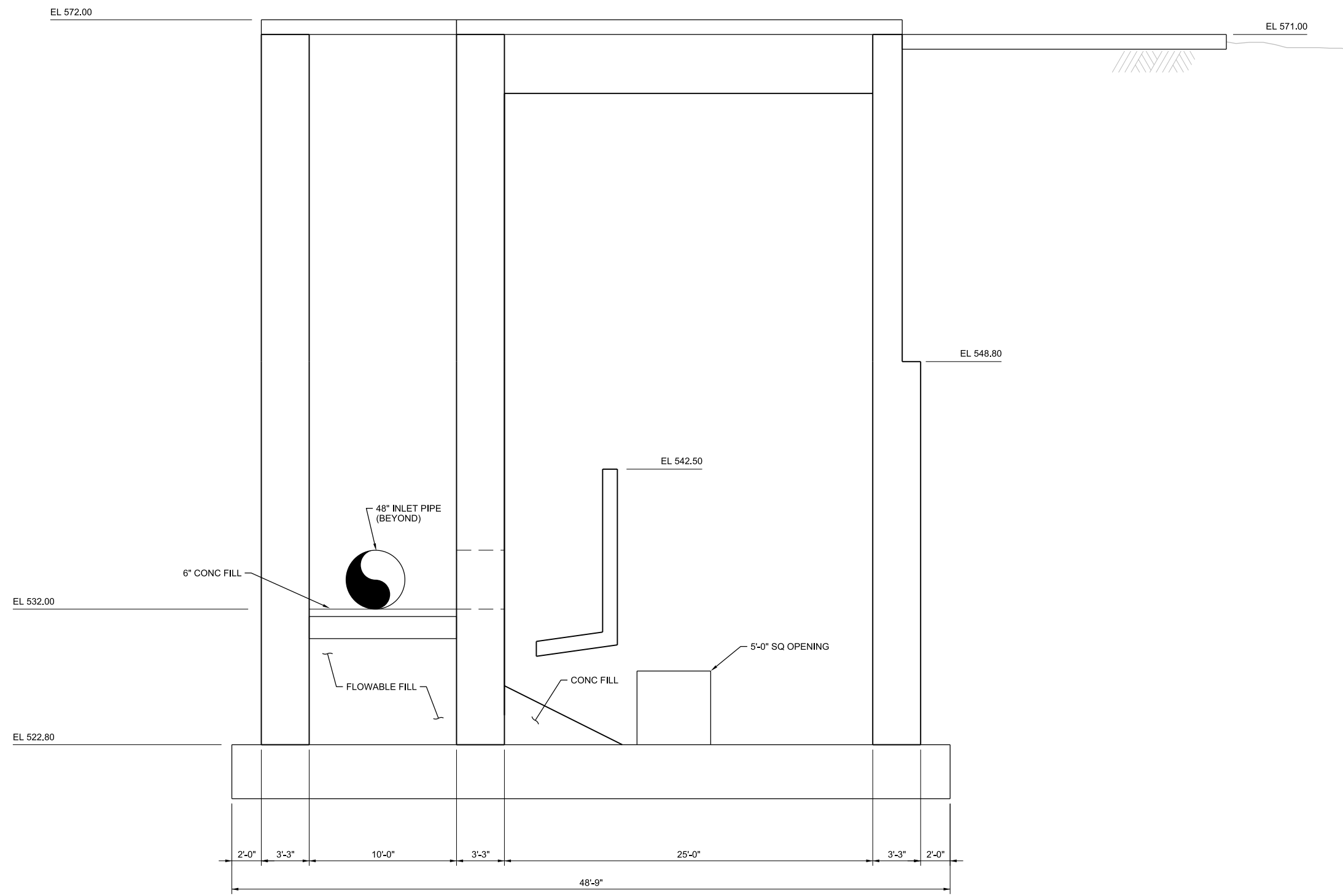
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SAWS JOB NO. 10148
BASIN PLANNING PROJECT, CENTRAL BASIN
OFFLINE STORAGE AT RILLING ROAD
STRUCTURAL
PUMP STATION
FOUNDATION PLAN

DWG 05
Sheet

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A SECTION
 1/4"=1'-0"
 S-04, S-05

NOTE:
 PUMP STATION LAYOUT SHOWN
 REFLECTS TANK OPTION

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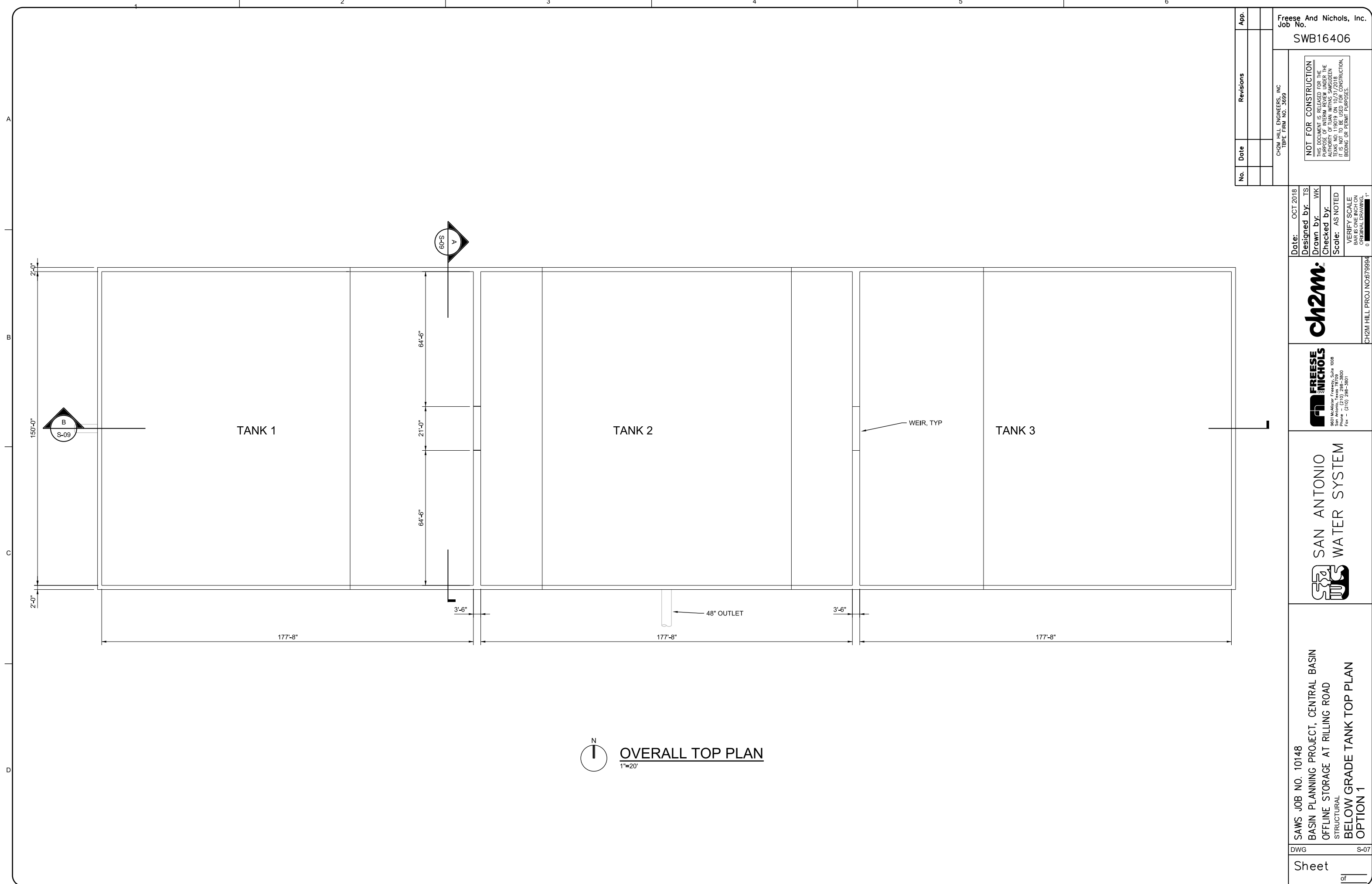
FREESE AND NICHOLS
 9801 McAlister Freeway, Suite 1008
 San Antonio, TX 78217
 Phone - (210) 298-3500
 Fax - (210) 298-3501



SAWS JOB NO. 10148
 BASIN PLANNING PROJECT, CENTRAL BASIN
 OFFLINE STORAGE AT RILLING ROAD
 STRUCTURAL
 PUMP STATION
 SECTIONS

DWG 06
 Sheet 01

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OVERALL TOP PLAN
 1"=20'

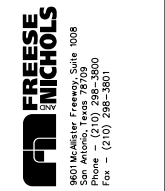
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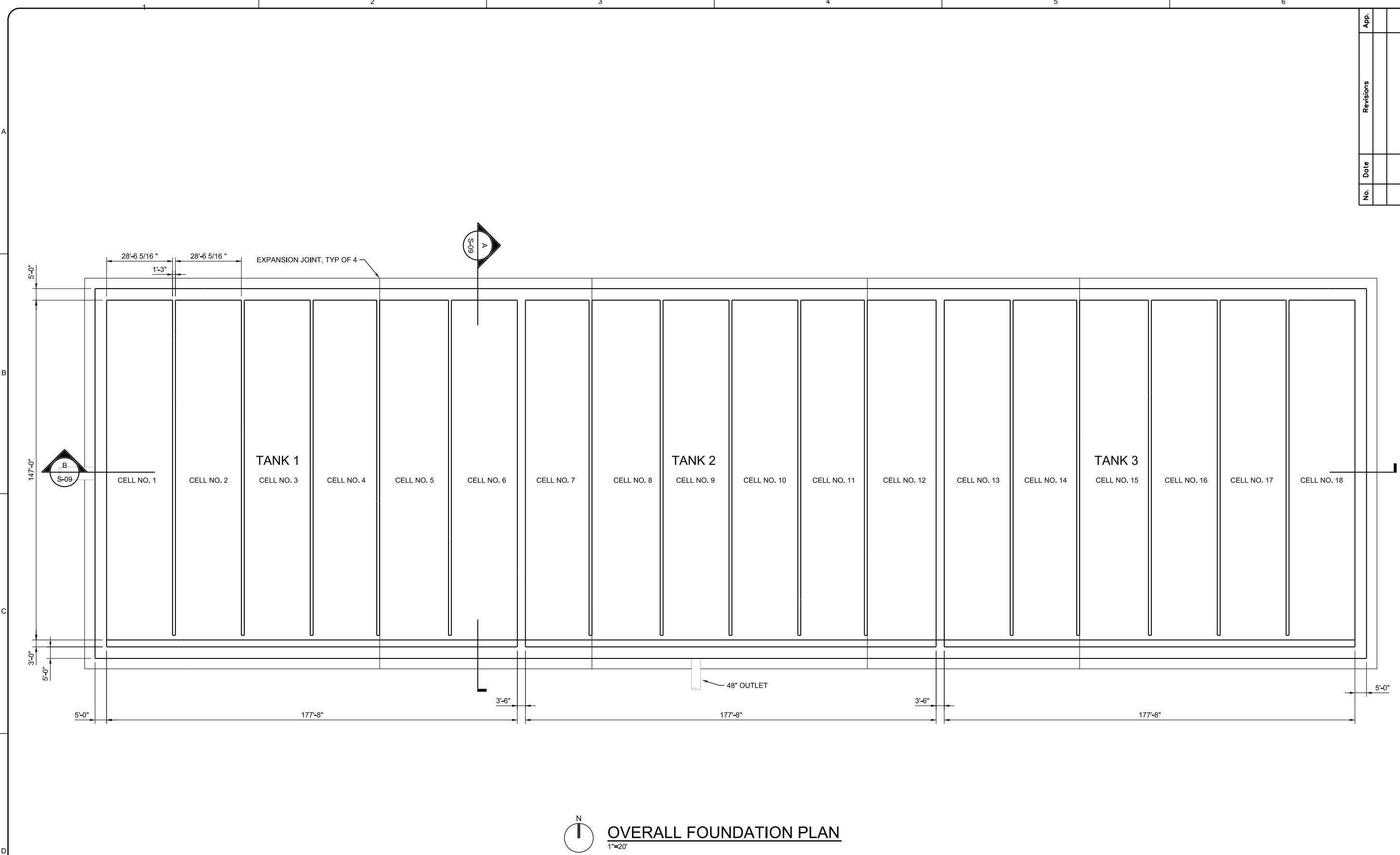
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 OFFLINE STORAGE AT RILLING ROAD
 STRUCTURAL
 BELOW GRADE TANK TOP PLAN
 OPTION 1

DWG 07
 Sheet

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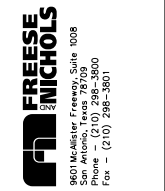


OVERALL FOUNDATION PLAN
 1"=20'

No.	Date	Revisions	App.

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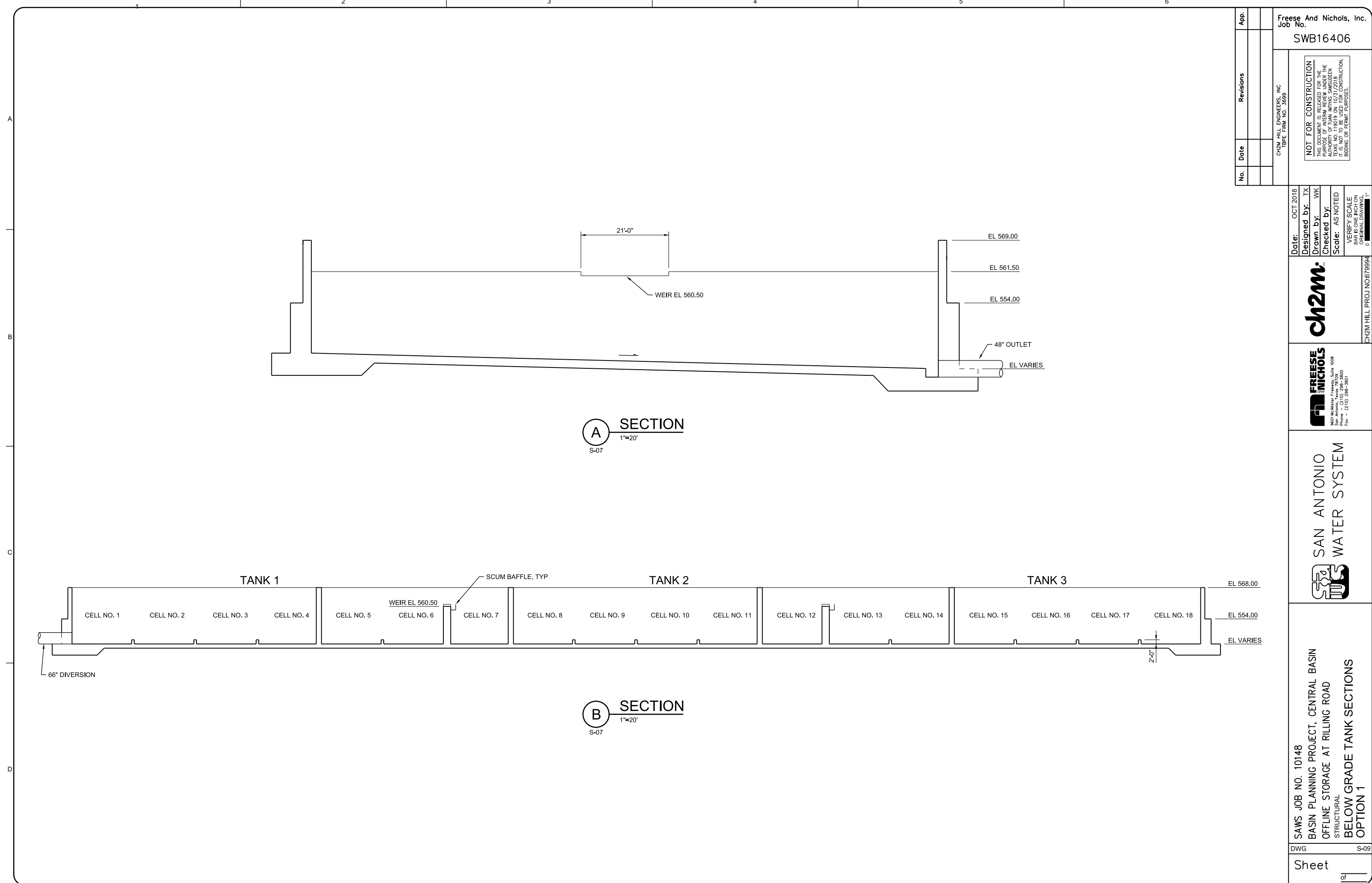
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 BASIN PLANNING PROJECT, CENTRAL BASIN
 OFFLINE STORAGE AT RILLING ROAD
 STRUCTURAL
BELOW GRADE TANK
OVERALL FOUNDATION PLAN OPTION 1

DWG 08
Sheet

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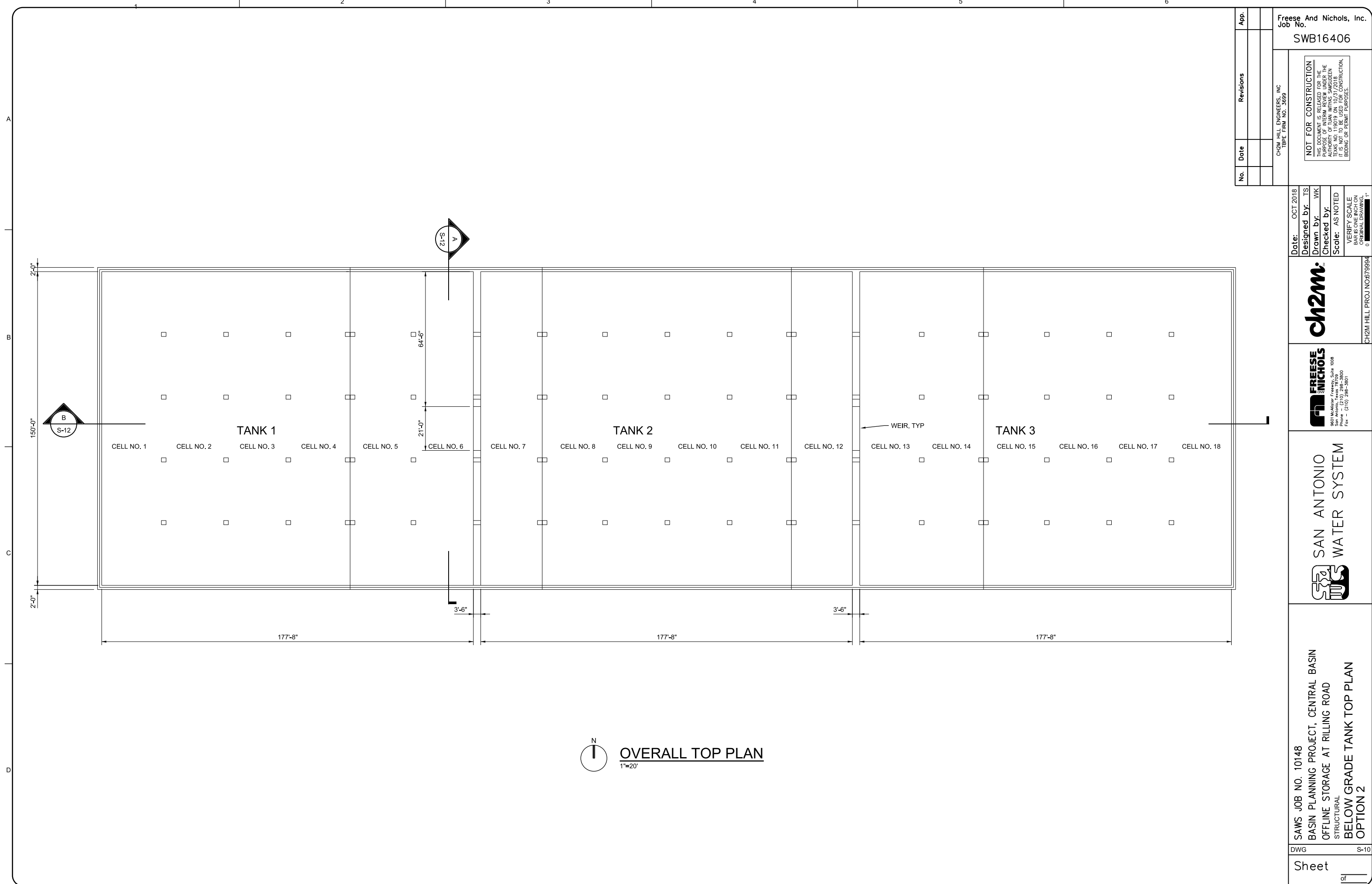
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SAWS JOB NO. 10148
 BASIN PLANNING PROJECT, CENTRAL BASIN
 OFFLINE STORAGE AT RILLING ROAD
 STRUCTURAL
 BELOW GRADE TANK SECTIONS
 OPTION 1

DWG 9-09
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OVERALL TOP PLAN
1"=20'

No.	Date	Revisions	App.

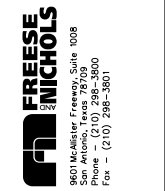
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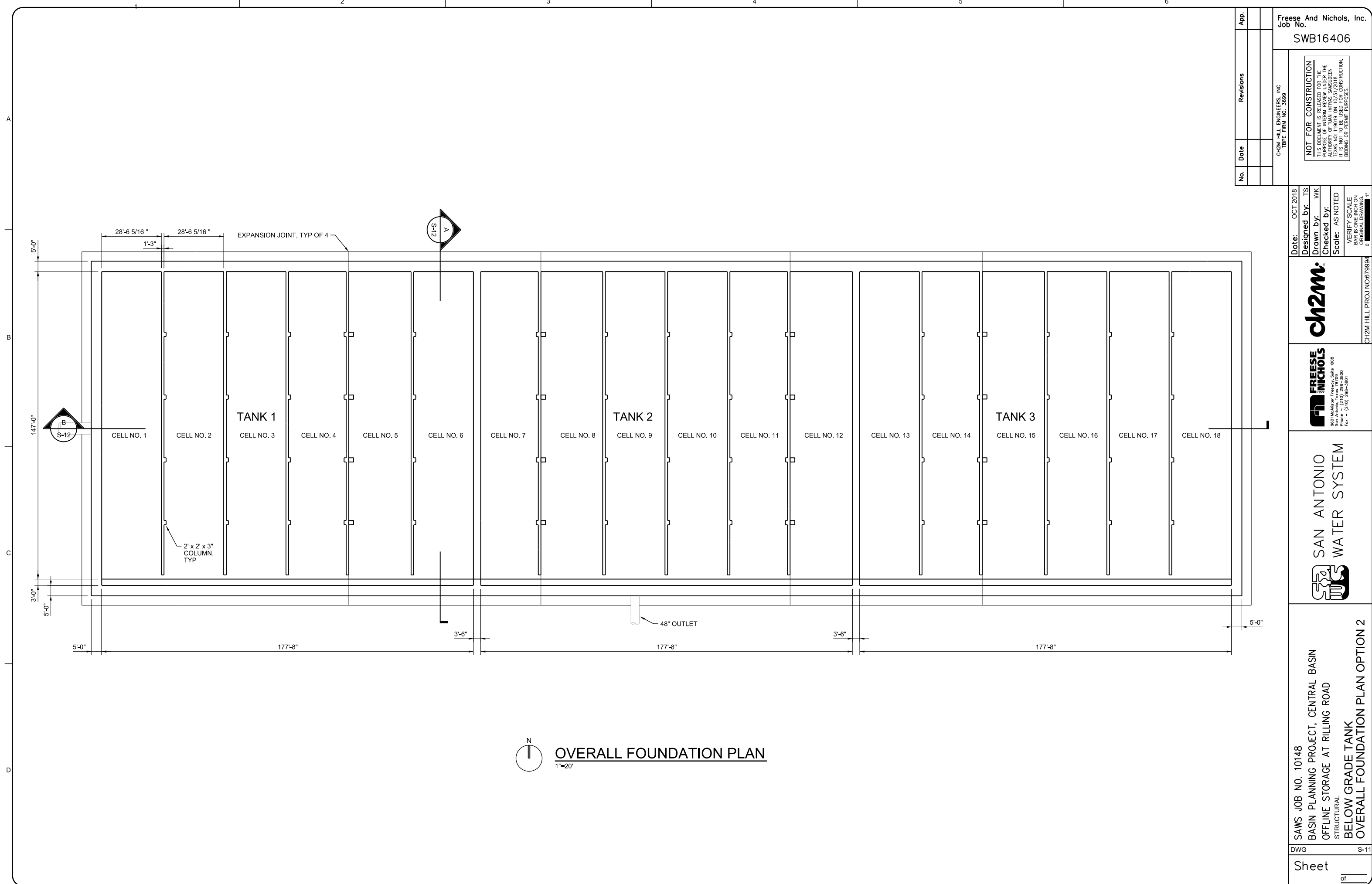
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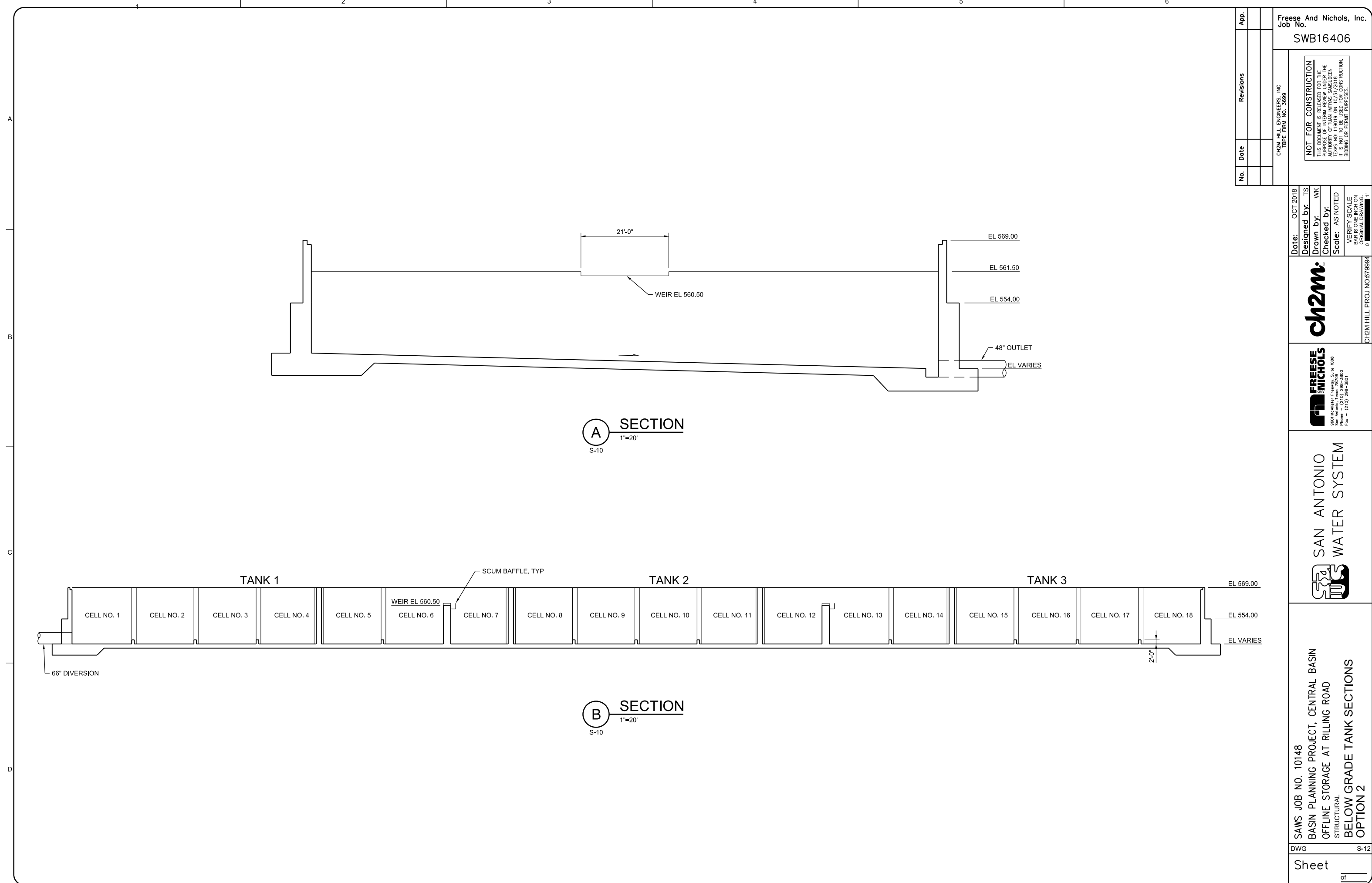


SAWS JOB NO. 10148
BASIN PLANNING PROJECT, CENTRAL BASIN
OFFLINE STORAGE AT RILLING ROAD
STRUCTURAL
BELOW GRADE TANK TOP PLAN
OPTION 2

DWG 10
Sheet

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A SECTION
1"=20'
S-10

B SECTION
1"=20'
S-10

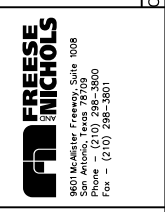
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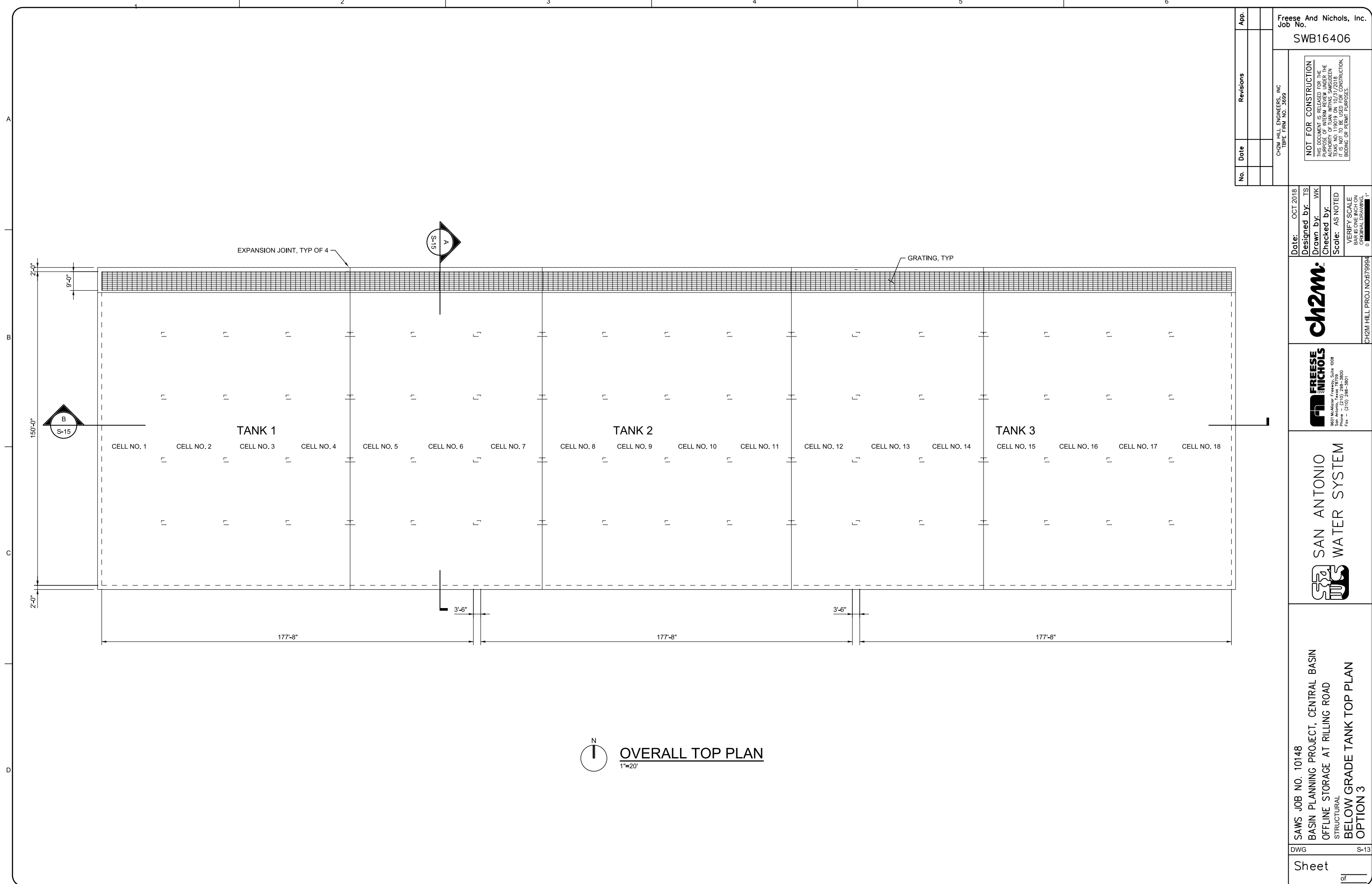
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BASIN PLANNING PROJECT, CENTRAL BASIN
OFFLINE STORAGE AT RILLING ROAD
STRUCTURAL
BELOW GRADE TANK SECTIONS
OPTION 2

DWG 12
Sheet

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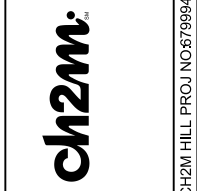
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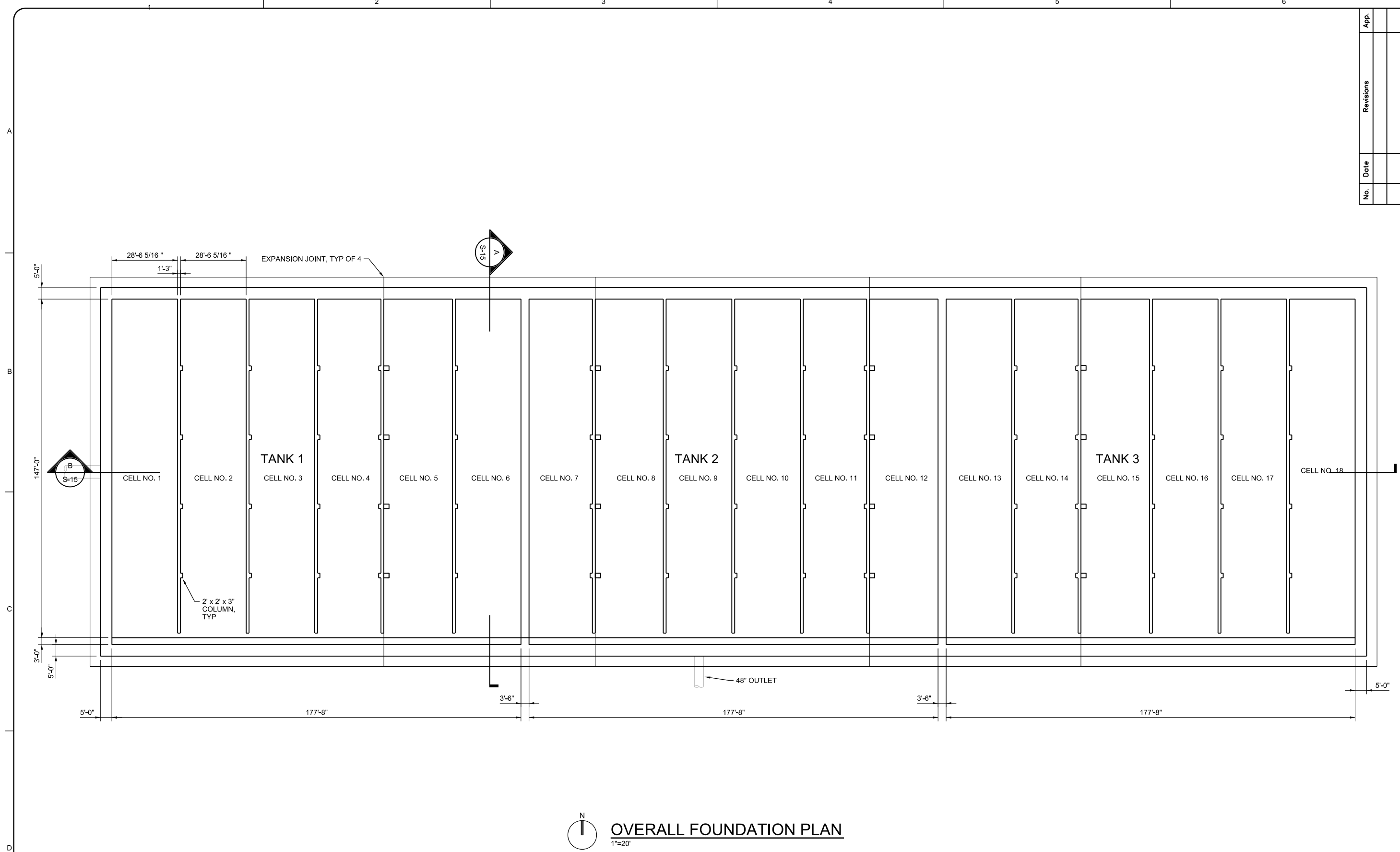


SAWS JOB NO. 10148
 BASIN PLANNING PROJECT, CENTRAL BASIN
 OFFLINE STORAGE AT RILLING ROAD
 STRUCTURAL
 BELOW GRADE TANK TOP PLAN
 OPTION 3

DWG 13
 Sheet

SCHEMATIC DESIGN

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OVERALL FOUNDATION PLAN
 1"=20'

No.	Date	Revisions	App.

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SAN ANTONIO WATER SYSTEM
 SAWS JOB NO. 10148
 BASIN PLANNING PROJECT, CENTRAL BASIN
 OFFLINE STORAGE AT RILLING ROAD
 STRUCTURAL
BELOW GRADE TANK
OVERALL FOUNDATION PLAN OPTION 3

DWG 14
 Sheet

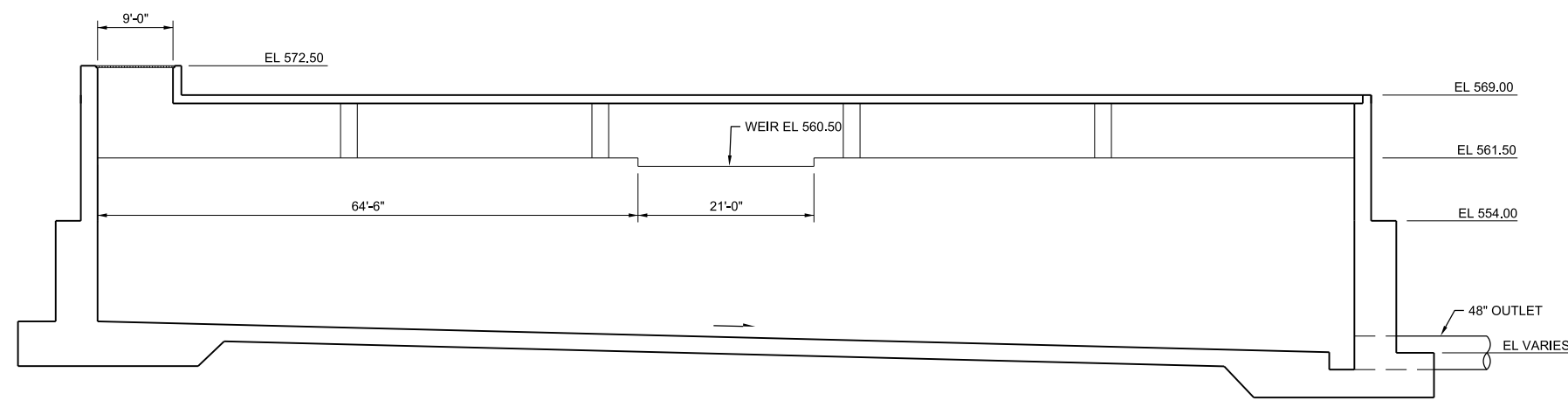
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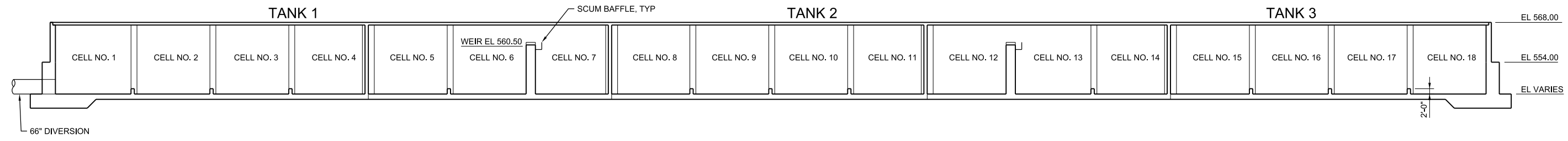
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A SECTION
 1"=20'
 S-13



B SECTION
 1"=20'
 S-13

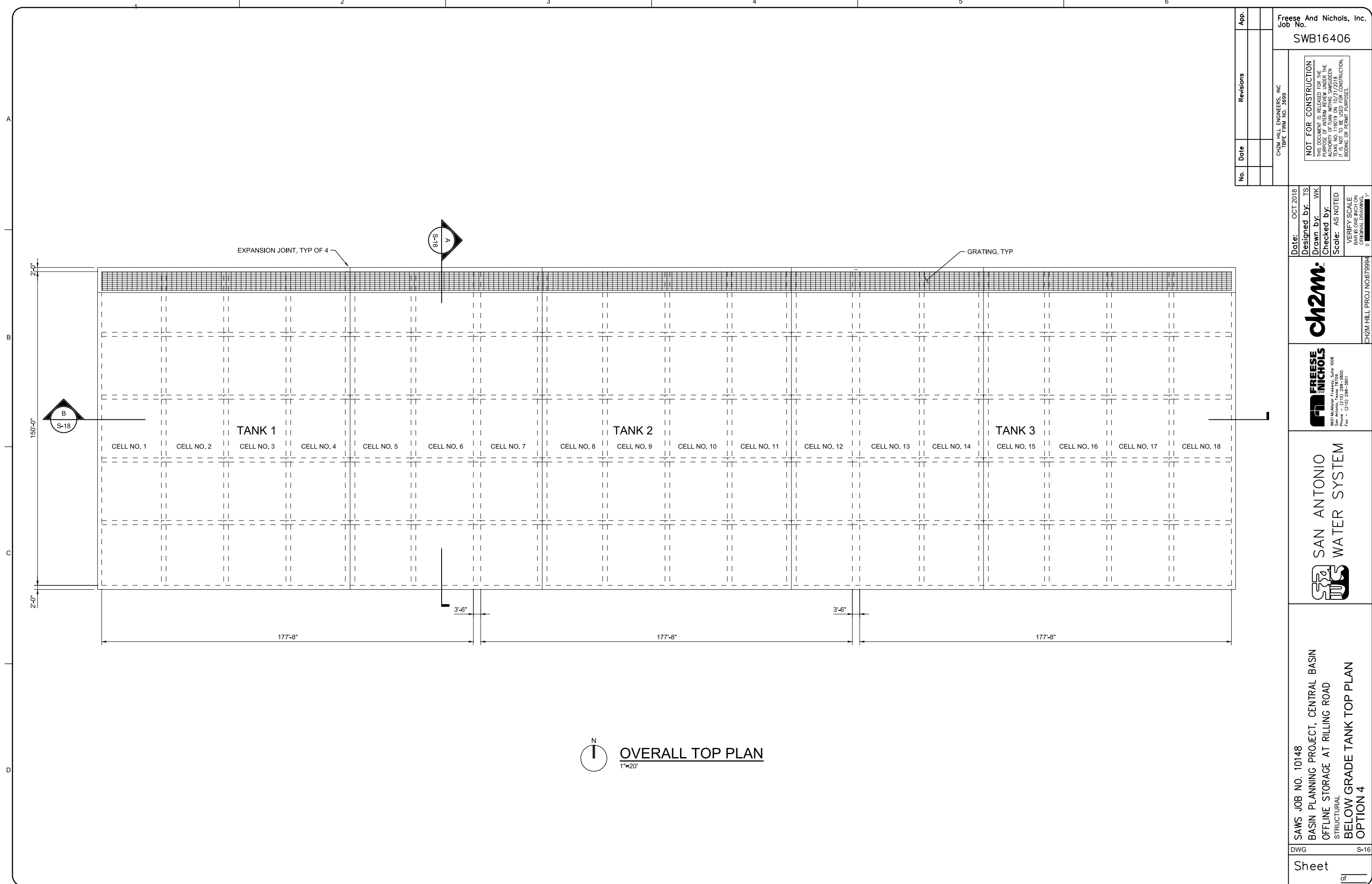
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 0 1"



SAWS JOB NO. 10148
 BASIN PLANNING PROJECT, CENTRAL BASIN
 OFFLINE STORAGE AT RILLING ROAD
 STRUCTURAL
 BELOW GRADE TANK SECTIONS
 OPTION 3

DWG 15
 Sheet

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N
OVERALL TOP PLAN
 1"=20'

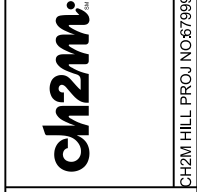
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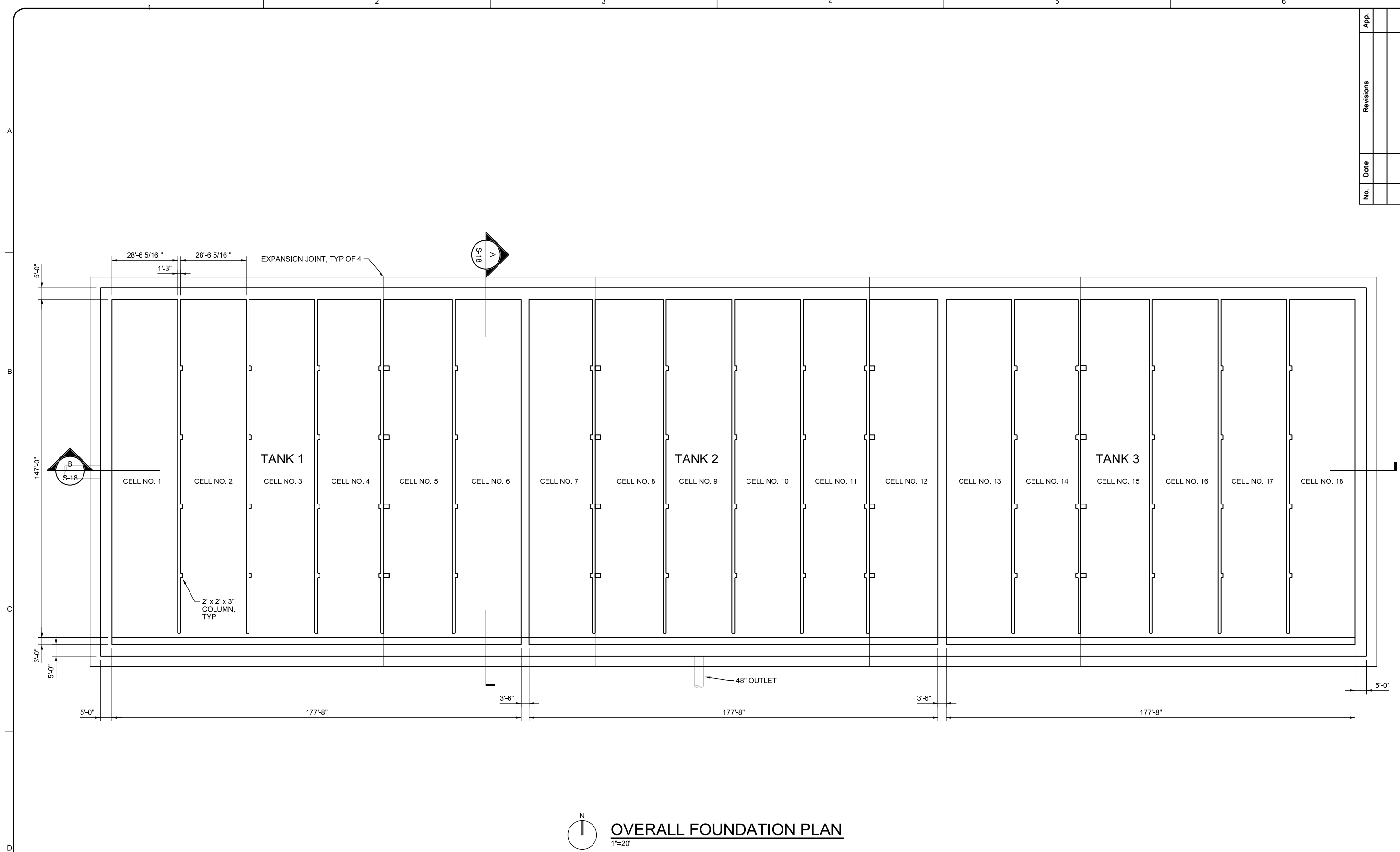


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 BASIN PLANNING PROJECT, CENTRAL BASIN
 OFFLINE STORAGE AT RILLING ROAD
 STRUCTURAL
**BELOW GRADE TANK TOP PLAN
 OPTION 4**

DWG 16
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SCHEMATIC DESIGN

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OVERALL FOUNDATION PLAN
 1"=20'

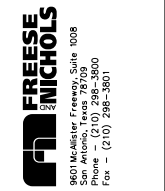
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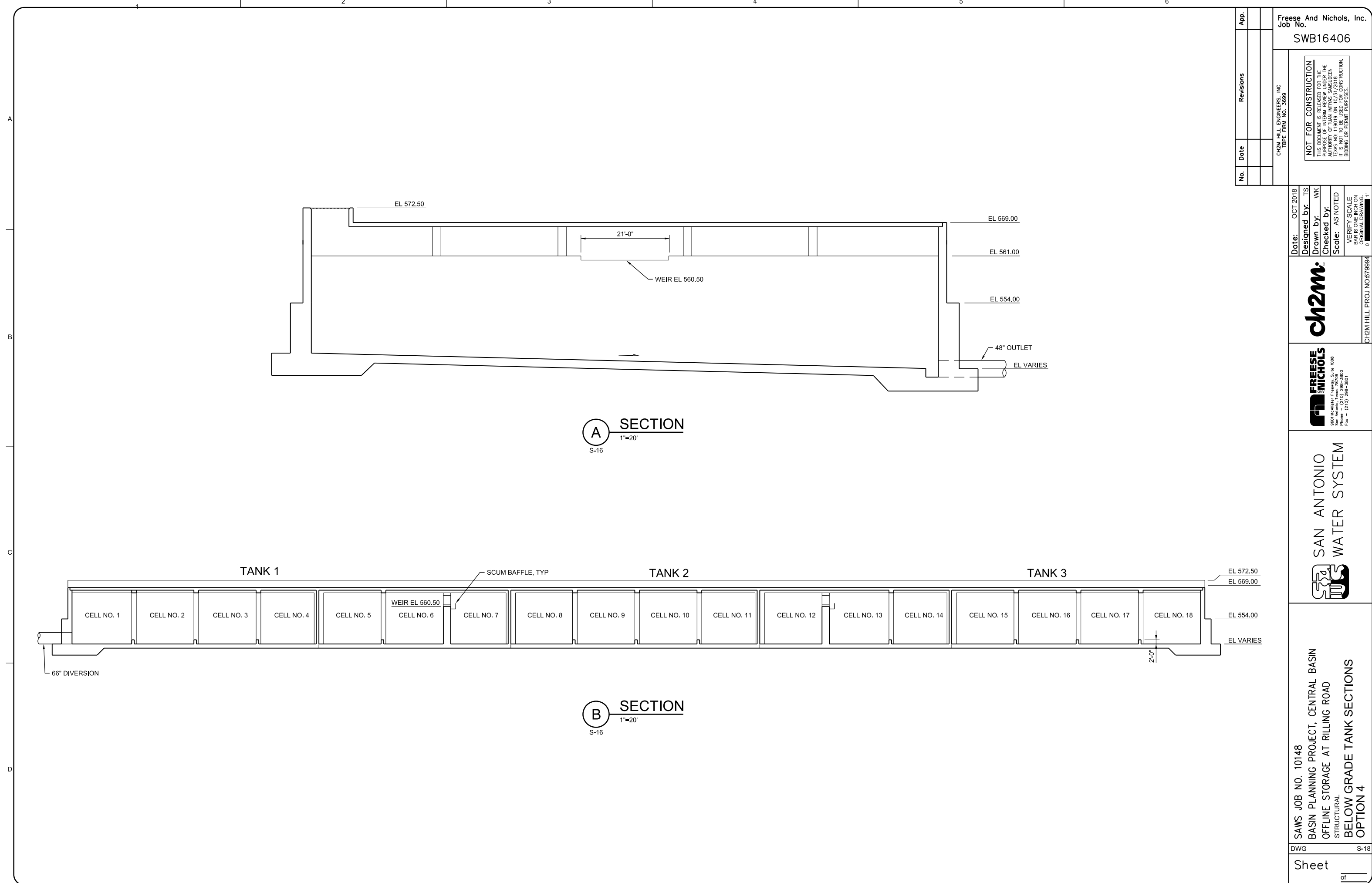
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OFFLINE STORAGE AT RILLING ROAD
STRUCTURAL
BELOW GRADE TANK
OVERALL FOUNDATION PLAN OPTION 4

DWG 917
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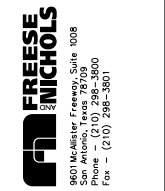
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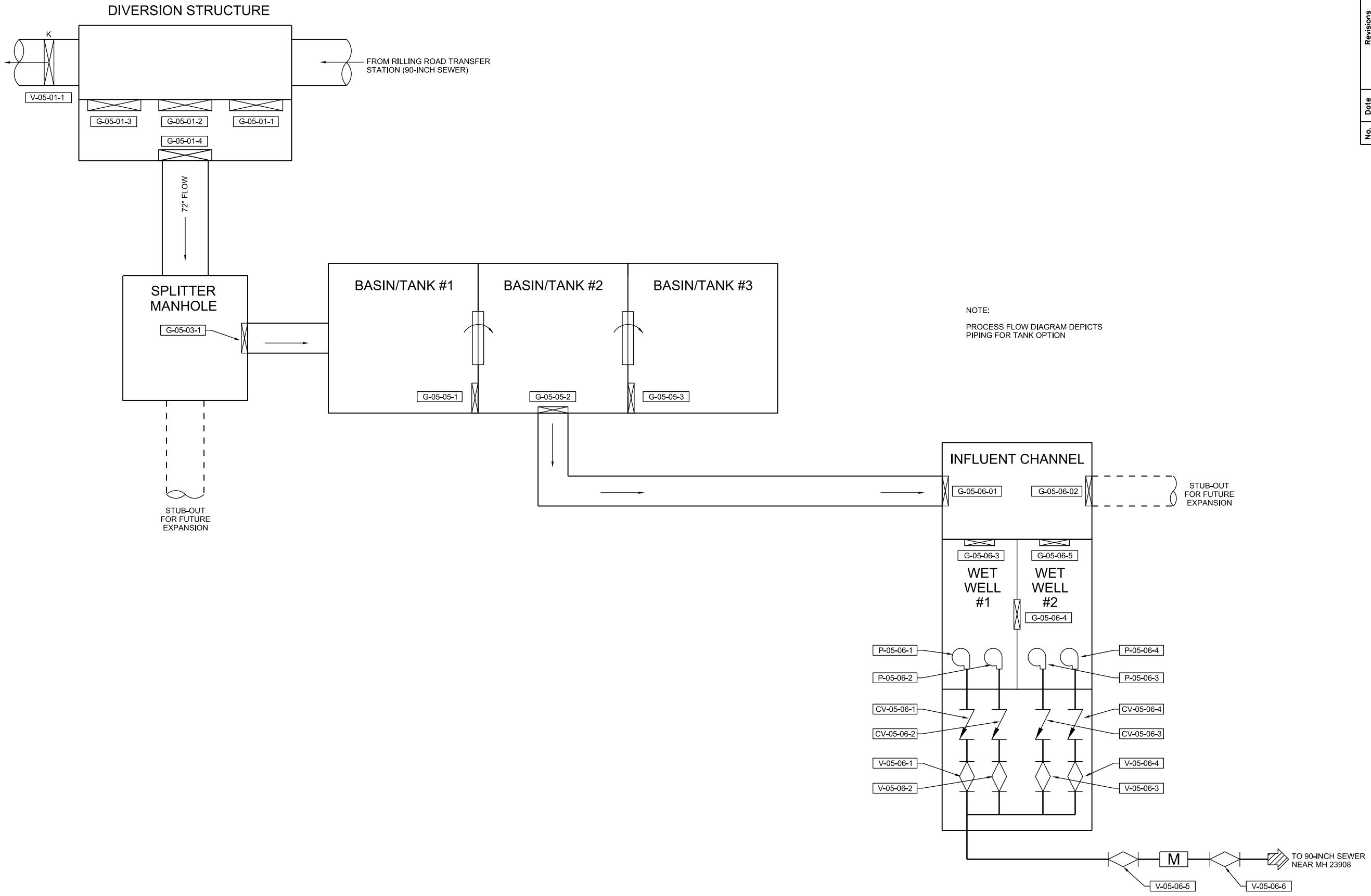
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SAWS JOB NO. 10148
BASIN PLANNING PROJECT, CENTRAL BASIN
OFFLINE STORAGE AT RILLING ROAD
STRUCTURAL
BELOW GRADE TANK SECTIONS
OPTION 4

DWG 18
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NOTE:
PROCESS FLOW DIAGRAM DEPICTS
PIPING FOR TANK OPTION

DIVERSION STRUCTURE

SPLITTER
MANHOLE

BASIN/TANK #1

BASIN/TANK #2

BASIN/TANK #3

INFLUENT CHANNEL

WET
WELL
#1

WET
WELL
#2

STUB-OUT
FOR FUTURE
EXPANSION

STUB-OUT
FOR FUTURE
EXPANSION

72" FLOW

FROM RILLING ROAD TRANSFER
STATION (90-INCH SEWER)

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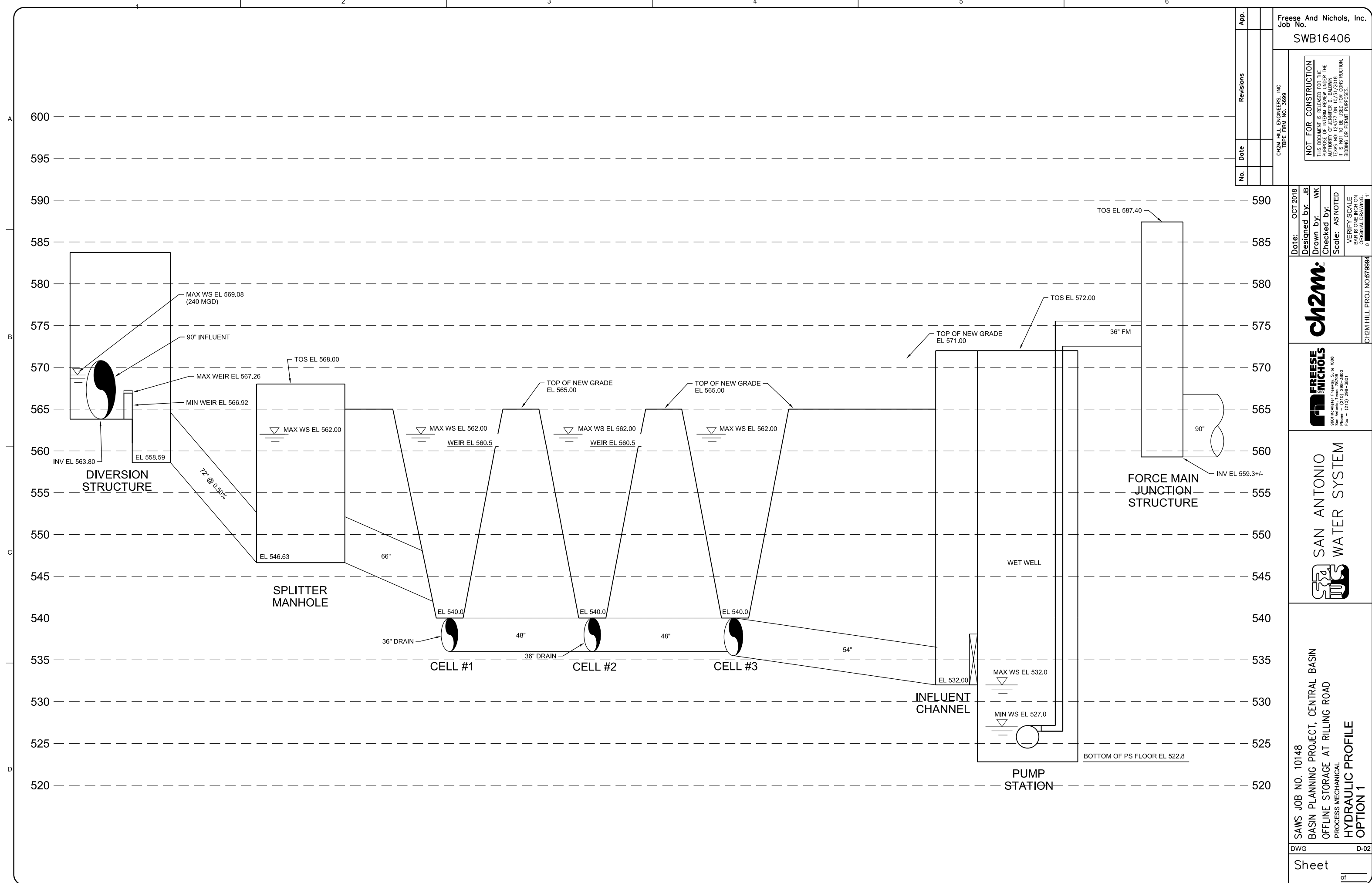
9801 McAlister Freeway, Suite 1008
San Antonio, TX 78217
Phone: (210) 298-3500
Fax: (210) 298-3501



SAWS JOB NO. 10148
BASIN PLANNING PROJECT, CENTRAL BASIN
OFFLINE STORAGE AT RILLING ROAD
PROCESS / MECHANICAL
PROCESS FLOW DIAGRAM

DWG D-01
Sheet

SCHEMATIC DESIGN



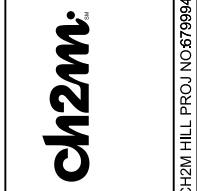
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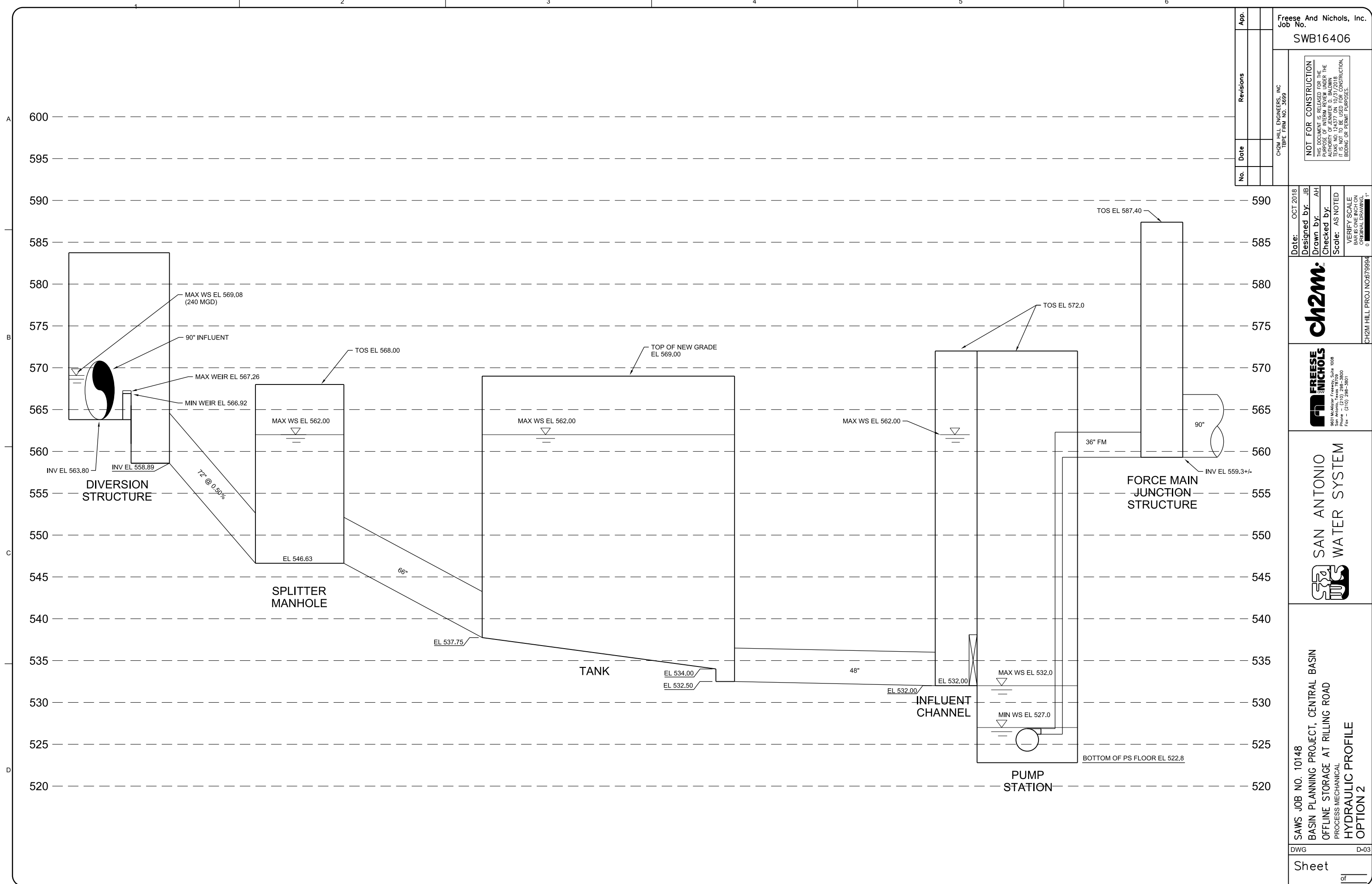
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SAWS JOB NO. 10148
 BASIN PLANNING PROJECT, CENTRAL BASIN
 OFFLINE STORAGE AT RILLING ROAD
 PROCESS MECHANICAL
 HYDRAULIC PROFILE
 OPTION 1

DWG P-02
 Sheet

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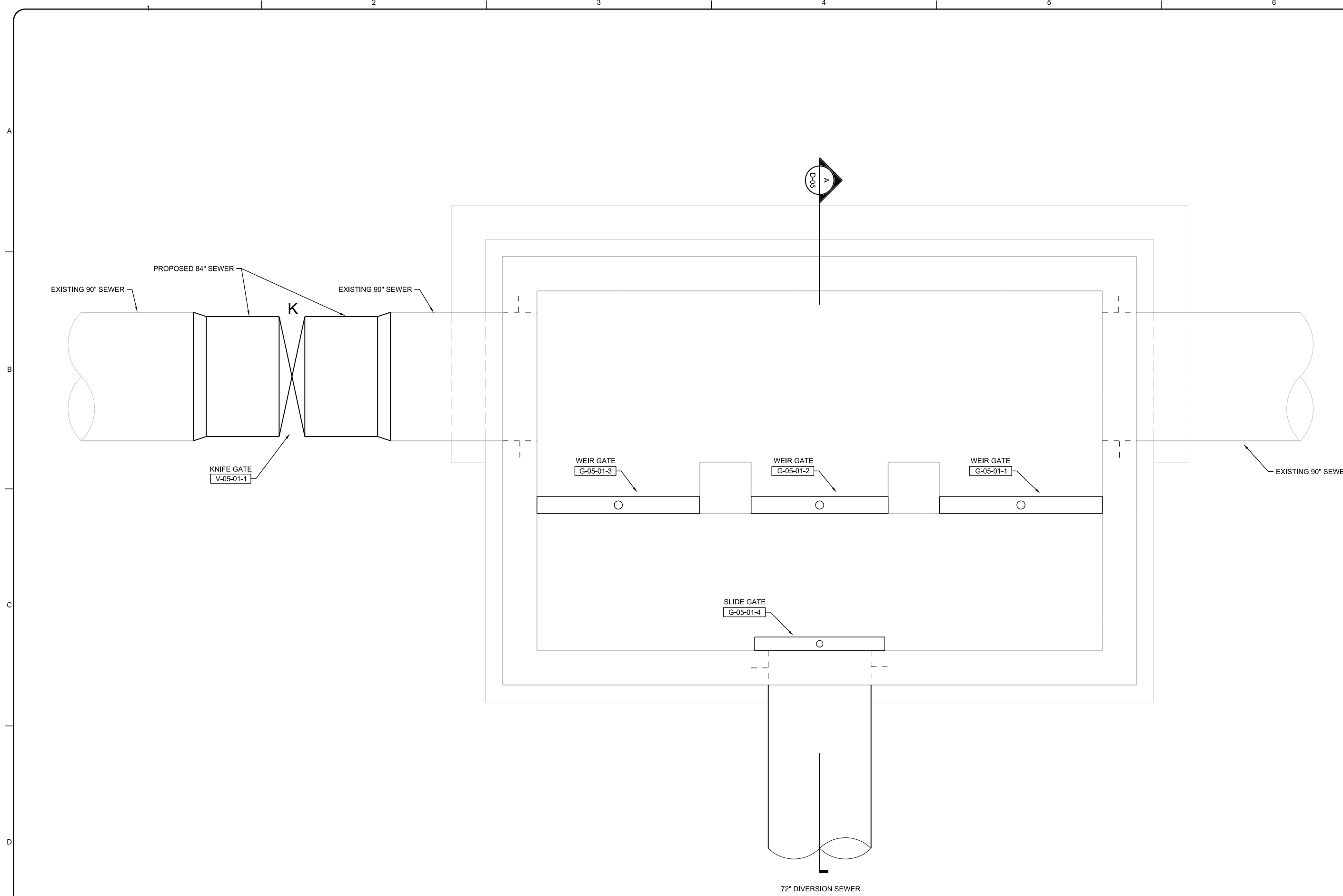
ch2m

FRESE & NICHOLS
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 San Antonio, TX 78217
 Tel: (210) 298-3900
 Fax: (210) 298-3901

SAN ANTONIO WATER SYSTEM

SAWS JOB NO. 10148
 BASIN PLANNING PROJECT, CENTRAL BASIN
 OFFLINE STORAGE AT RILLING ROAD
 PROCESS MECHANICAL
 HYDRAULIC PROFILE
 OPTION 2

DWG D-03
 Sheet 1 of 1
 SCHEMATIC DESIGN



INTERMEDIATE PLAN
1/4"=1'-0"

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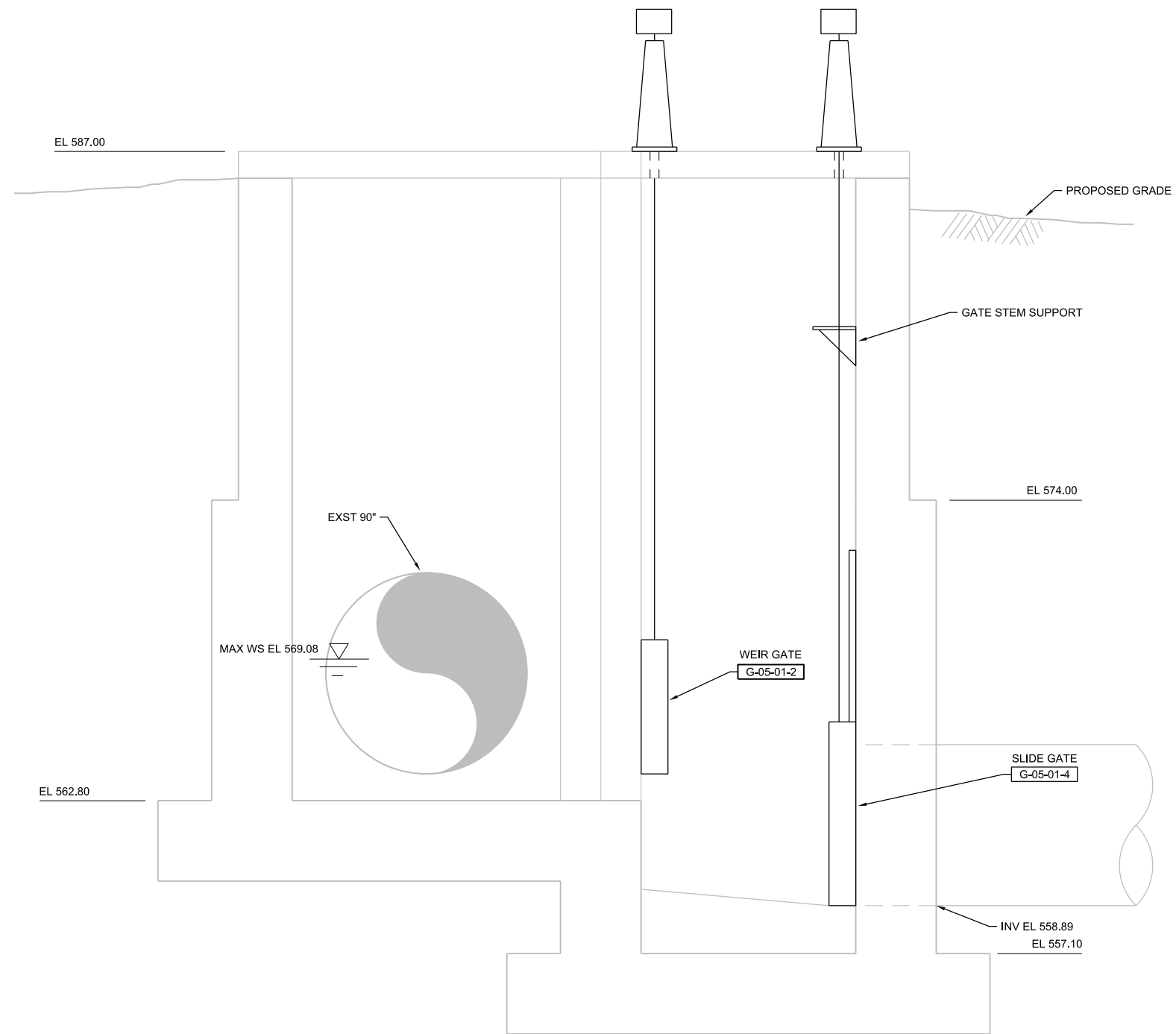
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San Antonio, TX 78217
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SAN ANTONIO WATER SYSTEM

SAWS JOB NO. 10148
BASIN PLANNING PROJECT, CENTRAL BASIN
OFFLINE STORAGE AT RILLING ROAD
PROCESS MECHANICAL
DIVERSION STRUCTURE
INTERMEDIATE PLAN

DWG P-04
Sheet

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A SECTION
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 D-04

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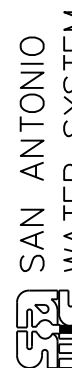
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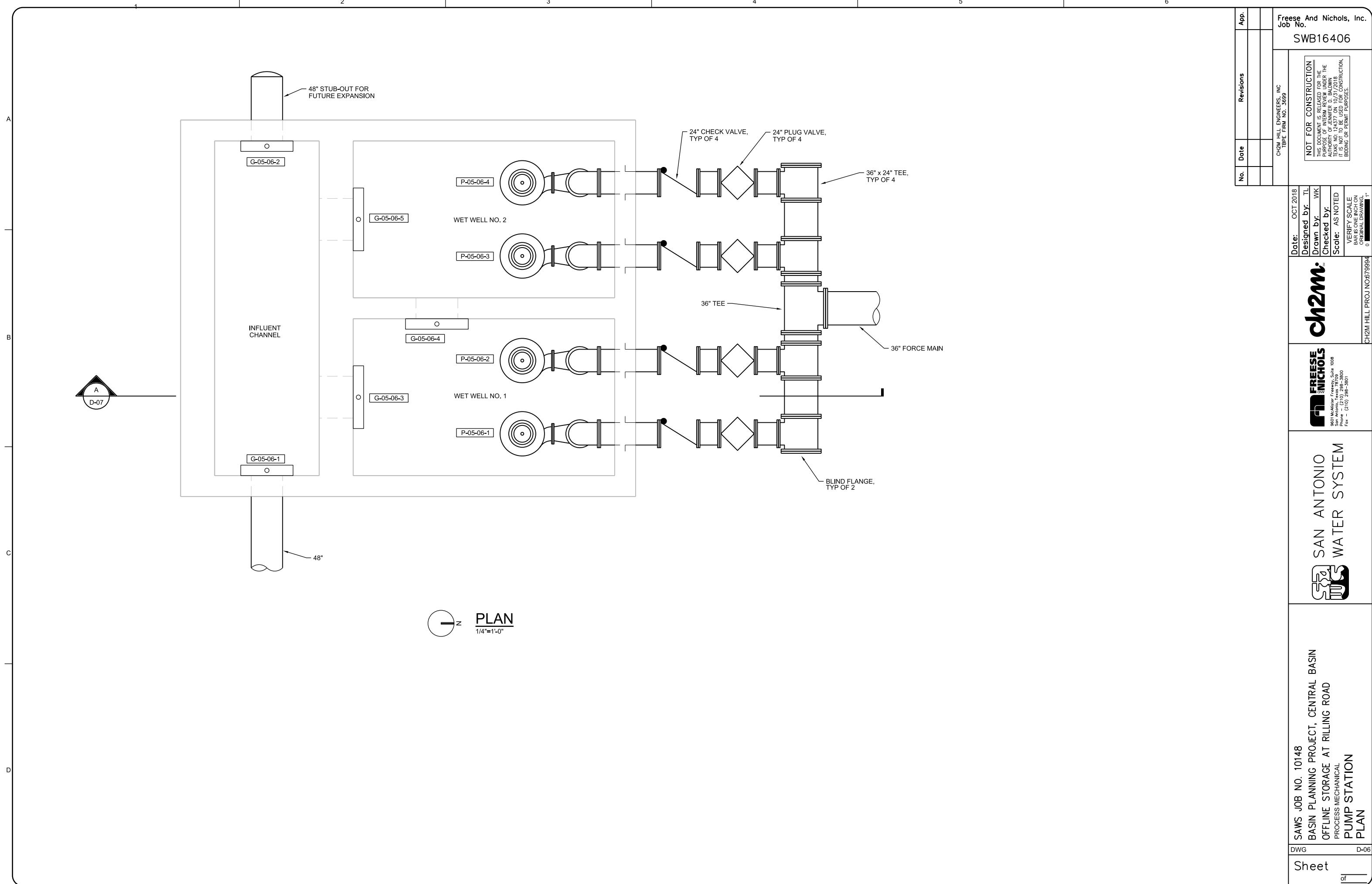


SAWS JOB NO. 10148
 BASIN PLANNING PROJECT, CENTRAL BASIN
 OFFLINE STORAGE AT RILLING ROAD
 PROCESS MECHANICAL
 DIVERSION STRUCTURE
 SECTIONS

DWG D-05

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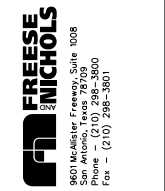


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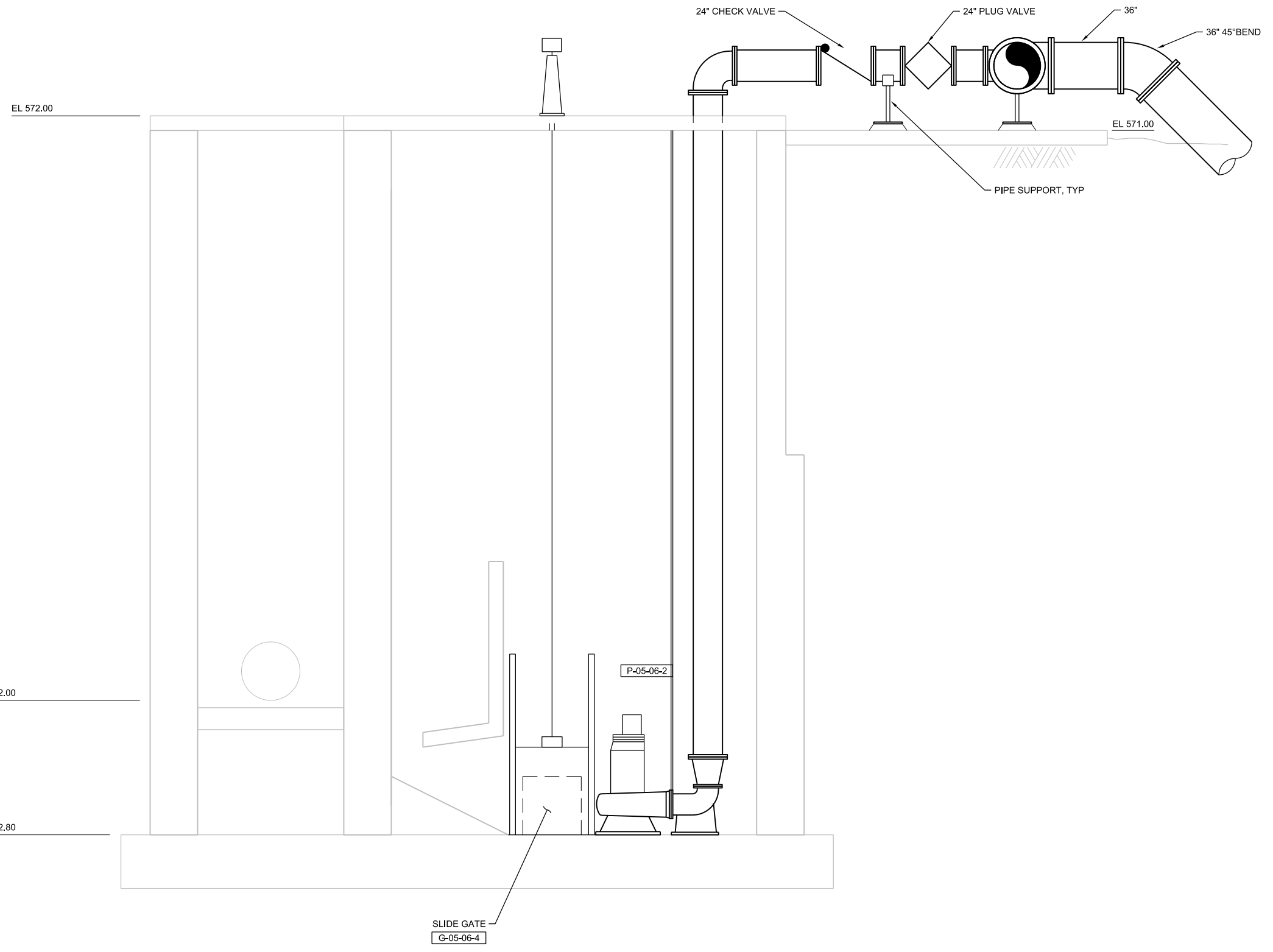


SAN ANTONIO WATER SYSTEM

SAWS JOB NO. 10148
 BASIN PLANNING PROJECT, CENTRAL BASIN
 OFFLINE STORAGE AT RILLING ROAD
 PROCESS MECHANICAL
 PUMP STATION
 PLAN

DWG D-06
 Sheet 01

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A SECTION
1/4"=1'-0"
D-06

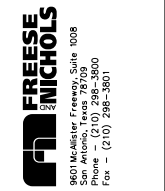
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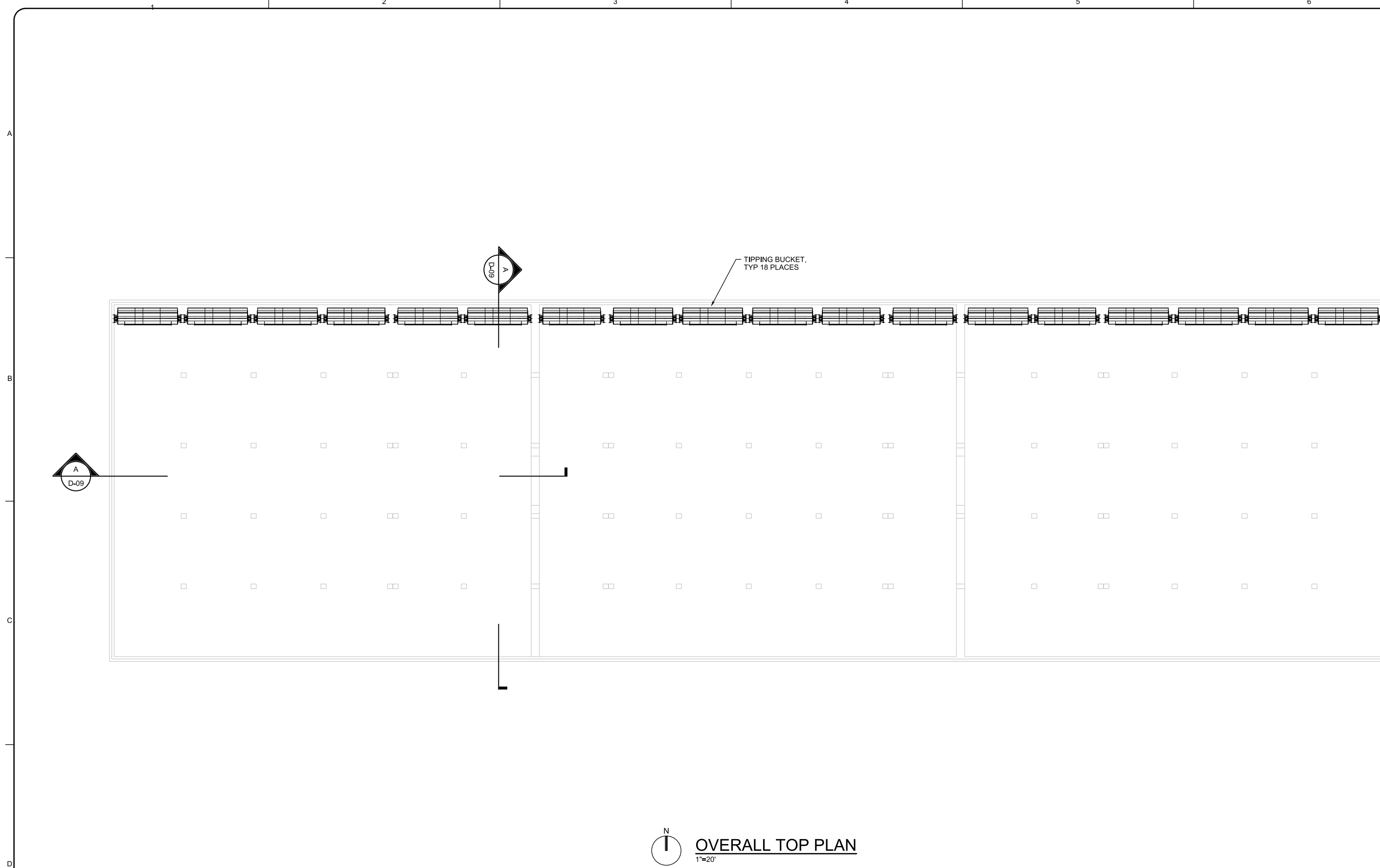
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BASIN PLANNING PROJECT, CENTRAL BASIN
OFFLINE STORAGE AT RILLING ROAD
PROCESS MECHANICAL
PUMP STATION
SECTIONS

DWG P-07
Sheet

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OVERALL TOP PLAN
 1"=20'

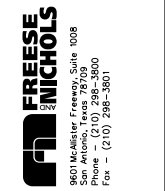
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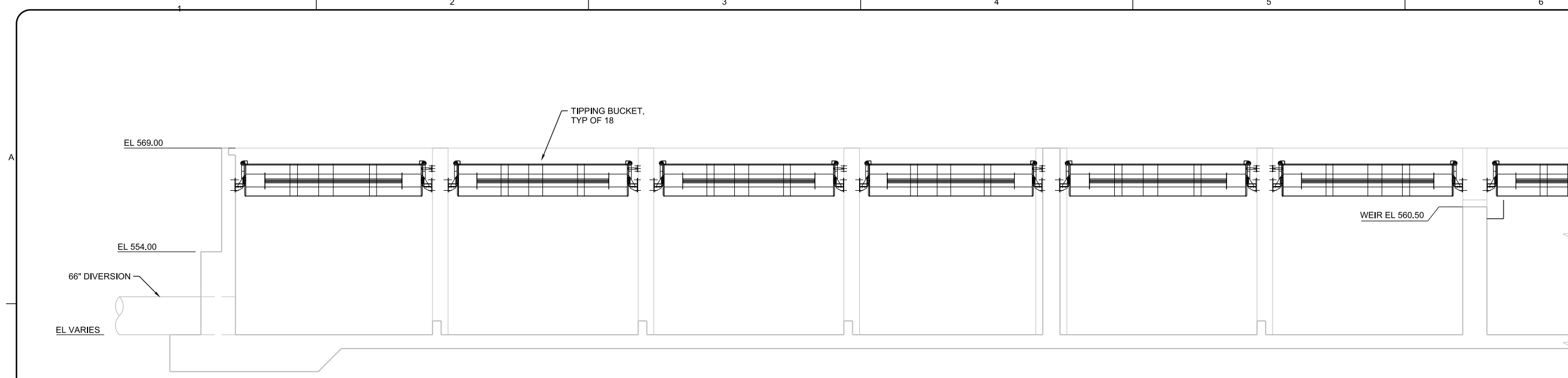
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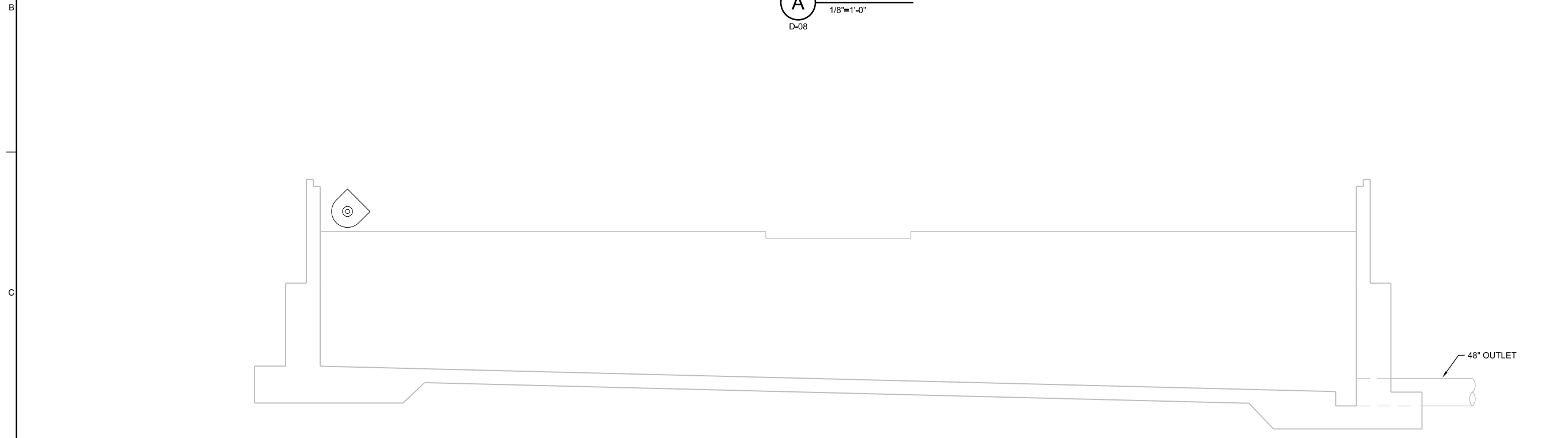
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 BASIN PLANNING PROJECT, CENTRAL BASIN
 OFFLINE STORAGE AT RILLING ROAD
 PROCESS MECHANICAL
 BELOW GRADE TANK
TOP PLAN

DWG P-08
 Sheet

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A SECTION
1/8"=1'-0"
D-08



B SECTION
1/8"=1'-0"
D-08

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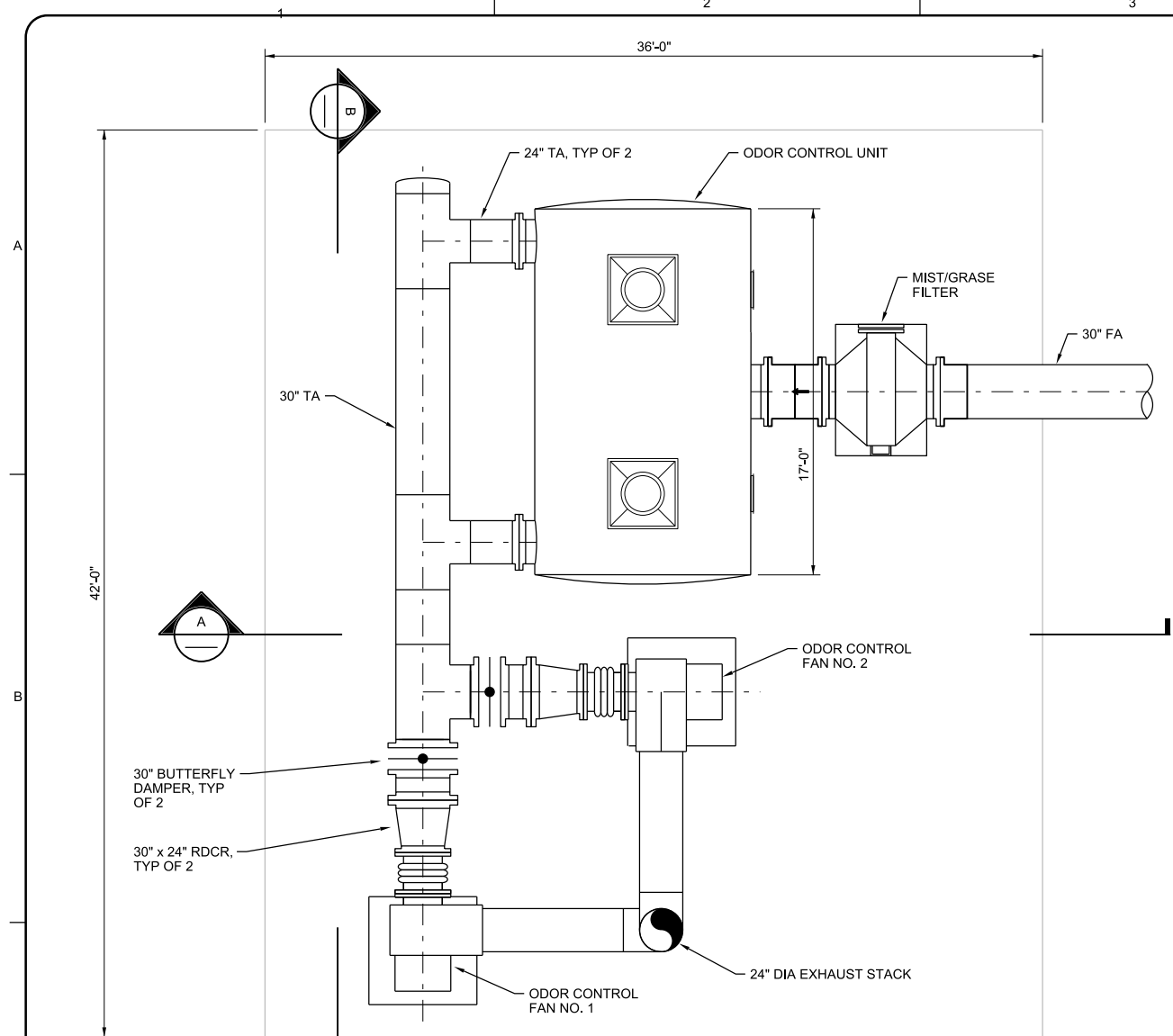
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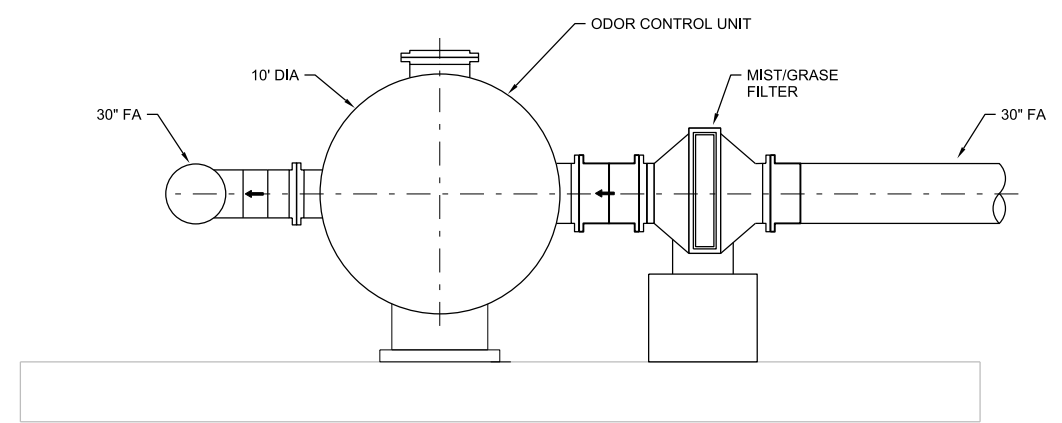
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BASIN PLANNING PROJECT, CENTRAL BASIN
OFFLINE STORAGE AT RILLING ROAD
PROCESS MECHANICAL
BELOW GRADE TANK
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DWG D-09
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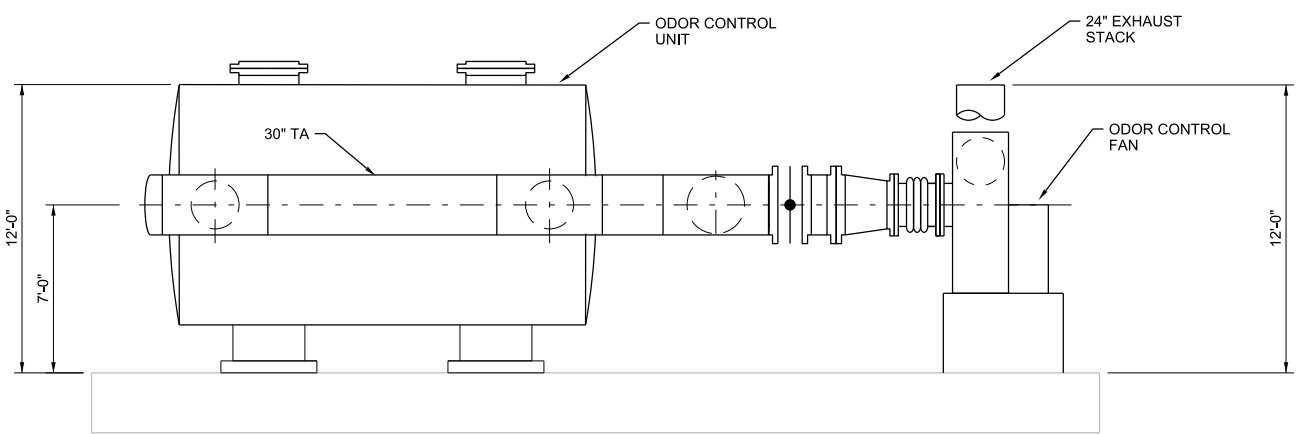
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PLAN
1/4"=1'-0"



A SECTION
1/4"=1'-0"



B SECTION
1/4"=1'-0"

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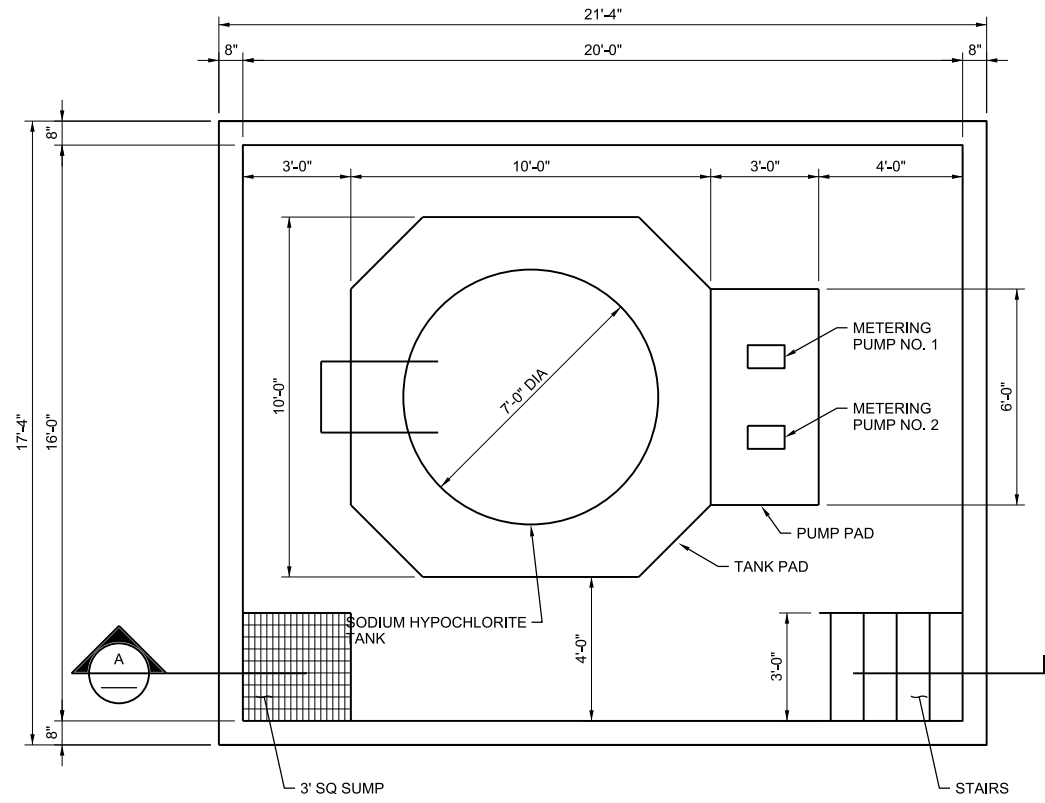
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0	1"



SAWS JOB NO. 10148
BASIN PLANNING PROJECT, CENTRAL BASIN
OFFLINE STORAGE AT RILLING ROAD
PROCESS MECHANICAL
ODOR CONTROL
PLAN AND SECTIONS

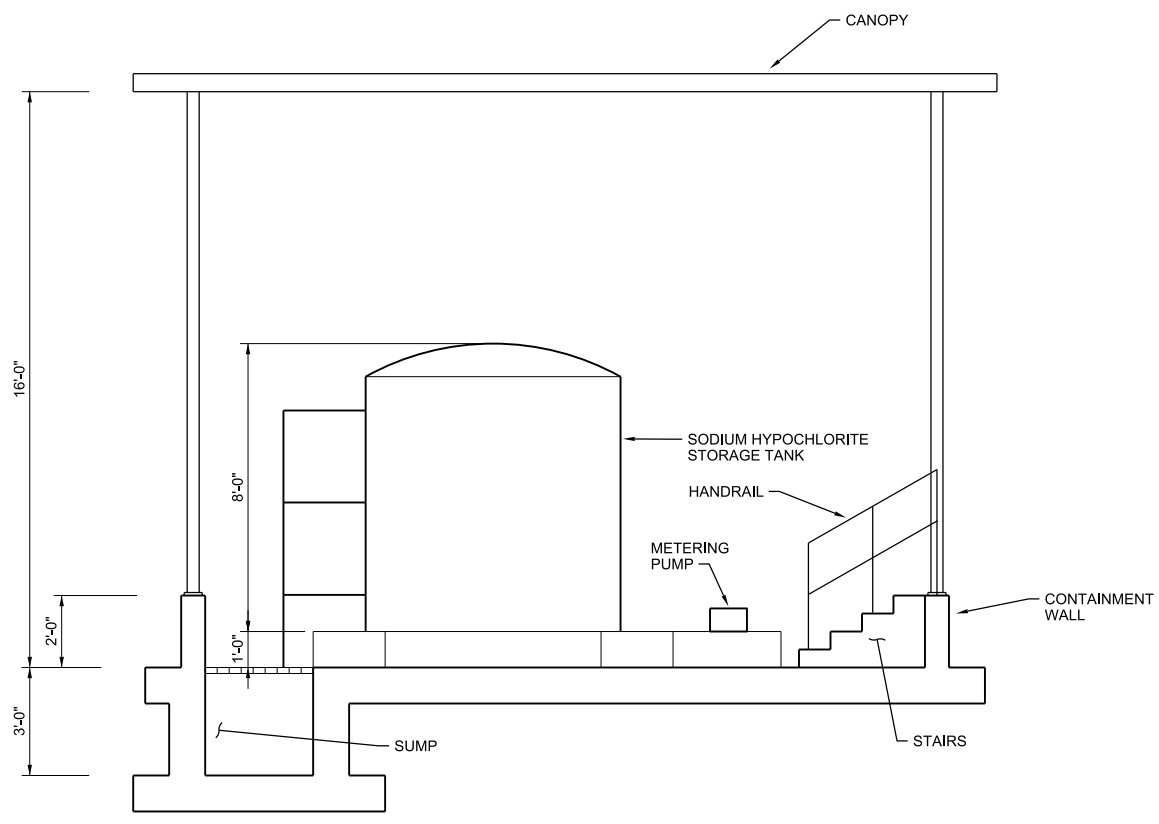
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PLAN
3/8"=1'-0"

- NOTES:
1. THE ENTIRE SYSTEM IS CONTAINED AND COVERED BY CANOPY.
 2. METERING PUMPS ALSO FUNCTION AS TANK MIXING PUMPS WHEN NEEDED



A SECTION
3/8"=1'-0"

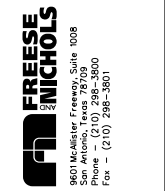
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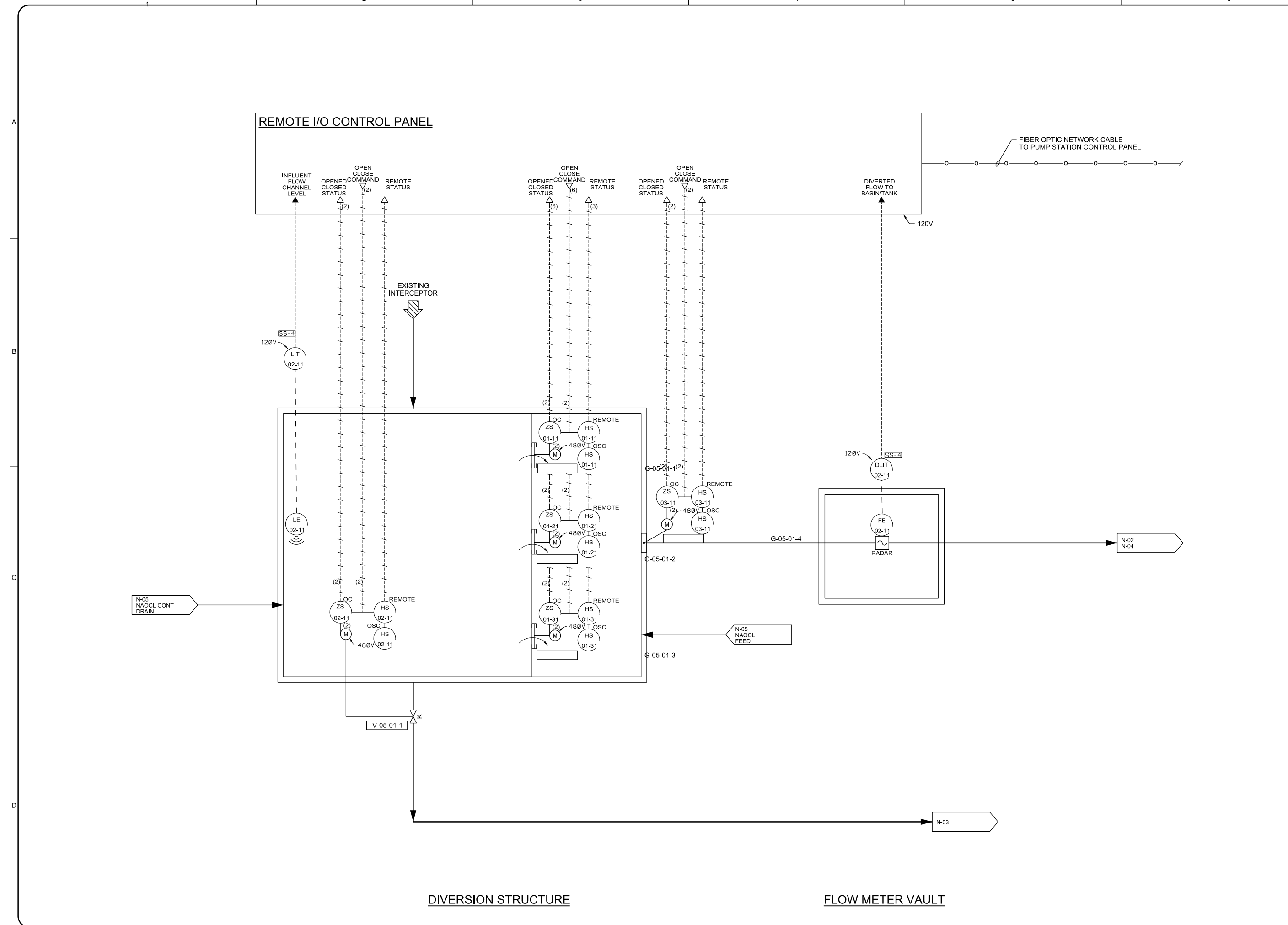
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BASIN PLANNING PROJECT, CENTRAL BASIN
OFFLINE STORAGE AT RILLING ROAD
PROCESS MECHANICAL
ODOR CONTROL LIQUID TREATMENT
CHEMICAL SYSTEM PLAN AND SECTION

DWG P1
Sheet

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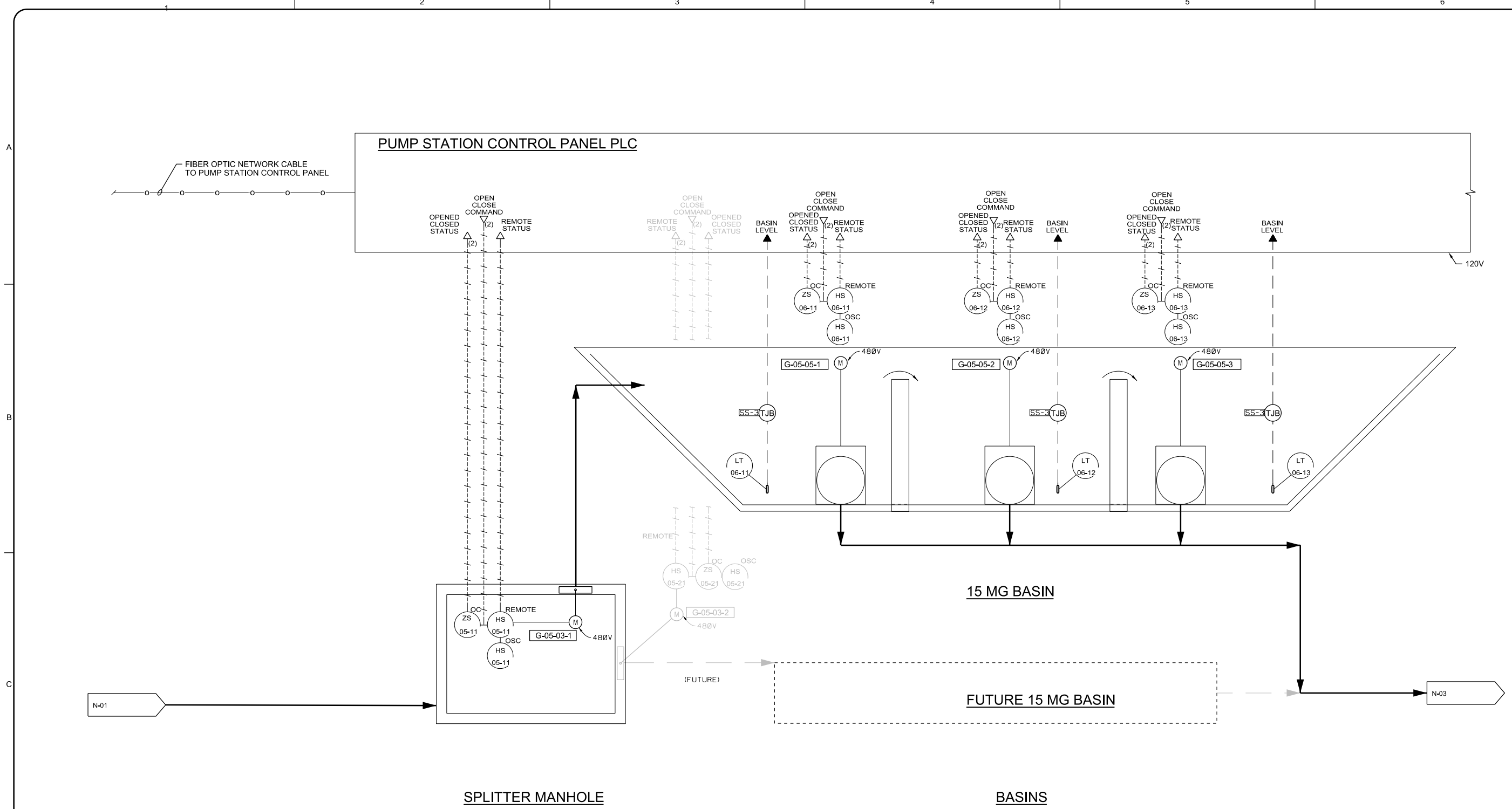
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OFFLINE STORAGE AT RILLING ROAD
P&ID
DIVERSION STRUCTURE

DWG N-01
Sheet 01

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SAN ANTONIO WATER SYSTEM

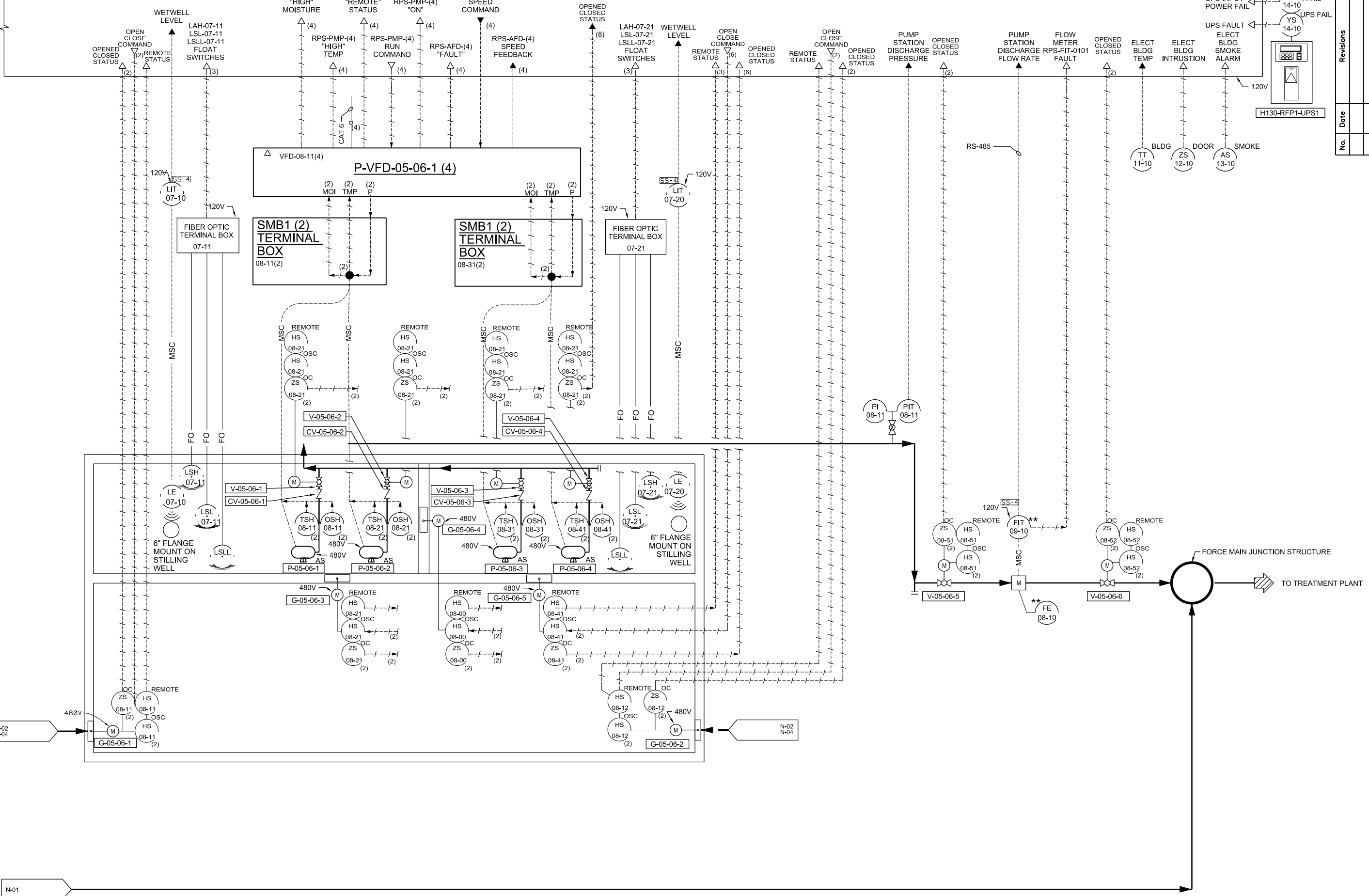
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SPLITTER MANHOLE AND EARTHEN BASINS

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SCHEMATIC DESIGN

PUMP STATION CONTROL PANEL PLC



RETURN PUMP STATION
(2 PUMPS)

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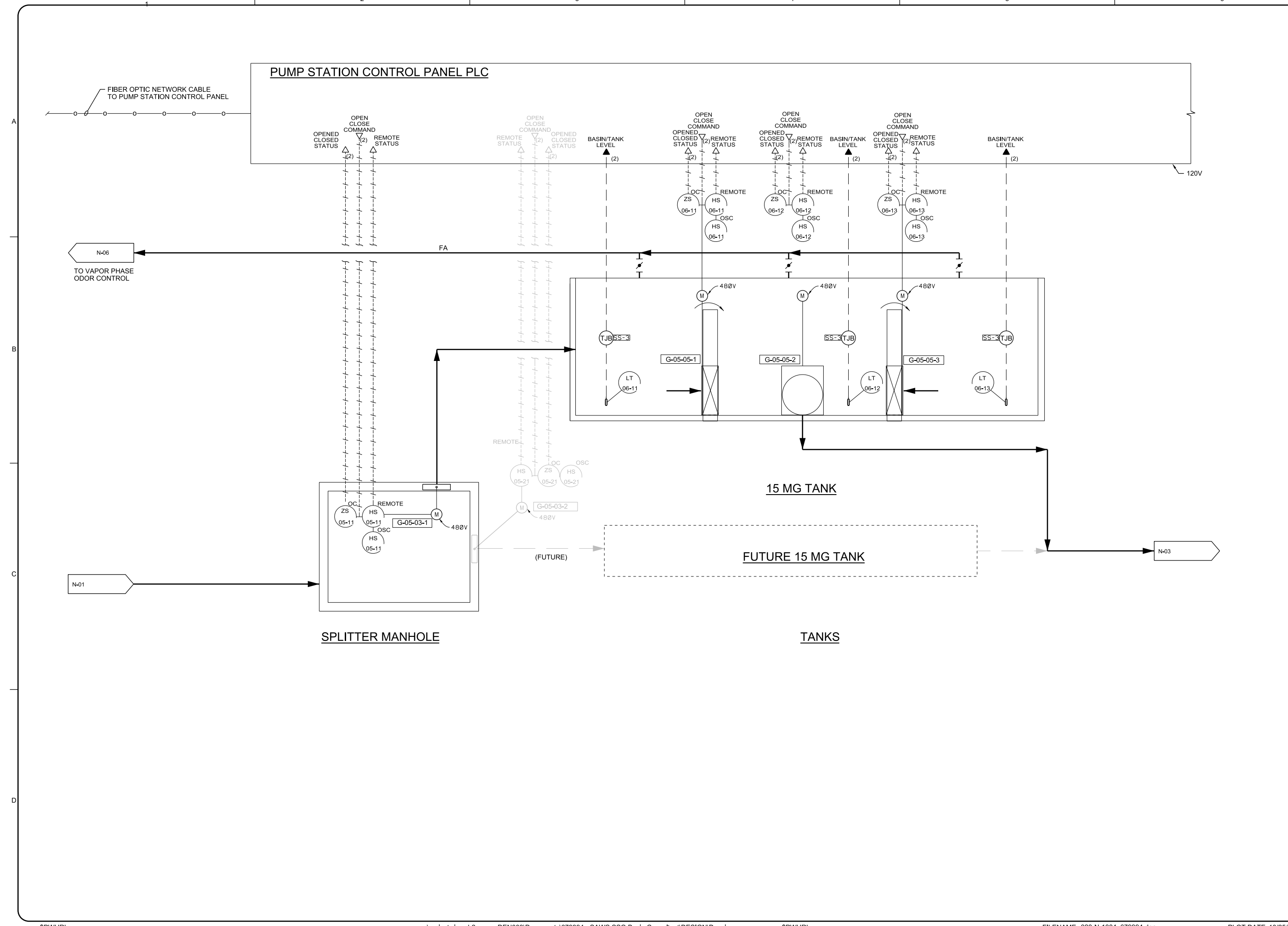
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OFFLINE STORAGE AT RILLING ROAD
P&ID
PUMP STATION

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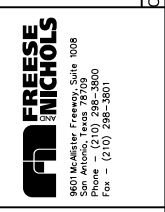
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OFFLINE STORAGE AT RILLING ROAD
P&ID
SPLITTER MANHOLE
AND BELOW GRADE TANK

DWG T-04
Sheet 01

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SCHEMATIC DESIGN

REMOTE I/O CONTROL PANEL

REMOTE I/O

OPEN
CLOSE
COMMAND

PV

ON

AUTO

HAND

FL

RN

MO

HI

OP

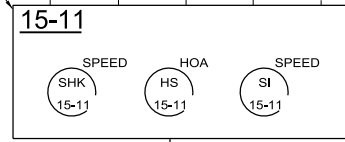
CL

ZS
16-21



EMERGENCY EYEWASH
AND SHOWER STATION

120V



120V

LIT
15-11

ZS
16-21

PSV-05-02-1

CITY WATER SUPPLY

FV-05-02-1

FILL CONNECTION

LE
15-11

OF

NAOCL

NAOCL

SODIUM
HYPOCHLORITE
STORAGE TANK
T-05-02-1

LG
15-11

NAOCL

"POWER"

SODIUM
HYPOCHLORITE
METERING PUMP 1
P-05-02-1

SODIUM
HYPOCHLORITE
METERING PUMP 2
P-05-02-2

PI
15-11

PE
15-11

P1
15-21

PE
15-21

PCV-05-02-1
BACK PRERSSURE/
ANTI-SIPHON VALVE

NAOCL

N-01
DIVERSION
STRUCTURE

LSH
17-11

ZS
17-11

FV
17-11

N-01
DIVERSION
STRUCTURE

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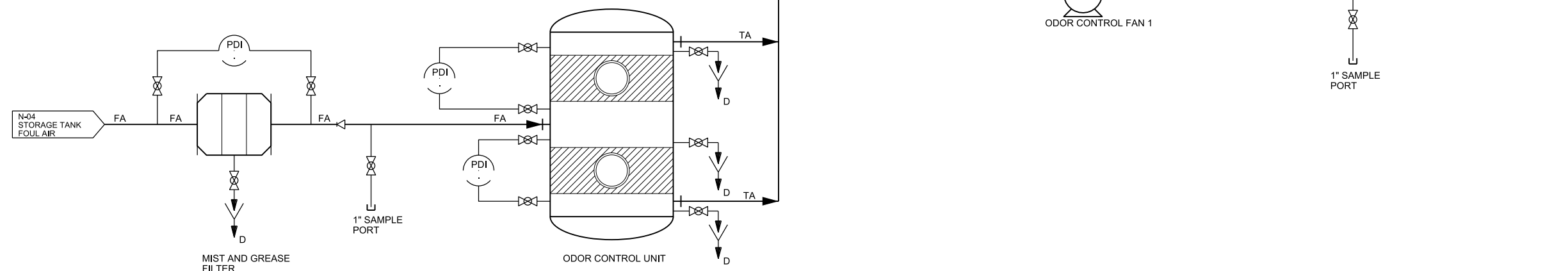
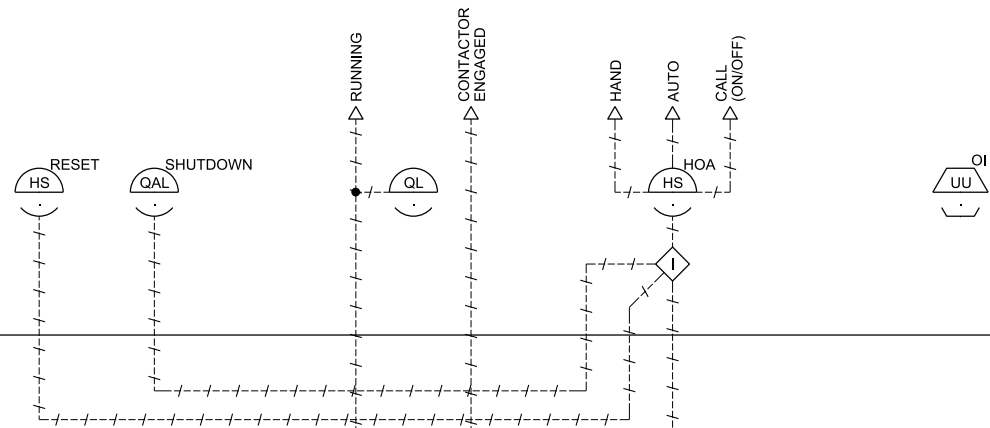
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OFFLINE STORAGE AT RILLING ROAD
P&ID
ODOR CONTROL
CHEMICAL SYSTEM

DWG T-05

Sheet

SCHEMATIC DESIGN

MCP-0900



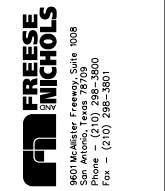
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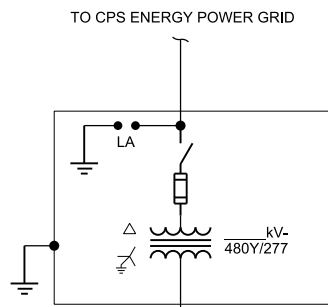
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OFFLINE STORAGE AT RILLING ROAD
P&ID
VAPOR PHASE ODOR CONTROL
CHEMICAL SYSTEM

DWG 106
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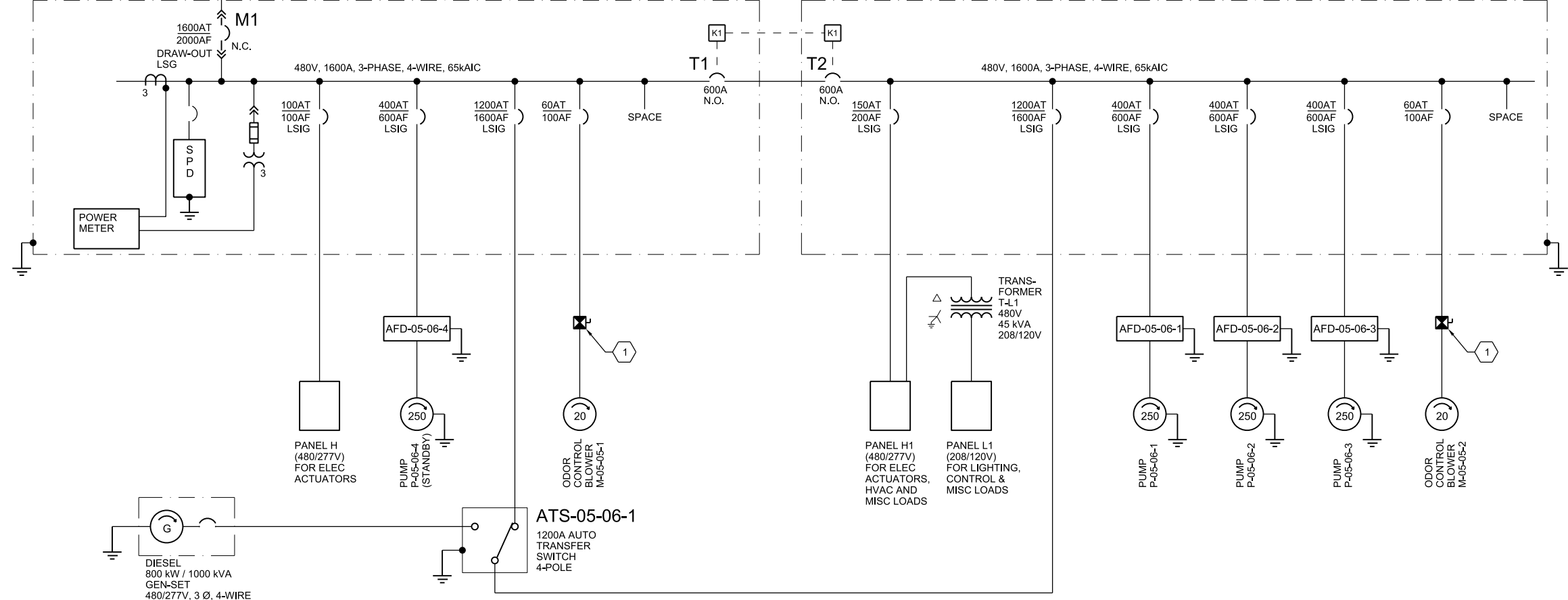


CPS ENERGY TRANSFORMER

BY CPS ENERGY

SWITCHBOARD SWBD-05-06-1

SWITCHBOARD SWBD-05-06-2



NORMAL/STAND-BY POWER OPERATION SCHEME:

NORMAL OPERATION MODE:

BOTH THE BREAKERS T1 AND T2 ARE OPEN VIA KIRK KEY INTERLOCK, TRANSFORMER FROM CPS ENERGY WILL PROVIDE 480V, 3-PHASE SERVICE TO SWITCHBOARD SWBD-05-06-1, AND SWITCHBOARD SWBD-05-06-2 VIA AUTOMATIC TRANSFER SWITCH ATS-05-06-1.

STANDBY OPERATION MODE:

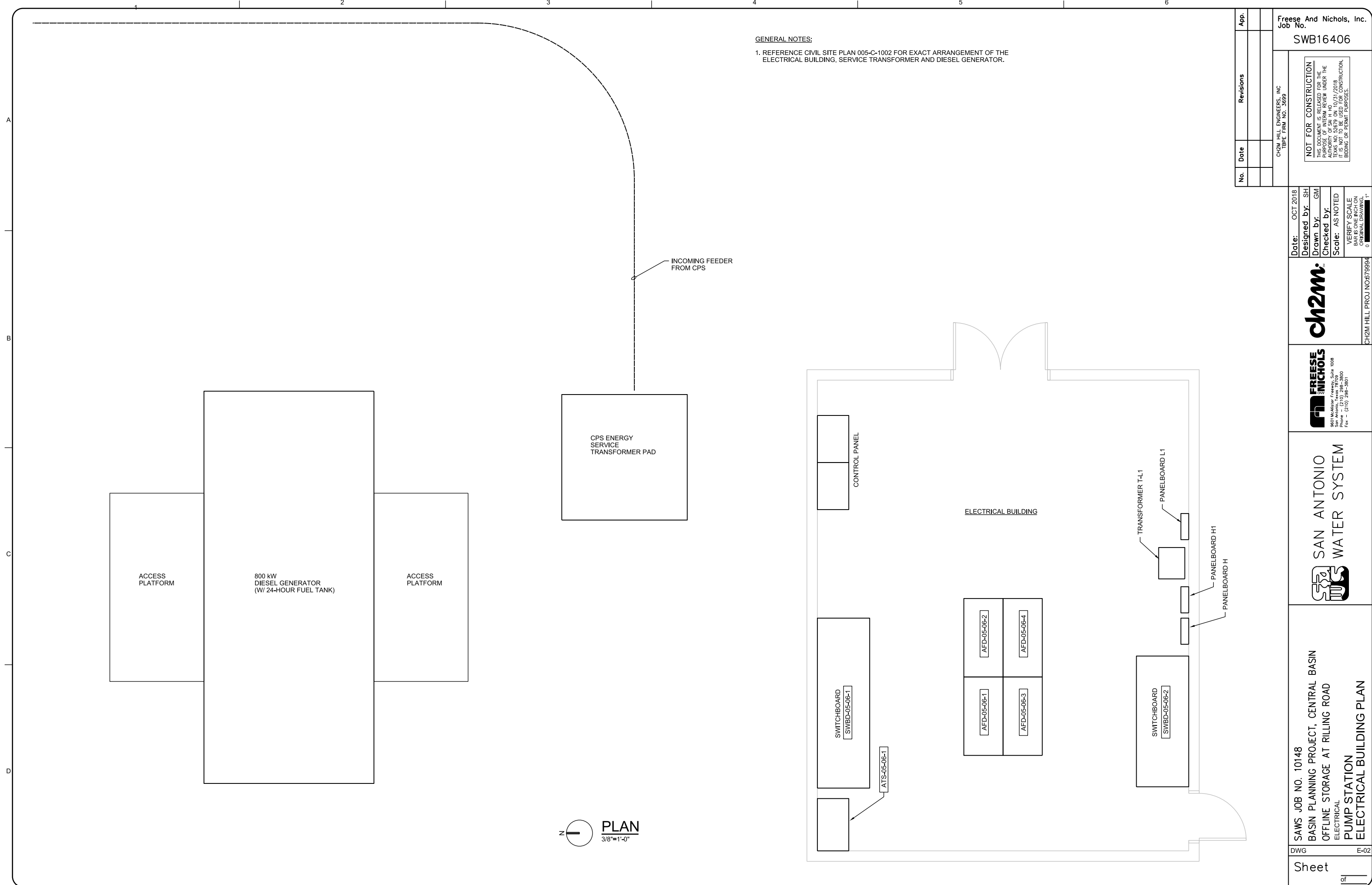
WHEN SERVICE TO THE PLANT FROM CPS ENERGY IS LOST, THE DIESEL GENERATOR WILL RUN TO OPERATE THE CRITICAL LOADS OF THE PLANT, WHICH ARE SERVED FROM SWITCHBOARD SWBD-05-06-2. DURING THIS MODE, IF EITHER ONE OF THE PUMPS P-05-06-1, 2 OR 3 IS OUT OF SERVICE, PROVISION IS MADE TO CONNECT THE STAND-BY PUMP P-05-06-4 AT SWITCHBOARD SWBD-05-06-1 TO THE GENERATOR BY MANUALLY OPENING THE MAIN BREAKER M1 AND THE BREAKER SERVING PANEL H, AND MANUALLY CLOSING THE TIE-BREAKERS T1 AND T2 VIA KIRK KEY INTERLOCK.

KEYED NOTES:

- 1 480V COMBINATION MAGNETIC STARTER WITH MOTOR CIRCUIT PROTECTOR, NEMA SIZE 2 FVNR IN NEMA 4X STAINLESS STEEL ENCLOSURE.

ELECTRICAL LOAD LIST

Equipment Designation/ Equipment Tag	Equipment Description	Location	On Generator (Yes/No)	Power (KVA) or HP	VOLTAGE/PHASE	Served By
G-05-01-1	Weir gate 1 - electric actuator	Diversion structure	Yes	1	480 / 3	Panel H
G-05-01-2	Weir gate 2 - electric actuator	Diversion structure	Yes	1	480 / 3	Panel H
G-05-01-3	Weir gate 3 - electric actuator	Diversion structure	Yes	1	480 / 3	Panel H
G-05-01-4	Isolation gate on 66-inch - electric actuator	Diversion structure	Yes	0.5	480 / 3	Panel H
V-05-01-1	Knife gate valve on 90-inch - electric actuator	Diversion structure	Yes	1	480 / 3	Panel H
P-05-02-1	Odor Control Chem Feed Pump 1	Diversion structure-Odor Control System	No	0.5	120/1	Panel L1
P-05-02-2	Odor Control Chem Feed Pump 2	Diversion structure-Odor Control System	No	0.5	120/1	Panel L1
G-05-03-1	Flow splitting MH Gate to Basin 1 - electric actuator	Splitter Box	No	0.5	480 / 3	Panel H
G-05-03-2	Flow splitting MH Gate to future Basin 2 - electric actuator	Splitter Box	No	0.5	480 / 3	Panel H
M-05-05-1	Vapor phase Odor Control Blower 1	Basin/Tank	No	20	480 / 3	Switchboard SWBD-05-06-1
M-05-05-2	Vapor phase Odor Control Blower 2	Basin/Tank	No	20	480 / 3	Switchboard SWBD-05-06-2
G-05-05-1	Basin/Tank No. 1 Drain Gate	Basin/Tank No. 1	Yes	0.5	480 / 3	Panel H
G-05-05-2	Basin/Tank No. 2 Drain Gate	Basin/Tank No. 2	Yes	0.5	480 / 3	Panel H
G-05-05-3	Basin/Tank No. 3 Drain Gate	Basin/Tank No. 3	Yes	0.5	480 / 3	Panel H
G-05-06-1	Inlet box isolation gate - electric actuator	Pump Station	Yes	0.5	480 / 3	Panel H1
G-05-06-2	Inlet box isolation gate - electric actuator	Pump Station	No	0.5	480 / 3	Panel H1
G-05-06-3	Isolation gate - electric actuator	Pump Station	Yes	0.5	480 / 3	Panel H1
G-05-06-4	Isolation gate - electric actuator	Pump Station	Yes	0.5	480 / 3	Panel H1
G-05-06-5	Isolation gate - electric actuator	Pump Station	Yes	0.5	480 / 3	Panel H1
P-05-06-1	Pump 1	Pump Station	Yes	250	480 / 3	Switchboard SWBD-05-06-2
P-05-06-2	Pump 2	Pump Station	Yes	250	480 / 3	Switchboard SWBD-05-06-2
P-05-06-3	Pump 3	Pump Station	Yes	250	480 / 3	Switchboard SWBD-05-06-2
P-05-06-4	Pump 4	Pump Station	Yes	250	480 / 3	Switchboard SWBD-05-06-1
V-05-06-1	Pump 1 FM Isolation valve - electric actuator	Pump Station	No	0.5	480 / 3	Panel H1
V-05-06-2	Pump 2 FM Isolation valve - electric actuator	Pump Station	No	0.5	480 / 3	Panel H1



GENERAL NOTES:

1. REFERENCE CIVIL SITE PLAN 005-C-1002 FOR EXACT ARRANGEMENT OF THE ELECTRICAL BUILDING, SERVICE TRANSFORMER AND DIESEL GENERATOR.

PLAN
3/8"=1'-0"

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Phone - (210) 298-3500
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SAN ANTONIO WATER SYSTEM

SAWS JOB NO. 10148
BASIN PLANNING PROJECT, CENTRAL BASIN
OFFLINE STORAGE AT RILLING ROAD
ELECTRICAL
PUMP STATION
ELECTRICAL BUILDING PLAN

DWG F-02
Sheet 01

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