Truckee River Whitewater Park

at Wingfield Park
Reno, Nevada
Prepared for the City of Reno

PREPARED BY:

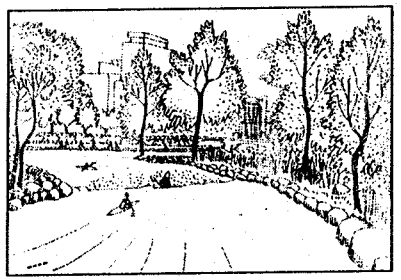
Resource Concepts, Inc.
340 N. Minnesota Street.
Carson City, Nevada 89703
Ph: (775) 883-1600

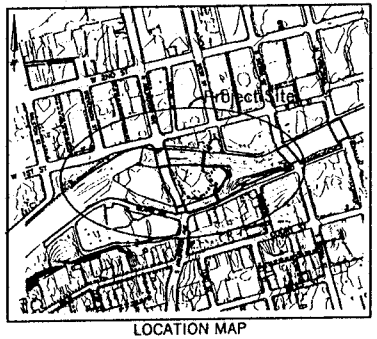
Kennedy/Jenks Consultants
5190 Neil Road, Suite 210
Reno, Nevada 89502
Ph: (775) 827-7900

Recreation Engineering & Planning
485 Arapahoe Ave.
Boulder, Colorado 80302
Ph: (303) 545-5883

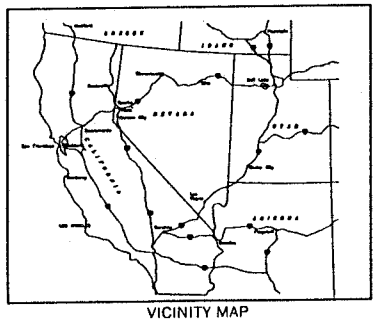
NOTES AND SPECIFICATIONS:

1. The work shall be completed in the following order:
   a. The north channel west of Arlington Ave.
   b. The north channel east of Arlington Ave.
   c. The south channel west of Arlington Ave.
   d. The south channel east of Arlington Ave.
   e. The river takeout west of Sierra Street.
   f. Park reconstruction and related improvements.
2. Upon completion of each portion of channel (items a-d) the river diversions shall be opened to allow flow through the portion completed for inspection by the Project Engineer. The diversion shall be reclosed and adjustments made as directed by the Project Engineer.
3. The Contractor shall be required to submit a detailed traffic control plan to the appropriate agencies and the Engineer prior to starting work.
4. The Contractor shall submit the source of rock to be imported for approval by the Engineer before start of construction. Rock shall be salvaged from river excavation areas and stockpiled onsite for use first in drop structure construction. 'Flat' faced boulders shall be separated and stockpiled for use on the downstream face of drop structures. 'Rounded' boulders shall also be separated and stockpiled for use on the upstream face of drop structures. Angular rock shall be utilized to build up the structures for final finishing rock placement.
5. Large diameter boulder (6'-8' dia.) shall be salvaged for placement in random locations as directed by the Engineer.
6. Areas within Wingfield Park to be protected from construction activity shall be fenced off using 'Carsonite' orange plastic fencing. The Contractor shall place temporary markers where he proposes to install the fencing for approval of the Engineer and Park Department personnel prior to installation.
7. All park areas disturbed due to construction shall be reconstructed per the landscaping plans and shall include installation of new sprinkler systems and turf.
8. All trees designated to remain shall be fenced with the 'Carsonite' fencing before construction starts. See detail, Sheet 16.





LOCATION MAP



VICINITY MAP

SHEET INDEX:

Sheet 1 - Title Sheet
Sheet 2 - Existing Site and Sheet Index to Plan and Profiles
Sheet 3 - River Diversion and Staging Area Plan
Sheet 4 - Plan and Profile North Channel Station N0+00 to N5+85
Sheet 5 - Plan and Profile North Channel Station N7+75 to N13+15
Sheet 6 - Plan and Profile South Channel Station S0+00 to S5+48
Sheet 7 - Plan and Profile South Channel Station S8+70 to S11+
Sheet 8 - Horizontal Control Plan and Sheet Index to Drop Structures
Sheet 9 - Drop Structure N1 and N2 Plan and Special Details (North Channel)
Sheet 10 - Drop Structure N3, N4, & N5 Plan and Special Details (North Channel)
Sheet 11 - Drop Structure S1 to S4 Plan and Special Details (North Channel)
Sheet 12 - Drop Structure S5 and S6 Plan and Special Details (North Channel)
Sheet 13 - Takeout Point Plan and Special Details
Sheet 14 - Special Details-Drop Structures
Sheet 15 - Special Details
Sheet 16 - River Diversion Details

APPROVALS:

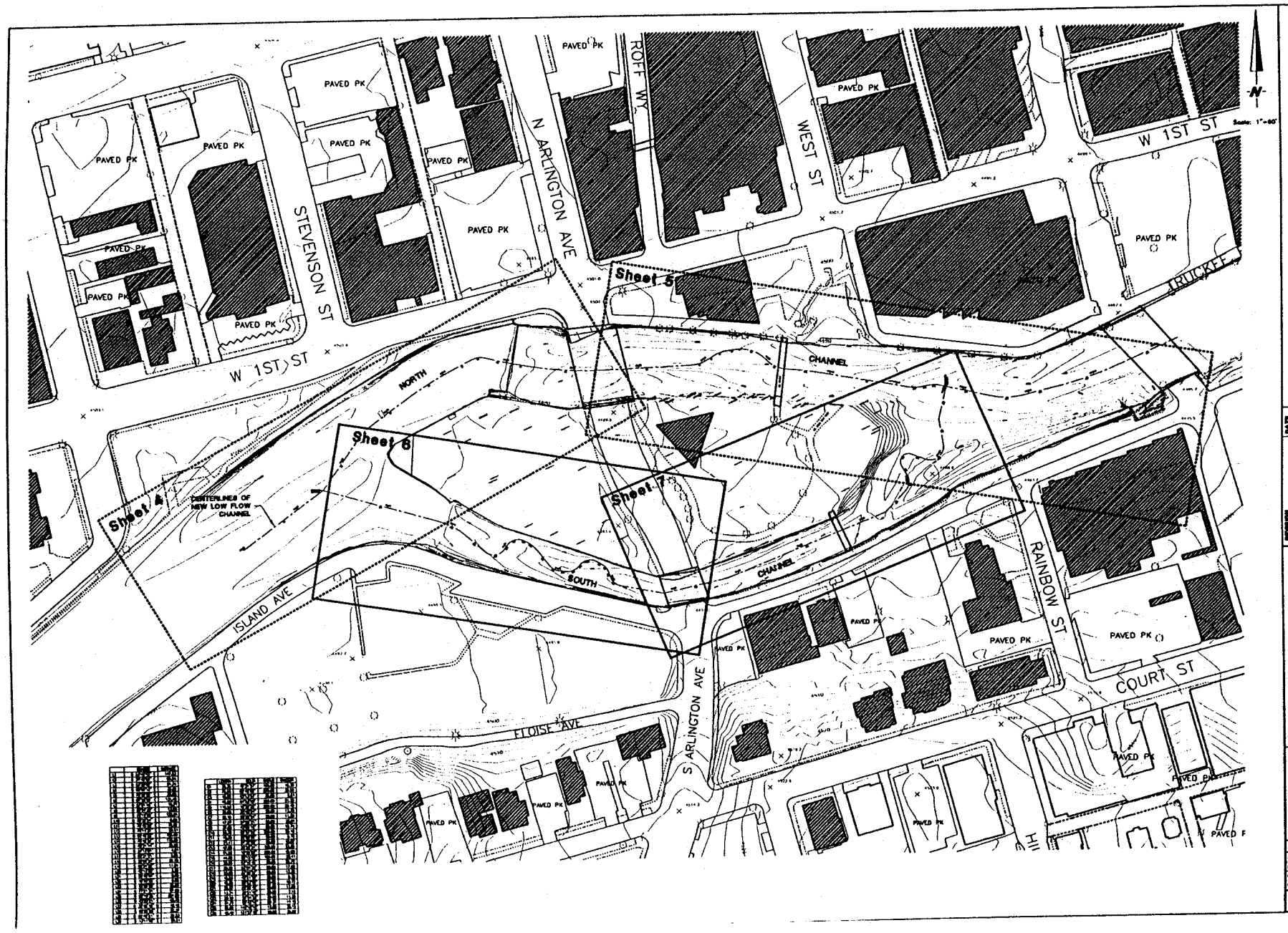
ENGINEERING · PLANNING · RESOURCE MANAGEMENT
RESOURCE CONCEPTS, INC.
340 N. MINNESOTA ST. · CARSON CITY, NEVADA 89703-4152
OFFICE: 775-883-1600 · FAX: 775-883-1656 · WEB SITE: www.rcnv.com

REVISION	DATE

Truckee River Whitewater Park
at Wingfield Park
Reno, Nevada

Title Sheet

JOB NO. 00-202-02
DATE March 25, 2002
DESIGNED: CDM
DRAWN: FRB
CHECKED:



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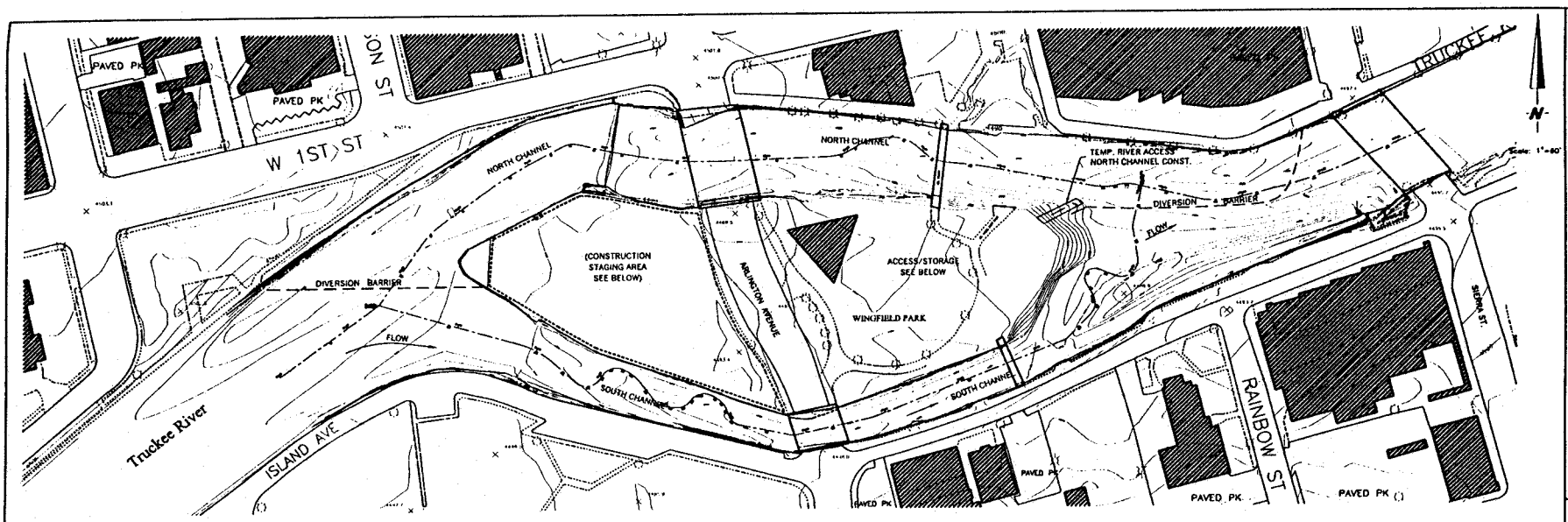
REVISIONS	DATE

Truckee River Whitewater Park
at Wingfield Park
Reno, Nevada

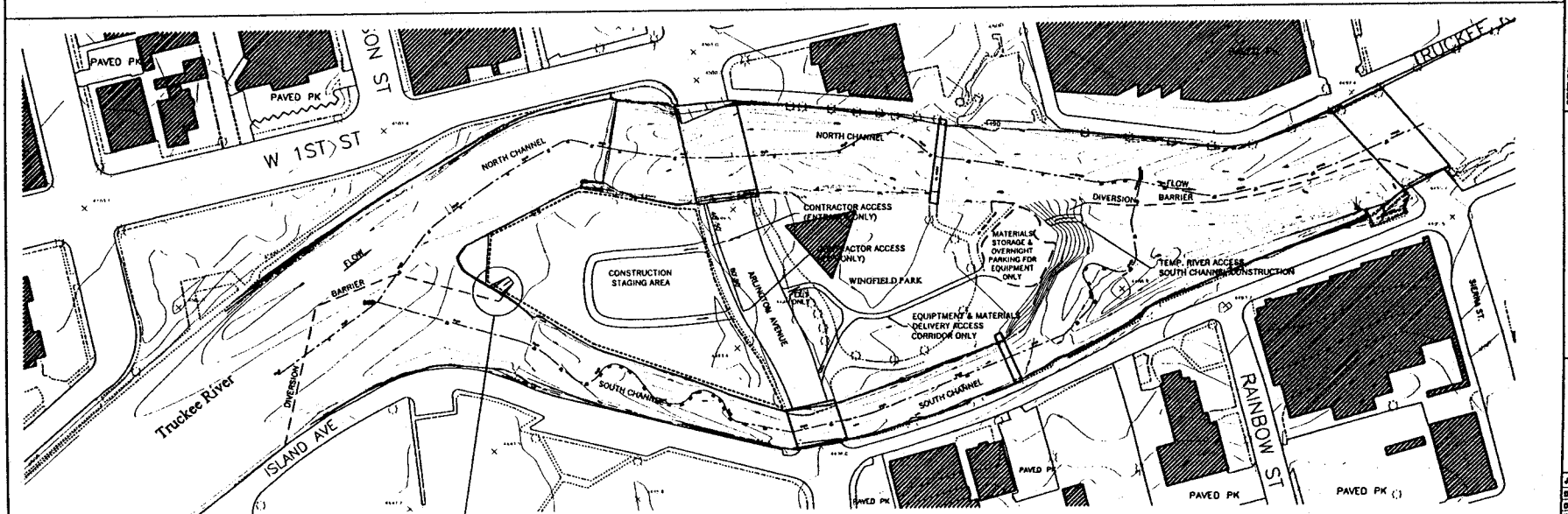
Existing Site and Sheet Index
to Plan and Profiles

JOB NO. 00-202-02
DATE March 25, 2000
DESIGNED CDM
DRAWN FRB
CHECKED

SHEET 2 OF 16



North Channel River Diversion Plan



South Channel River Diversion Plan

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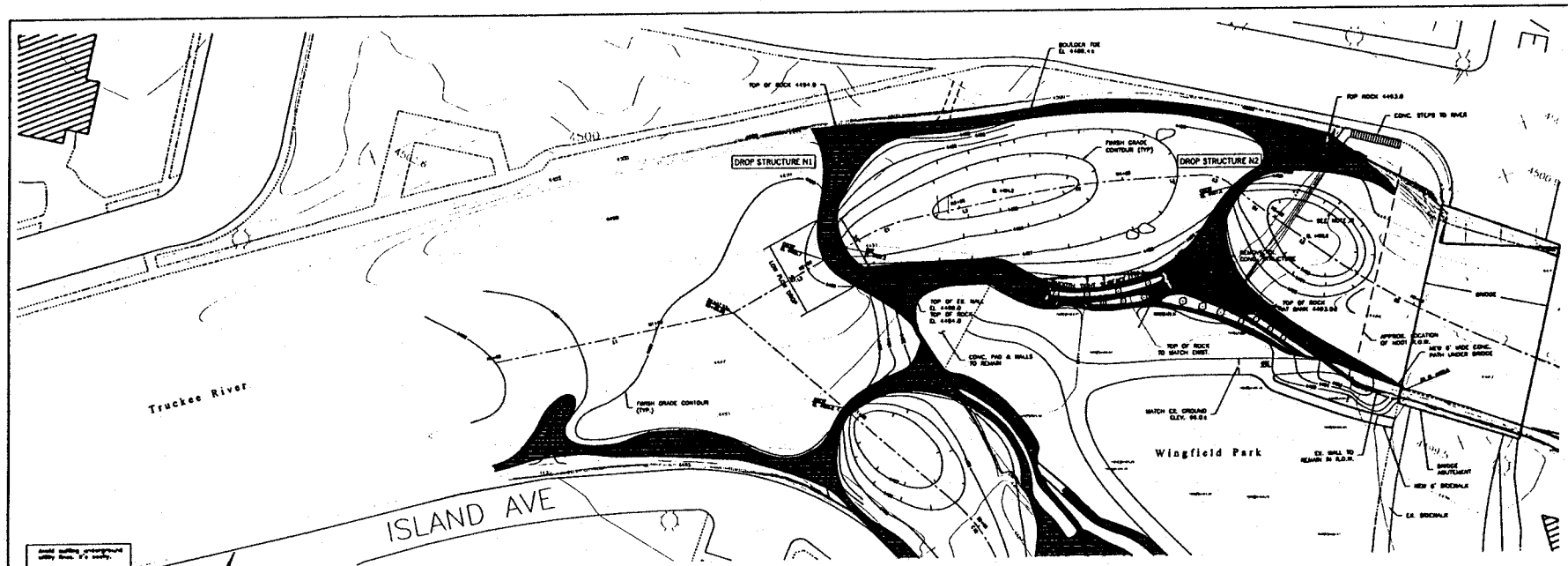
Truckee River Wastewater Park
at Wingfield Park
Reno, Nevada

Construction Staging &
River Diversion Plan

JOB NO. 00-202-02
DATE March 25, 2002
DESIGNED CDM
DRAWN RMB
CHECKED

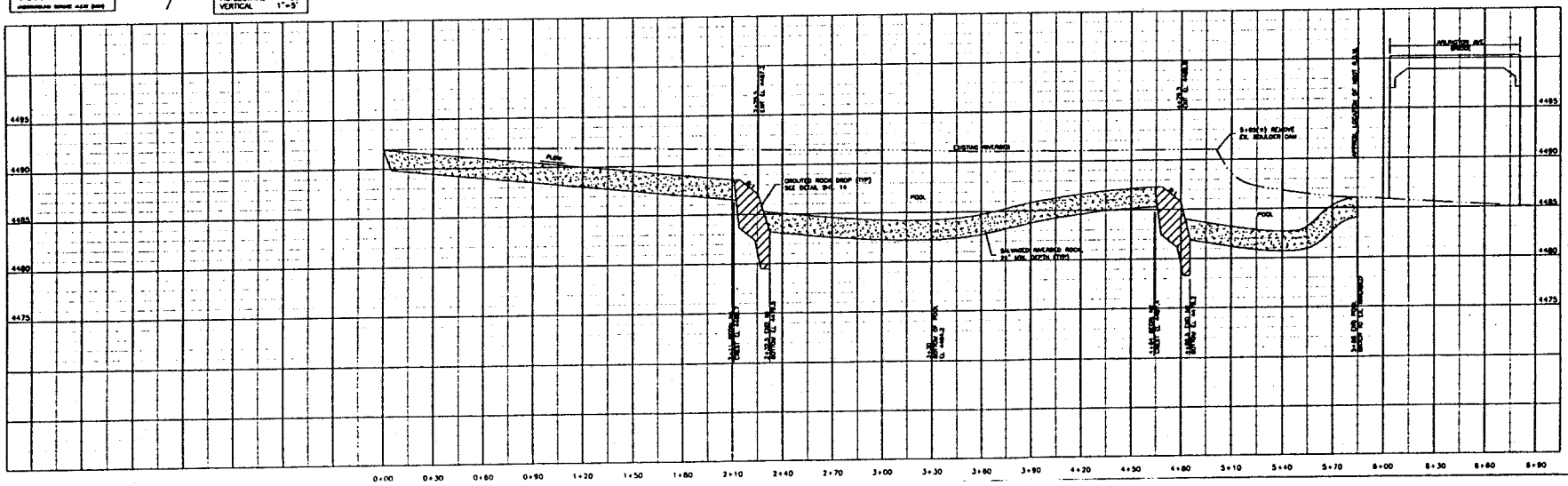
SHEET 3 OF 10



CALL BEFORE YOU DIG.
1-800-227-2600

SCALE:
HORIZONTAL 1"=30'
VERTICAL 1"=5'

NOTES:
1. SEE DETAIL SHEET 9 FOR DROP STRUCTURES N1 AND N2.
2. REMOVE EXISTING CONCRETE AND BOULDER DAM; SALVAGE AND STOCKPILE BOULDERS FOR USE IN DROP STRUCTURES.



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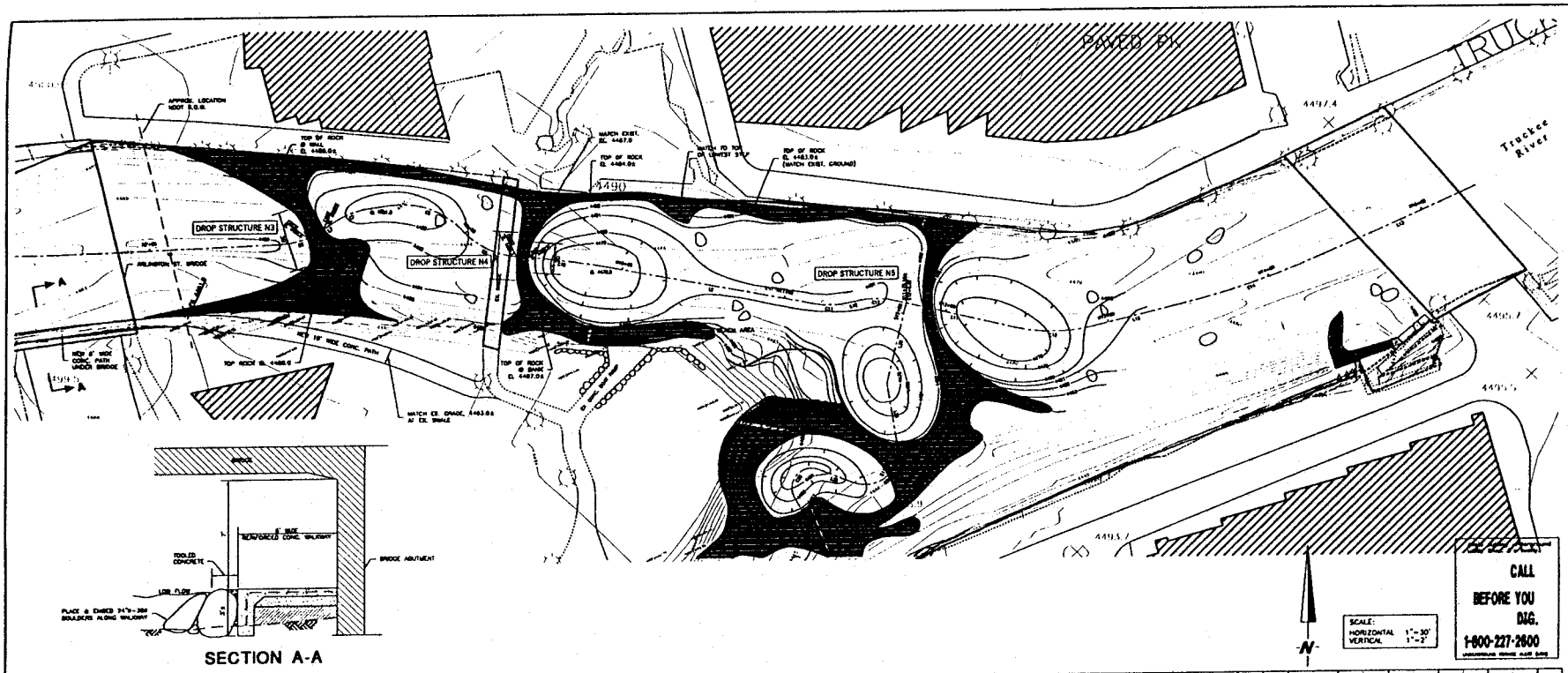
Truckee River Whitewater Park
at Wingfield Park
Reno, Nevada

North Channel Plan & Profile
Sta. N0+00 to N5+85

JOB NO. 00-202-02
DATE March 25, 2002
DESIGNED: GDW
DRAWN: FAB
CHECKED:

SHEET 4 OF



SECTION A-A

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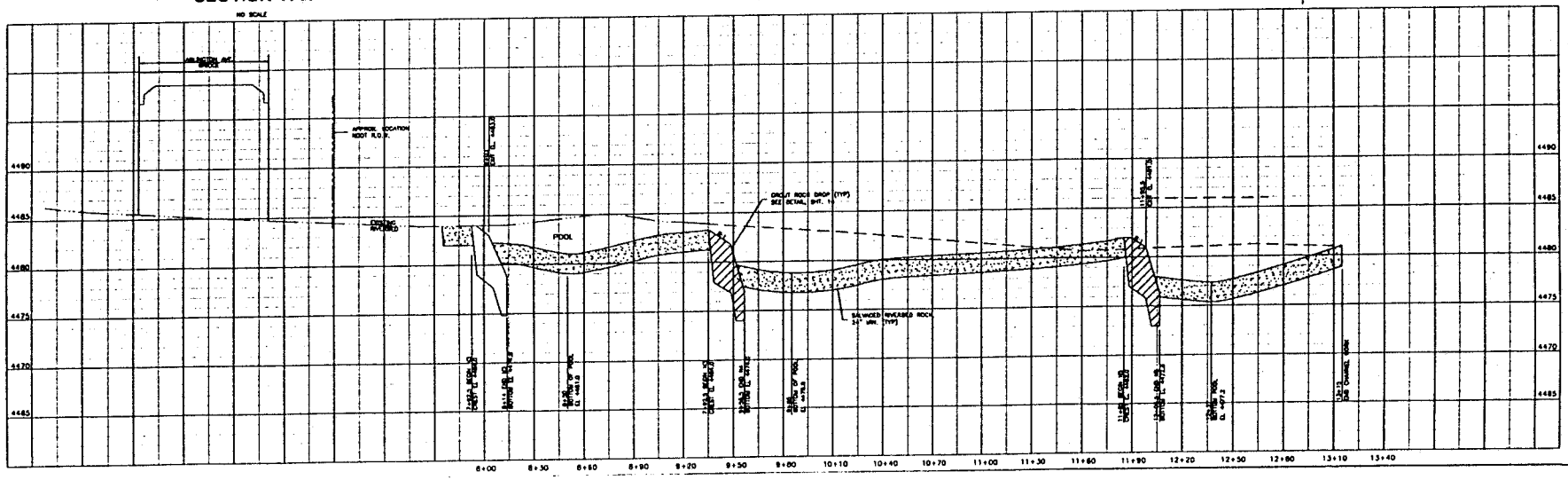

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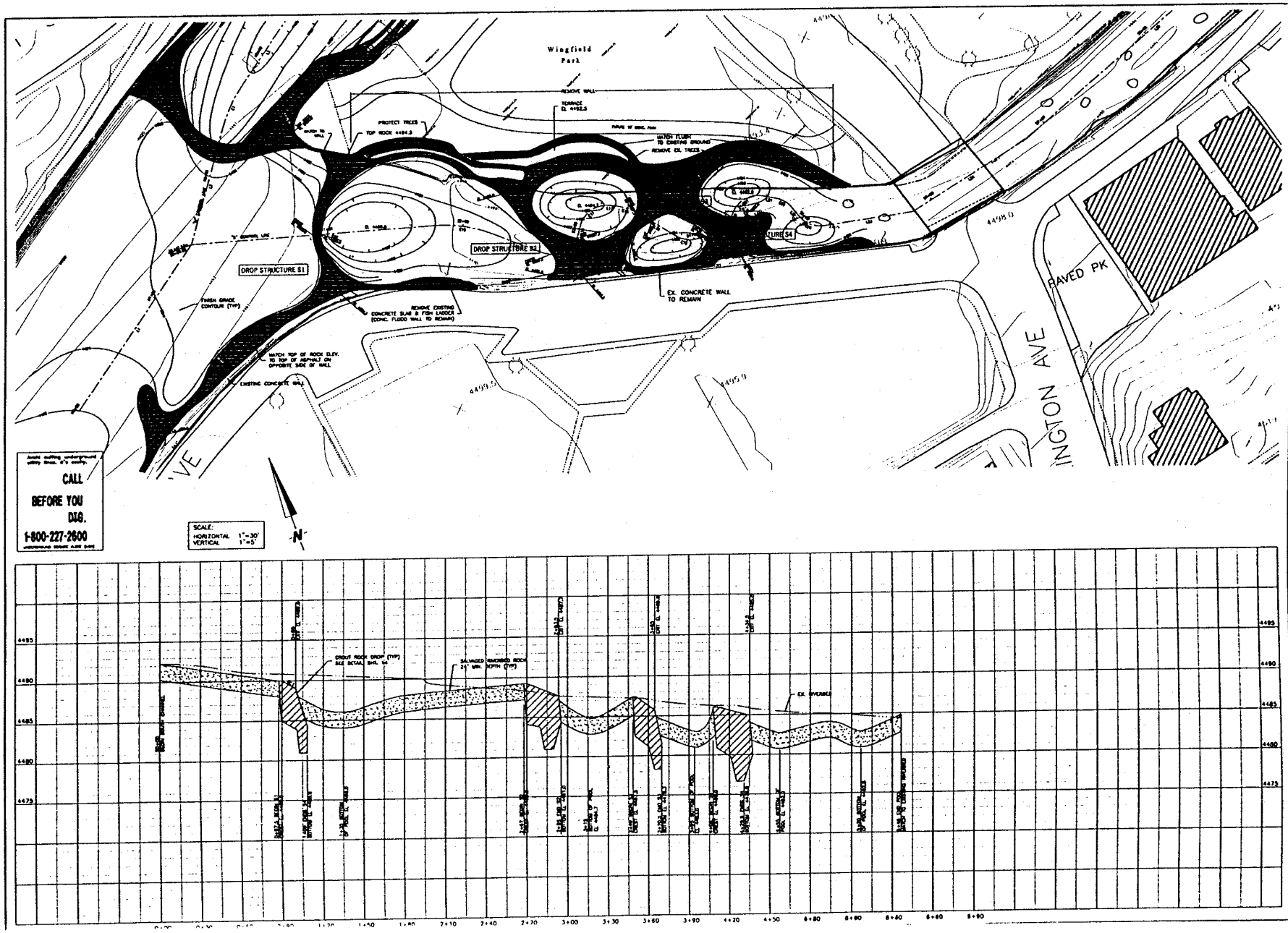
Truckee River Whitewater Park
at Wingfield Park
Reno, Nevada

North Channel Plan & Profile
Sta. N7+75 TO N13+15

JOB NO. 00-202-02
DATE March 25, 2002
DESIGNED: CDM
DRAWN: FRB
CHECKED:

SHEET 5 OF 16



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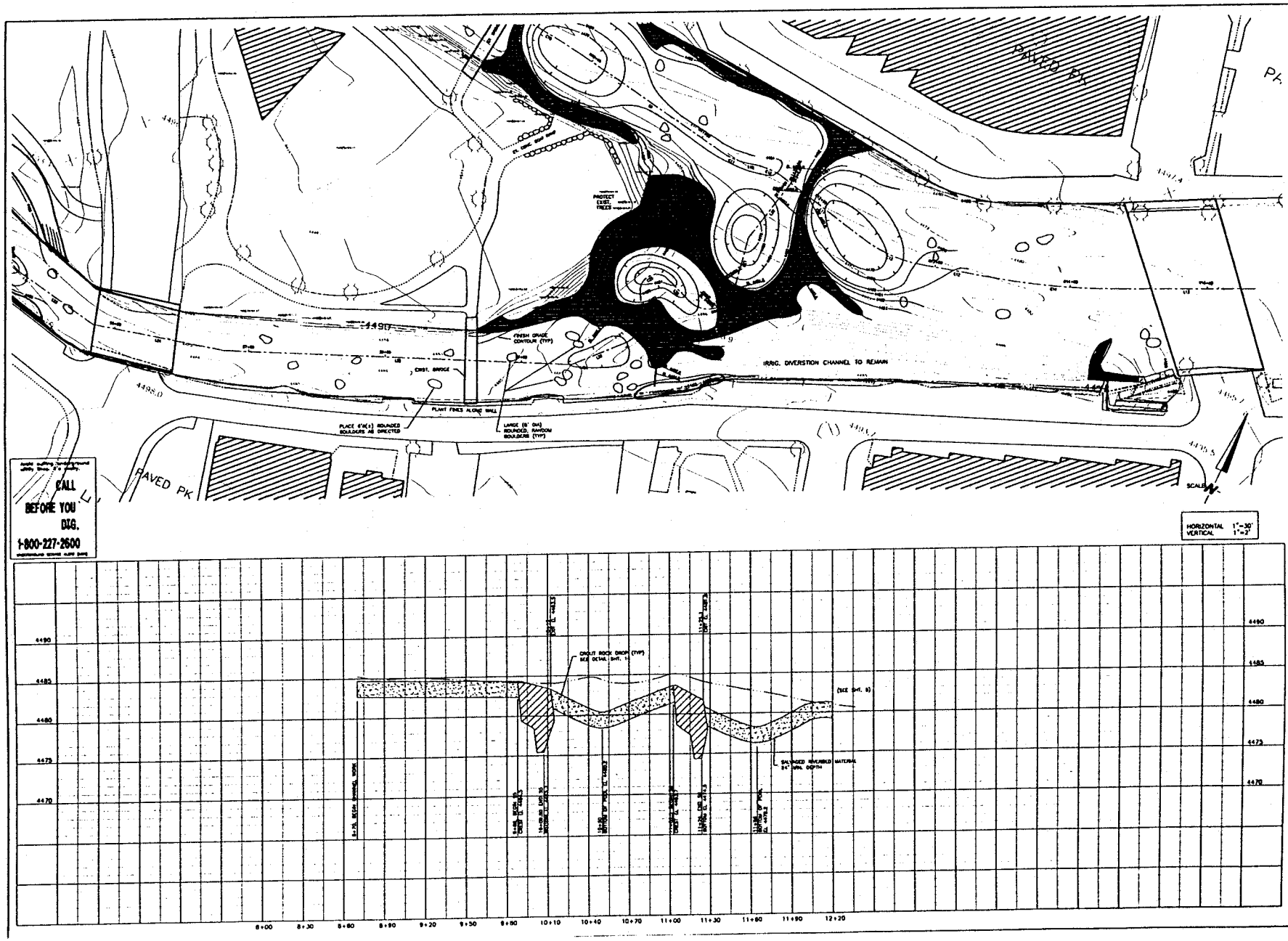
Truckee River Whitewater Park
at Wingfield Park
Reno, Nevada

South Channel Plan & Profile
Sta. S0+00 to S5+48

JOB NO. 00-202-02
DATE March 25, 2002
DESIGNED: CDM
DRAWN: FRB
CHECKED:

SHEET 6 OF 16



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Truckee River Whitewater Park
at Wingfield Park
Reno, Nevada

South Channel Plan & Profile
Sta. +00 to +00

JOB NO. 00-202-02
DATE March 25, 2002
DESIGNED: CDM
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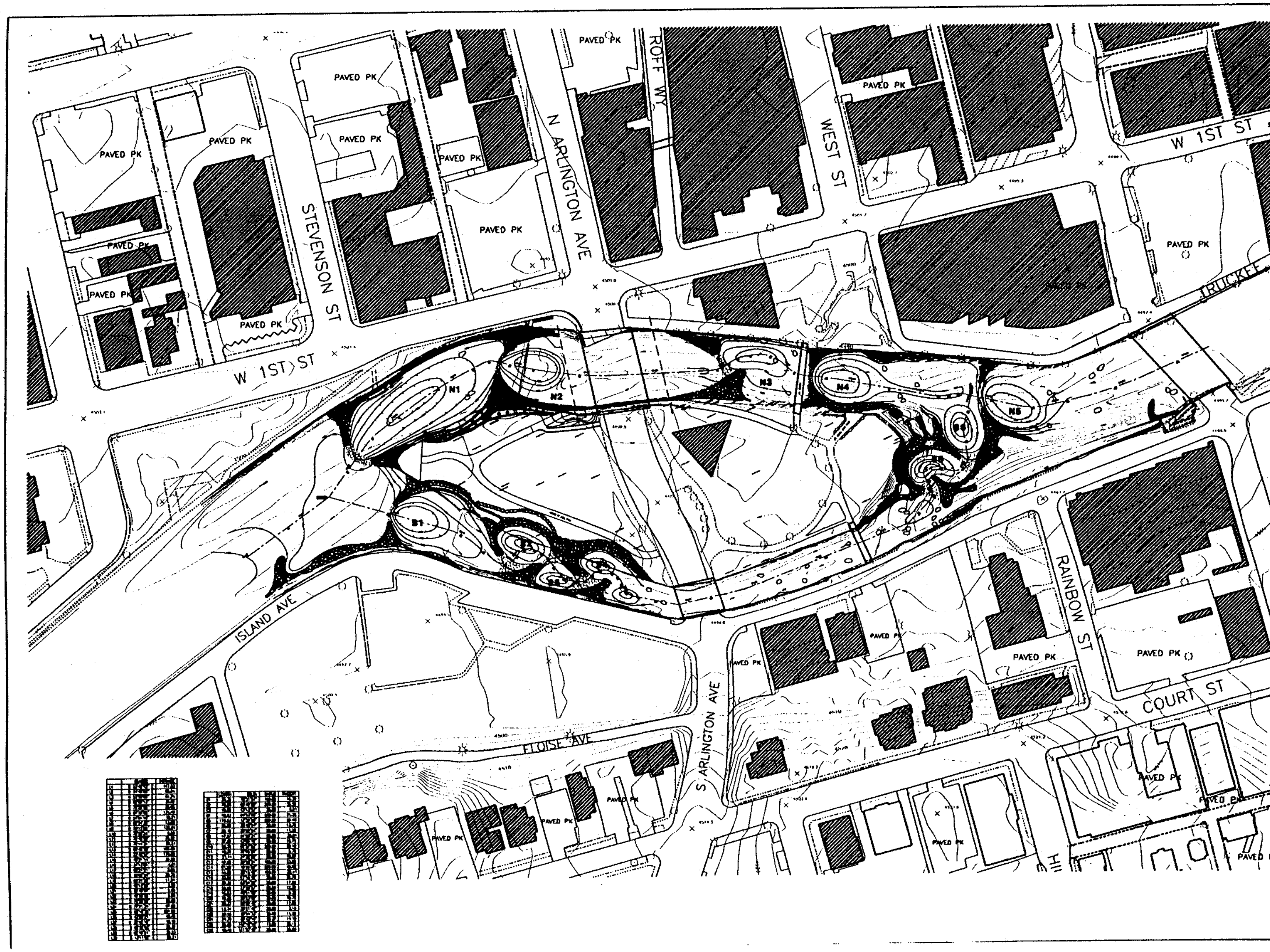
CHECKED:

SHEET 7 OF 18



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REVISION	DATE

Truckee River Whitewater Park
at Wingfield Park
Reno, Nevada

Horizontal Control Plan and
Sheet Index to Drop Structures

JOB NO. 00-202-02
DATE March 25, 2002
DESIGNED: CDM
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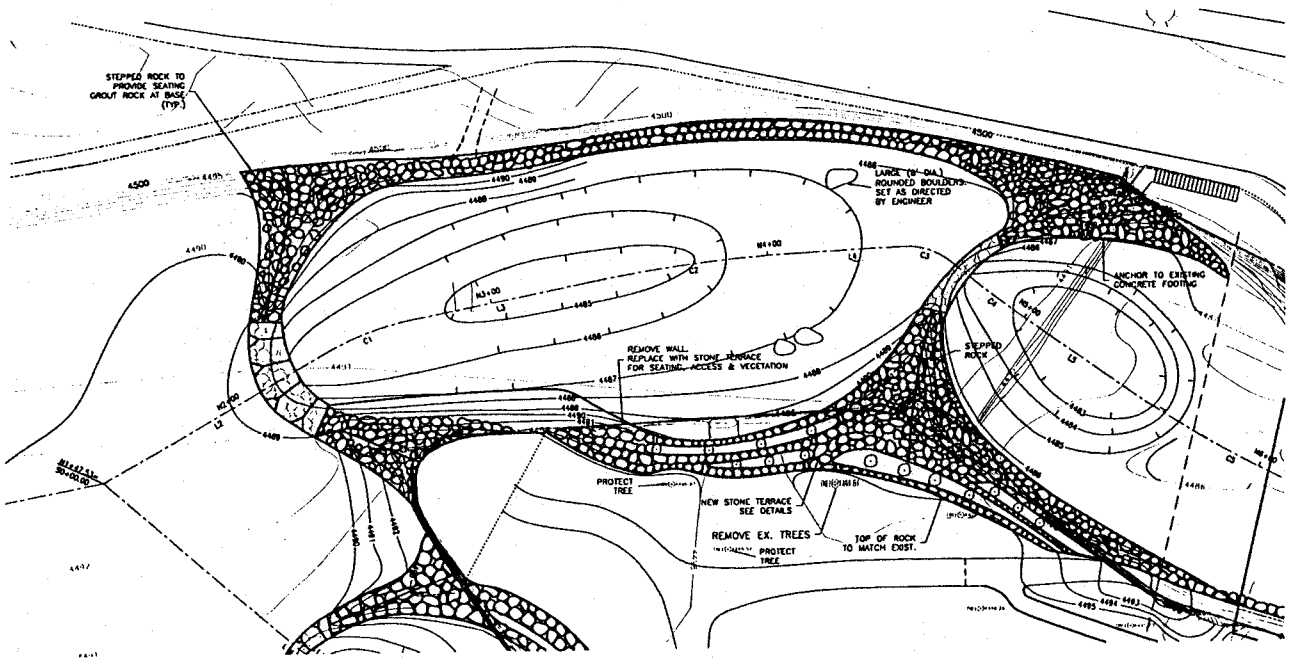
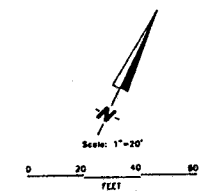
SHEET 8 OF 16





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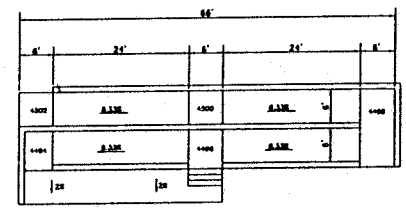
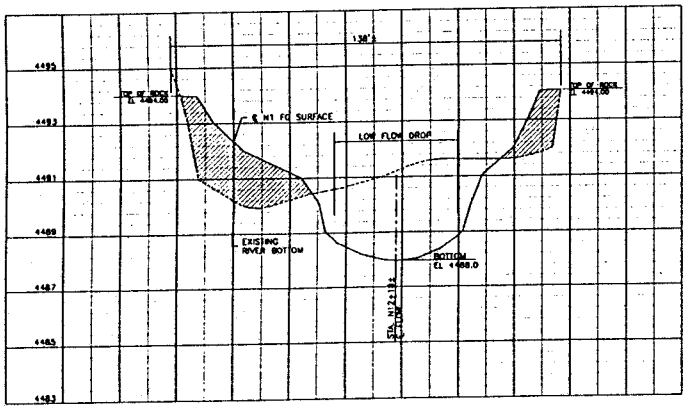


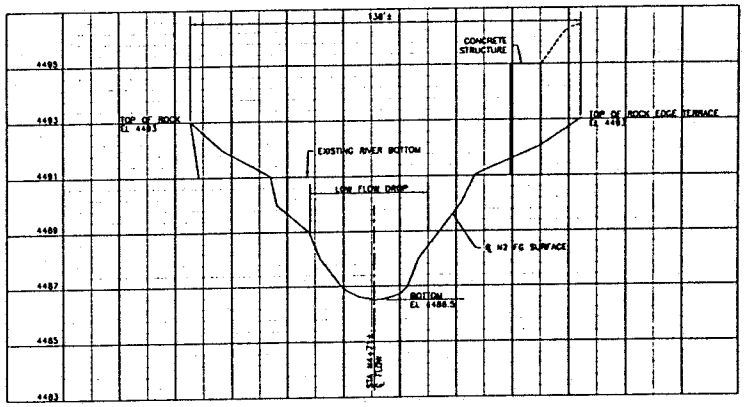
Special Detail - Pedestrian Access to River

No Scale



North Drop Structure N1

SCALE: HORIZ = 20' VERT = 2'



North Drop Structure N2

SCALE: HORIZ = 20' VERT = 2'

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Truckee River Whitewater Park at Wingfield Park Reno, Nevada

Drop Structure N1 and N2 Plan and Special Details

JOB NO. 00-202-02
DATE March 25, 2002
DESIGNED: CDM
DRAWN: FRB
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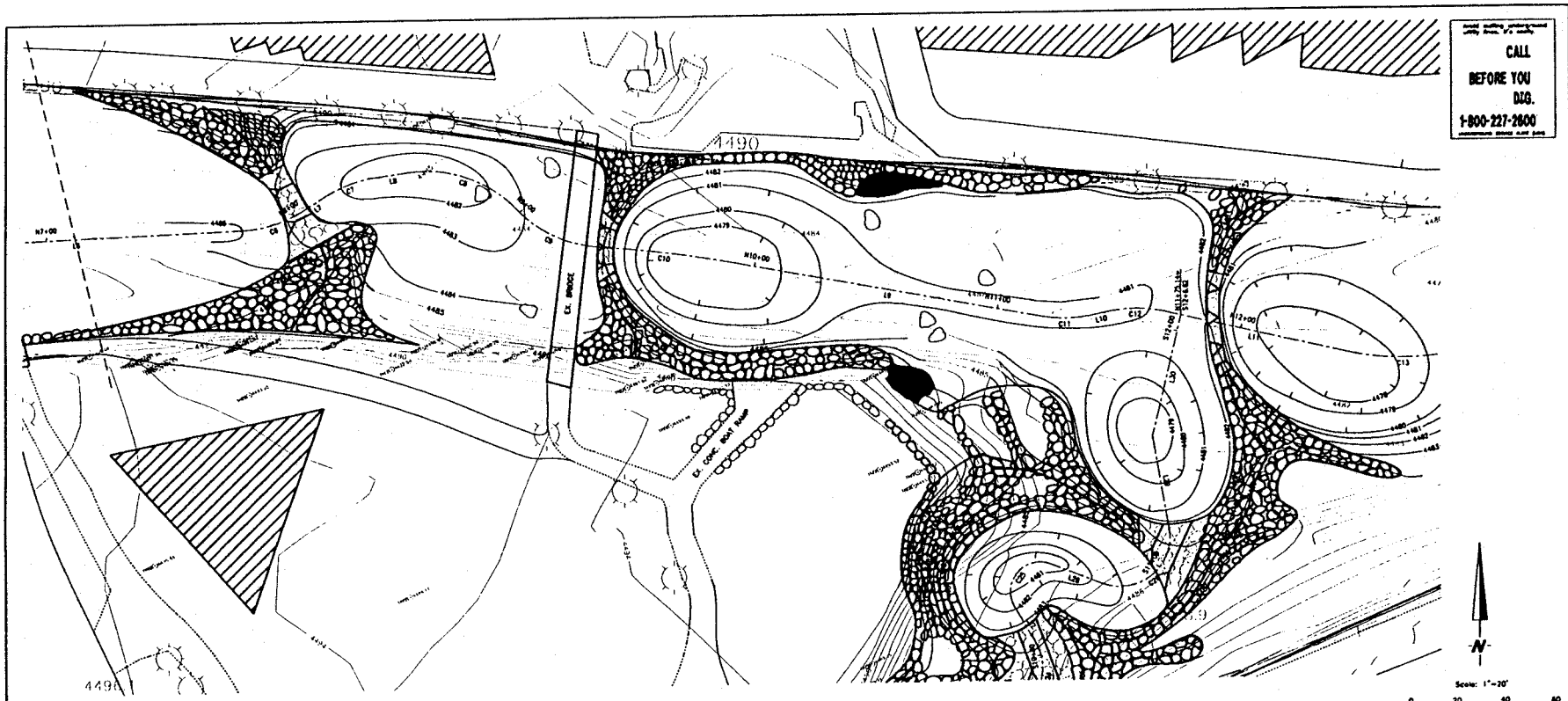
SHEET 9 OF 16



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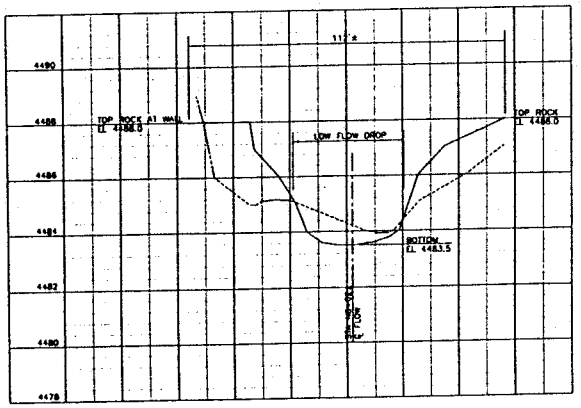
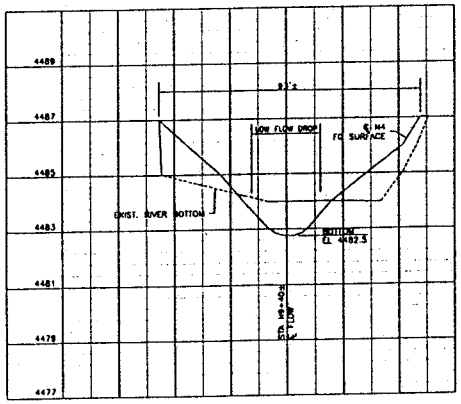
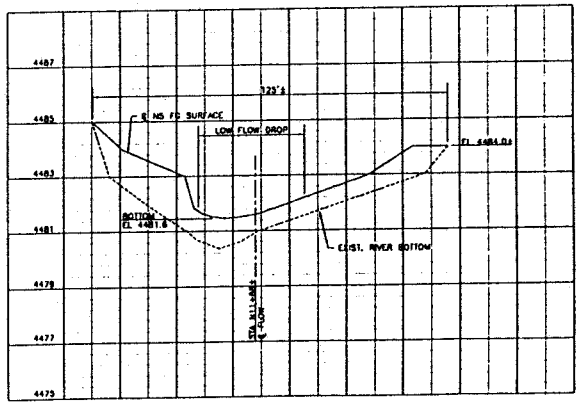


North Drop Structure N3



North Drop Structure N4



North Drop Structure N5

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Truckee River Whitewater Park
at Wingfield Park
Reno, Nevada

Drop Structure N3, N4, & N5 Plan
and Special Details

JOB NO. 00-202-02
DATE March 25, 2002
DESIGNED: CDM
DRAWN: FRB
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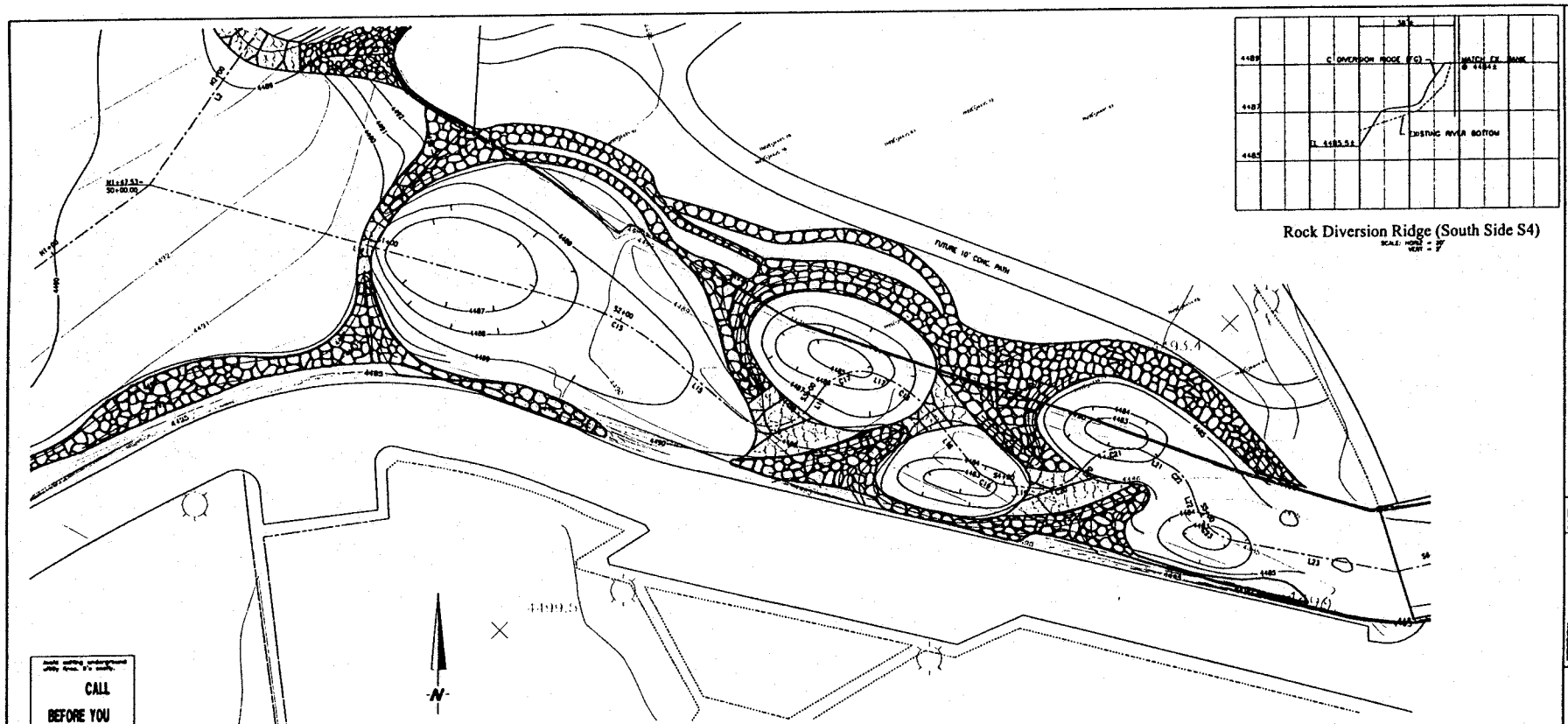
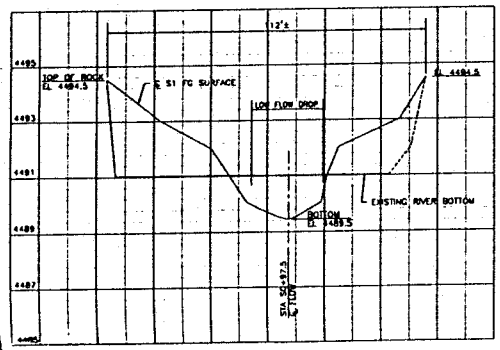
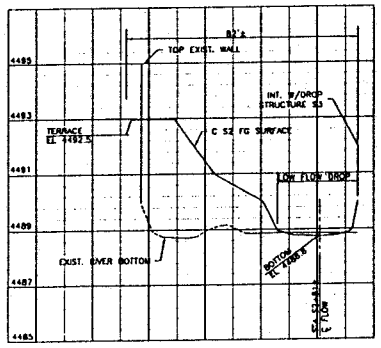
SHEET 10 OF 18



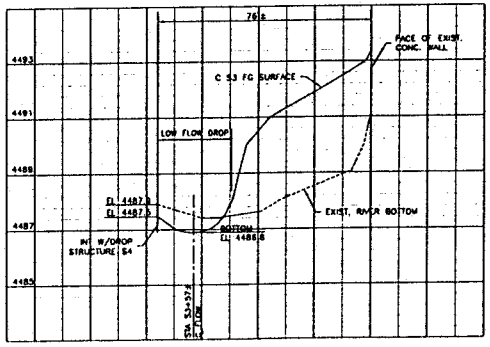
Rock Diversion Ridge (South Side S4)



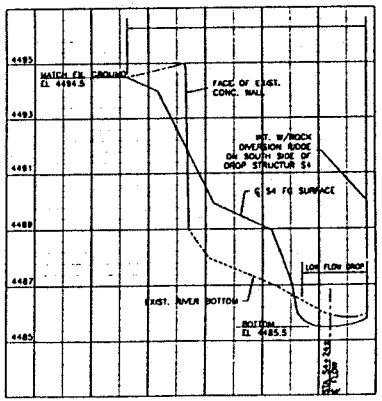
South Drop Structure S1



South Drop Structure S2



South Drop Structure S3



South Drop Structure S4

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REVISION	DATE

Truckee River Whitewater Park
at Wingfield Park
Reno, Nevada

Drop Structure S1 to S4 Plan
and Special Details

JOB NO. 00-202-02
DATE March 25, 2002
DESIGNED: CDM
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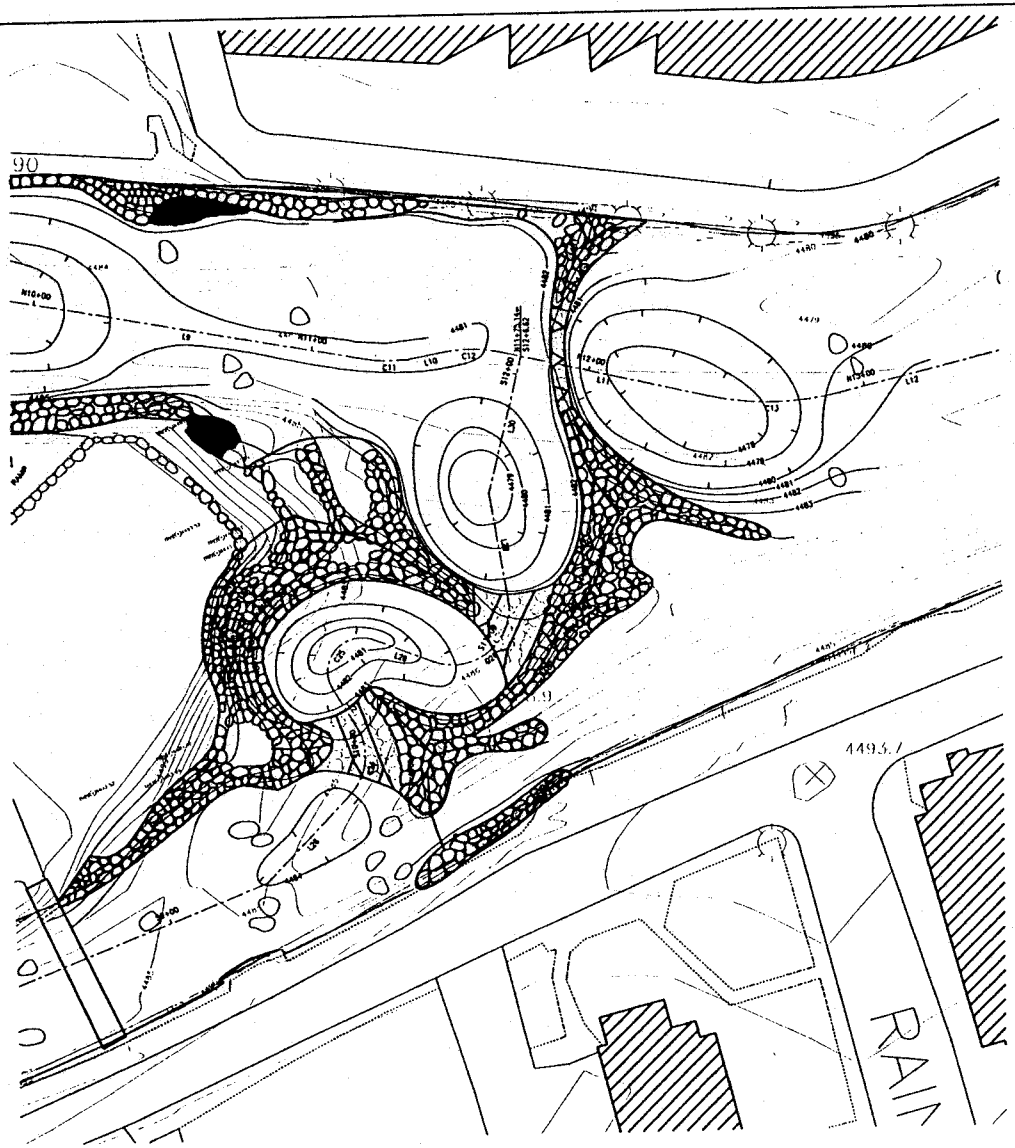
SHEET 11 OF 16



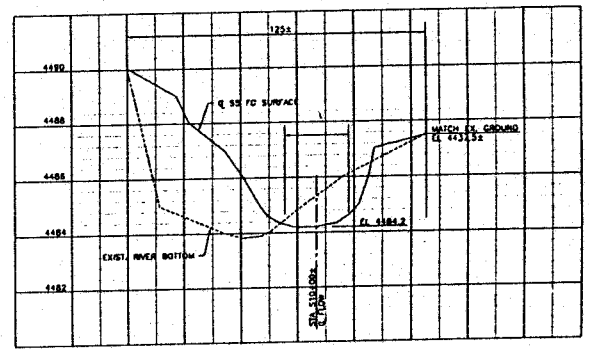
N

Scale: 1"=20'

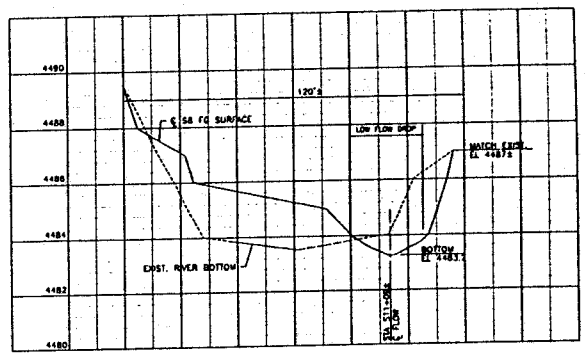
0 20 40 60

FEET

CALL BEFORE YOU DIG. 1-800-227-2600



South Drop Structure S5



South Drop Structure S6

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REVISION	DATE

Truckee River Whitewater Park
at Wingfield Park
Reno, Nevada

Drop Structure S5 to S6 Plan
and Special Details

JOB NO. 00-202-02
DATE March 25, 2002
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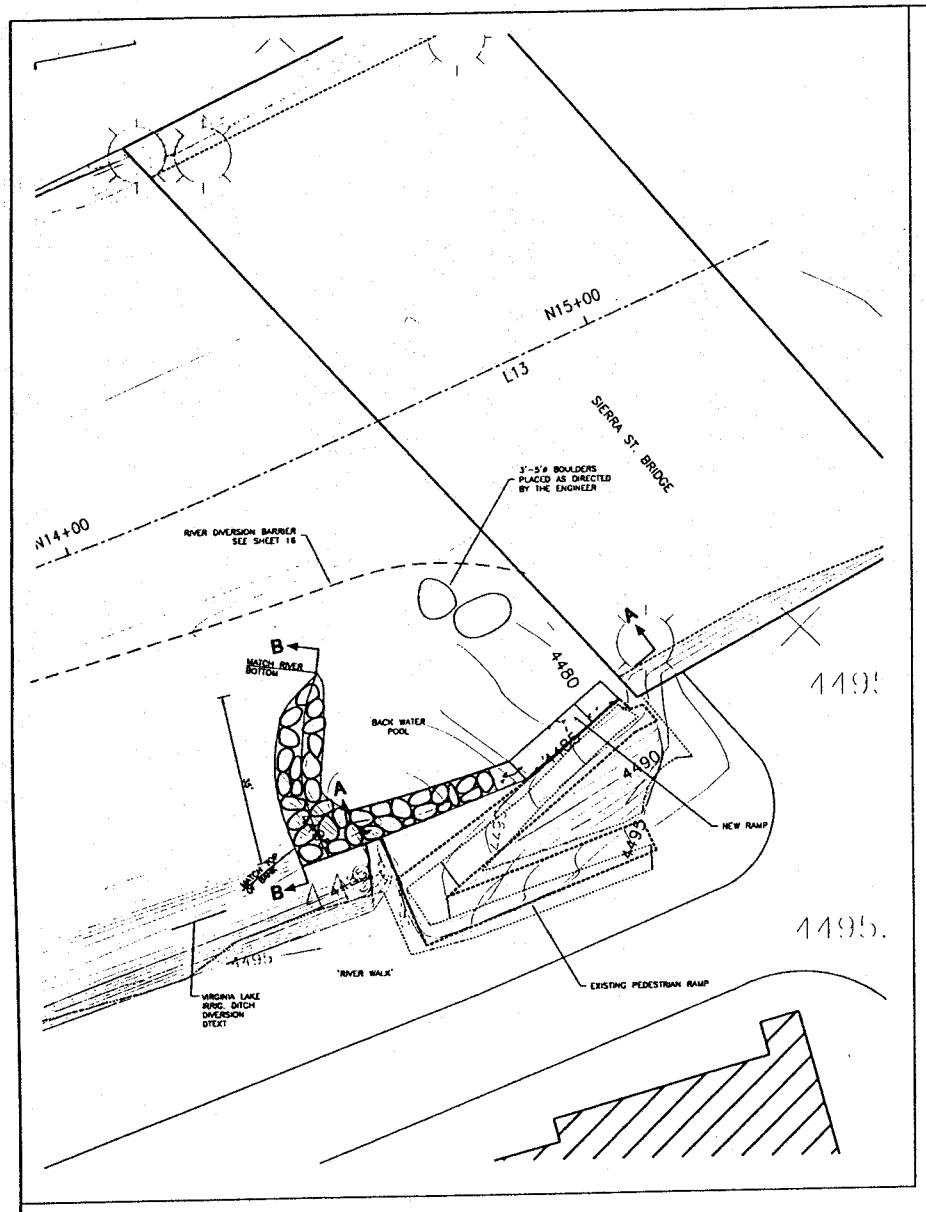
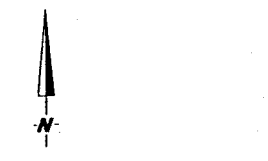
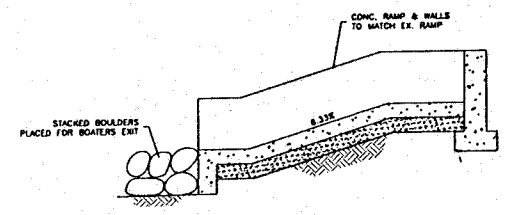
SHEET 12 OF 16



Site Plan - Boat Takeout Area





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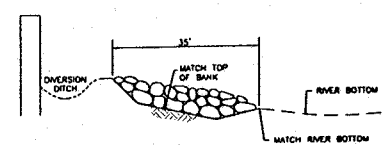

Section B-B
No Scale

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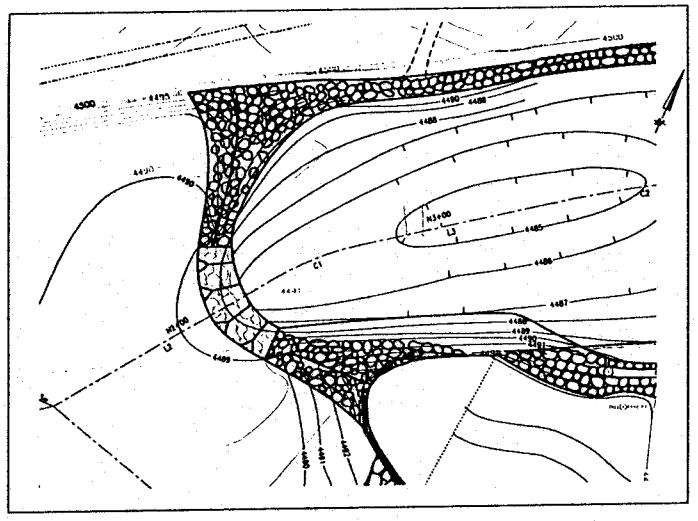
REVISION	DATE

Truckee River Whitewater Park at Wingfield Park
Reno, Nevada

Takeout Point Plan and Special Details

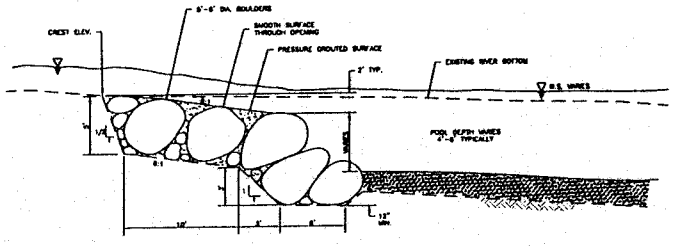
JOB NO. 00-202-02
DATE March 25, 2002
DESIGNED: CDM
DRAWN: FRB
CHECKED:

SHEET 13 OF 16



DROP STRUCTURE N1

SCALE: 1"=20'



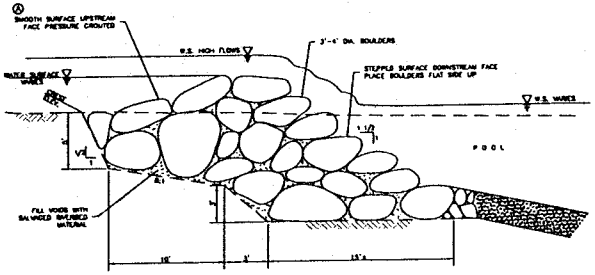
SECTION A-A

TYPICAL ℄ PROFILE VIEW OF DROP STRUCTURE AT OPENING

NO SCALE

LEGEND FOR ROCK TREATMENTS:

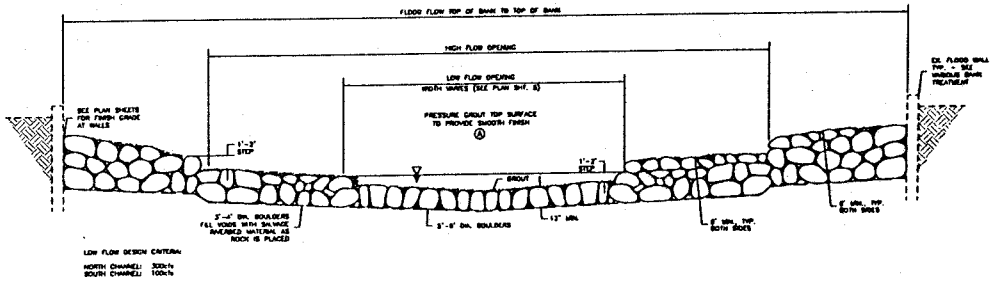
- (A) SMOOTH FLAT SURFACE. FLATTEST FACE OF ROCK UP
- (B) STEPPED ROCK FINISH WITH FLATTEST PART OF ROCK UP FOR EACH LAYER
- (C) TERRACE ROCK (BANKS ONLY)



SECTION B-B

TYPICAL SECTION OF ROCK BEYOND DROP STRUCTURE OPENING

NO SCALE



TYPICAL CROSS SECTION - DROP STRUCTURE BANK TO BANK

NO SCALE

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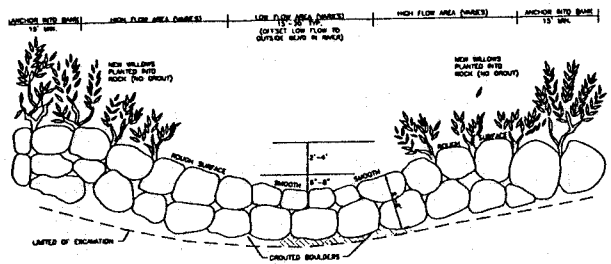
REVISION	DATE

Truckee River Whitewater Park
at Wingfield Park
Reno, Nevada

Special Details - Drop Structures

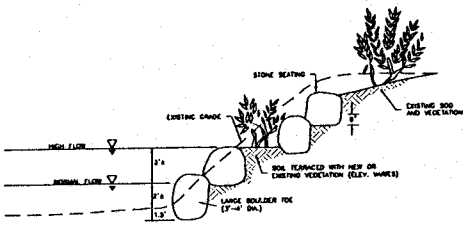
JOB NO. 00-202-02
DATE March 25, 2002
DESIGNED: CDM
DRAWN: FRB
CHECKED:

SHEET 14 OF 18



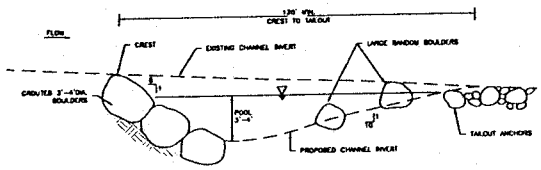
TYPICAL SECTION VIEW OF "AT-GRADE" DROP STRUCTURE

SCALE: 1"=10' HORIZ.
1"=5' VERT.



BANK TERRACED SEATING AND RESTORATION

SCALE: 1"=5'



TYPICAL C PROFILE VIEW OF "AT-GRADE" DROP STRUCTURE

SCALE: 1"=5'

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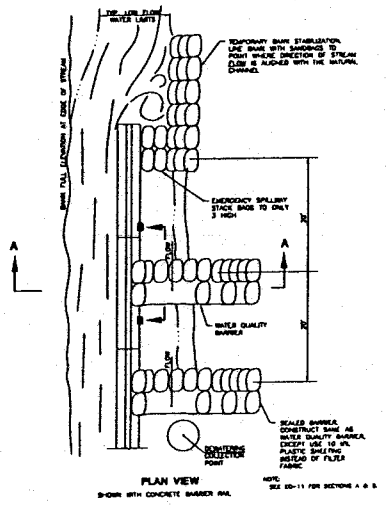
REVISION	DATE

Truckee River Whitewater Park
at Wingfield Park
Reno, Nevada

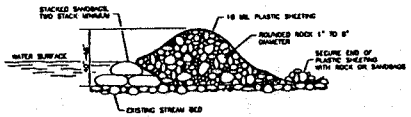
Special Details

JOB NO. 00-202-03
DATE March 25, 2003
DESIGNED: CDM
DRAWN: FRB
CHECKED:

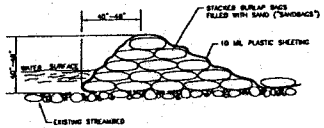
SHEET 16 OF 16



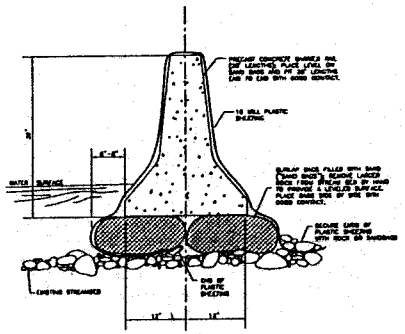
STREAM DIVERSION CONSTRUCTION
(DOWNSTREAM)
Not to Scale



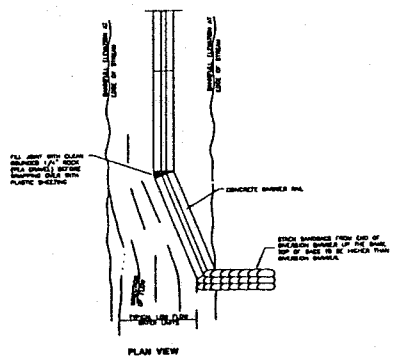
TYPICAL STREAM DIVERSION
(WITH ROCK)



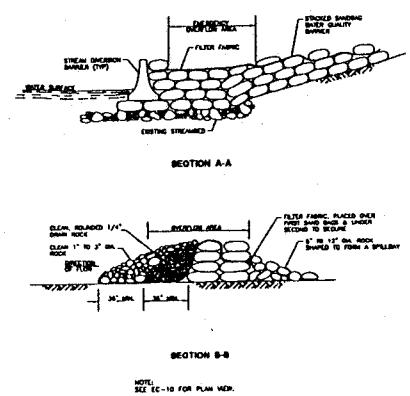
TYPICAL STREAM DIVERSION
(WITH SANDBAGS)
Not to Scale



TYPICAL STREAM DIVERSION
(WITH PRECAST CONCRETE BARRIER RAIL)
Not to Scale



TYPICAL STREAM DIVERSION
(UPSTREAM)
Not to Scale



STREAM DIVERSION CONSTRUCTION
(DOWNSTREAM)
Not to Scale

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REVISION	DATE

Truckee River Whitewater Park
at Wingfield Park
Reno, Nevada

River Diversion Details

JOB NO. 00-202-02
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SHEET 16 OF 16