

# PUBLIC NOTICE



US ARMY CORPS  
OF ENGINEERS

APPLICANT: SD DEPT. OF GAME, FISH,  
AND PARKS  
APPLICATION NO: 200430254  
WATERWAY: UNNAMED TRIBUTARY TO  
SPRING CREEK

OMAHA DISTRICT

ISSUE DATE: AUGUST 19, 2004  
EXPIRATION DATE: SEPTEMBER 3, 2004

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Regulatory Office, 28563 Powerhouse Rd, Room 118, Pierre, SD 57501

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**15-DAY NOTICE**

## JOINT NOTICE OF PERMIT PENDING

US ARMY CORPS OF ENGINEERS  
AND  
SOUTH DAKOTA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

The application of the South Dakota Department of Game Fish and Parks, Pierre, South Dakota 57501, for approval of plans and issuance of a permit under authority of the Secretary of the Army is being considered by the District Engineer, US Army Engineer District, Omaha, Nebraska.

The applicant requests authorization to perform fill placement activities in an unnamed tributary to Spring Creek in association with the proposed Sunday Gulch Dam Construction project located in Section 12, Township 2 South, Range 4 East, latitude 43-53-25.5545, longitude 103-35-15.2341, Pennington County, South Dakota.

The proposed project will consist of the construction of an earthen dam and concrete chute spillway to include trail, parking lot, fishing dock and footbridge amenities. The applicant anticipates that the dewatering of the stream channel to aid in performing the construction activities and prevent adverse impacts to water quality will be accomplished by the construction of a cofferdam and pipe diversion system (see attached Sheet 11 of 11). Less than 0.5 acre of riparian wetland adjacent to the stream channel will be affected by the project construction. It is expected that riparian habitat will redevelop along the fringes of the 1.77 acre maximum pool reservoir created by the dam. The attached plans (Sheets 1 through 11 of 11) show/describe the location and extent of the proposed work activity.

The purpose of the project is to provide recreational opportunities for the general public.

The South Dakota Department of Environment and Natural Resources, Division of Environmental Services, 523 East Capitol Avenue, Pierre, South Dakota, 57501-3181, will review the proposed project for state certification in accordance with the provisions of Section 401 of the Clean Water Act. The certification, if issued, will express the State's opinion that the operations undertaken by the applicant will not result in a violation of applicable water quality standards. The South Dakota Department of Environment and Natural Resources hereby incorporates this public notice as its own public notice and procedures by reference (ARSD 74:51:01).

Omaha District will comply with the National Historic Preservation Act of 1966, as amended. The applicant pre-coordinated the project proposal with the State Historic Preservation Officer (SHPO). In a response letter (SHPO Project: 040721007S) dated August 2, 2004, the SHPO stated that "the proposed project will not encroach upon, damage or destroy any historic property which is included in the National or State Register of Historic Places or the environs of such property." However, we will evaluate any additional input by the SHPO and the public in response to this public notice, and we may conduct or require a reconnaissance survey of the permit area or check for unknown historic properties, if warranted.

In compliance with the Endangered Species Act, a preliminary determination has been made that the described work will not affect species designated as threatened or endangered or adversely affect critical habitat. In order to complete our evaluation of this activity, comments are solicited from the U.S. Fish and Wildlife Service and other interested agencies and individuals.

The decision whether to issue a permit will be based on an evaluation of the probable impacts including cumulative impacts of the proposed activity on the public interest. 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 proposals must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the activity will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, 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 production, and, in general the needs and welfare of the people. In addition, the evaluation of the impacts of the project on public interest will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act (40 CFR Part 230).

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 proposed 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 proposal. 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 proposed activity.

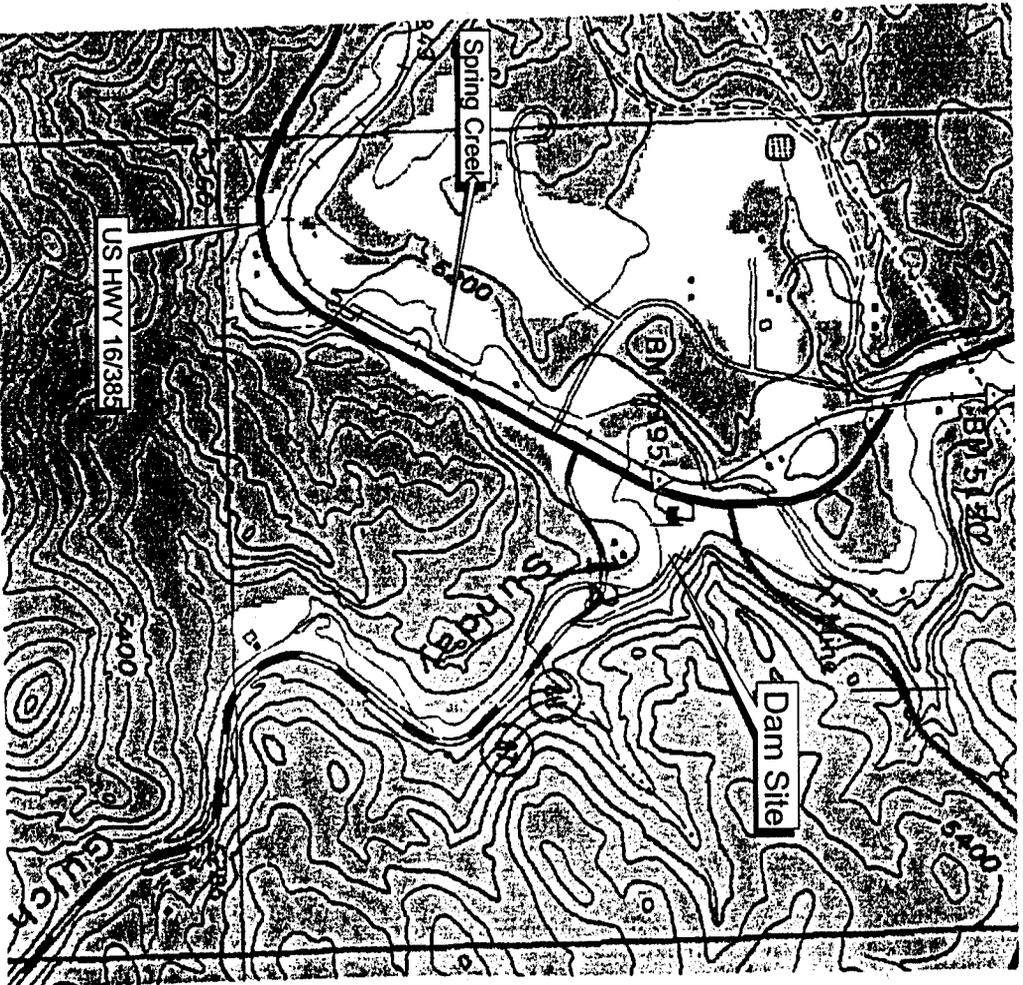
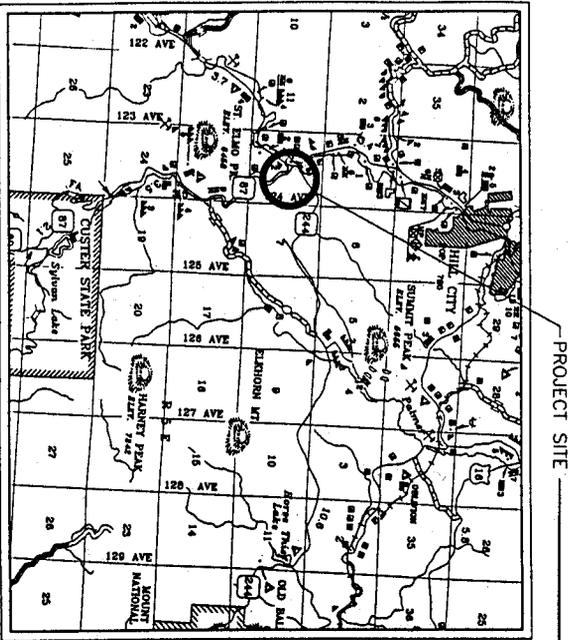
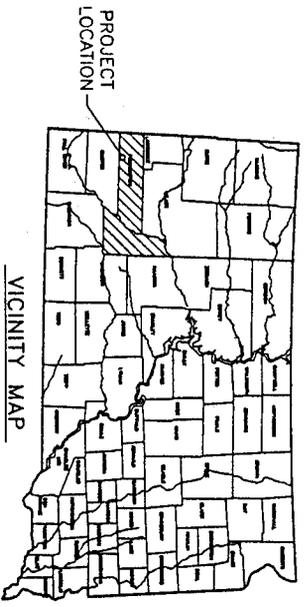
Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reason for holding a public hearing. The request must be submitted to the US Army Corps of Engineers, South Dakota Regulatory Office, 28563 Powerhouse Road, Room 118, Pierre, South Dakota 57501.

Any interested party (particularly officials of any town, city, county, state, Federal agency, Indian Tribe, or local association whose interests may be affected by the proposed work) is invited to submit to this office, written facts, arguments, or objections on or before September 3, 2004. Any agency or individual having an objection to the proposed work should specifically identify it as an objection with clear and specific reasons. Comments, both favorable and unfavorable, will be accepted, made a part of the record and will receive full consideration in subsequent actions on this permit application. All replies to the public notice should be addressed to the address listed in the previous paragraph. Thomas A Lowin, telephone number (605) 224-8531, may be contacted for additional information.

Comments received after the close of the business day on the expiration date of this public notice will not be considered.

This project, if authorized, will be under the provisions of Section 404 of the Clean Water Act.

SOUTH DAKOTA DEPARTMENT OF GAME, FISH & PARKS  
 SUNDAY GULCH DAM CONSTRUCTION  
 PENNINGTON COUNTY, SOUTH DAKOTA  
 GFP PROJECT NO. PEN-SUND-W04-A



**PURPOSE:** Recreation  
**APPLICATION BY:**  
 SD Dept. of Game, Fish & Parks  
 No. 200430254

**IN** unnamed tributary  
 AT Sec. 12/T2N/R4E  
**COUNTY** Pennington  
 DATE 8/19/2004  
 SHEET 1 OF 11

# ESTIMATE OF QUANTITIES

Item No.	Bid Item	Units	Dam	Parking Lot	Trail 1	Trail 2	Bridge	Fishing Pier	Total
1.00	Mobilization	LS							1
1.01	Unclassified Excavation	CY	4965	83	370	101	12		5531
1.02	Compacted Clay Core	CY	3501						3501
1.03	Compacted Liner	CY	554						554
1.04	Compacted Embankment	CY	165	900	474	39			1578
1.05	Class C Riprap	Tons	1485						1485
1.06	Rock Excavation	CY	425						425
1.07	Non-Woven Geotextile Fabric	SY	1165						1165
1.08	Flowable Grout	CY	135						135
1.09	Reinforced Concrete	CY	91.8				6.2		98
1.10	Engineered Fill	Tons	108				2.2		110.2
1.11	Fiber Entrained Concrete	CY	13.6						13.6
1.12	Topsoil	CY	7.8	135	145	31			318.8
1.13	Seeding & Erosion Control	LS	1						1
1.14	Compacted Basecourse	Tons		275					275
1.15	Ordinary Parking Lot Grading	SY		856					856
1.16	Ordinary Trail Grading	LF			415	74			489
1.17	Limestone	CY			60	10.6			70.6
1.18	Woven Geotextile Fabric	SY			277	50			327
1.19	Install Bridge	LS					1		1
1.20	Furnish Fishing Pier/ Foundation	LS							1
1.21	Install Fishing Pier/ Foundation	LS							1
1.22	Dewatering	LS							1
1.23	Traffic Control	Units							312
1.24	Traffic Control Miscellaneous	LS							1

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**IN** unnamed tributary

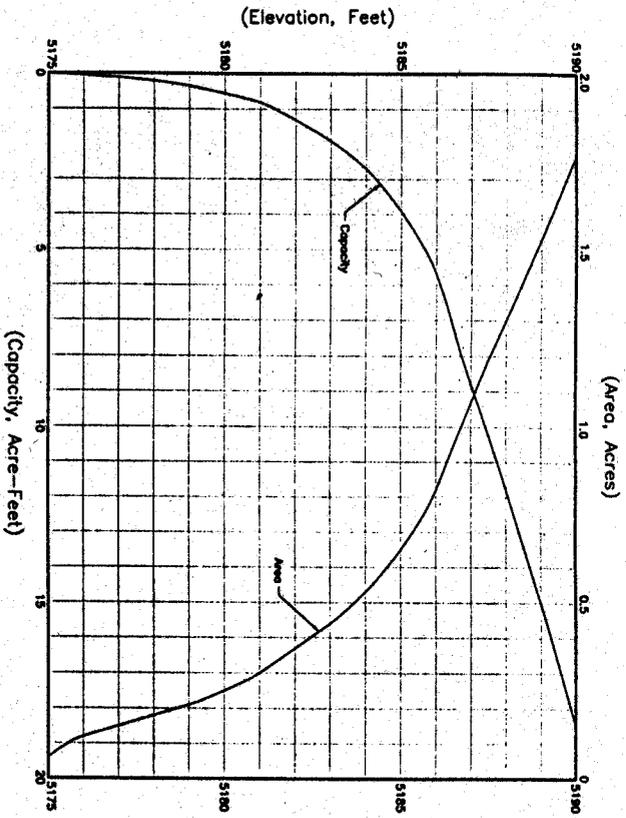
**AT** Sec. 12/T2N/R4E

**COUNTY** Pennington

**DATE** 8/19/2004

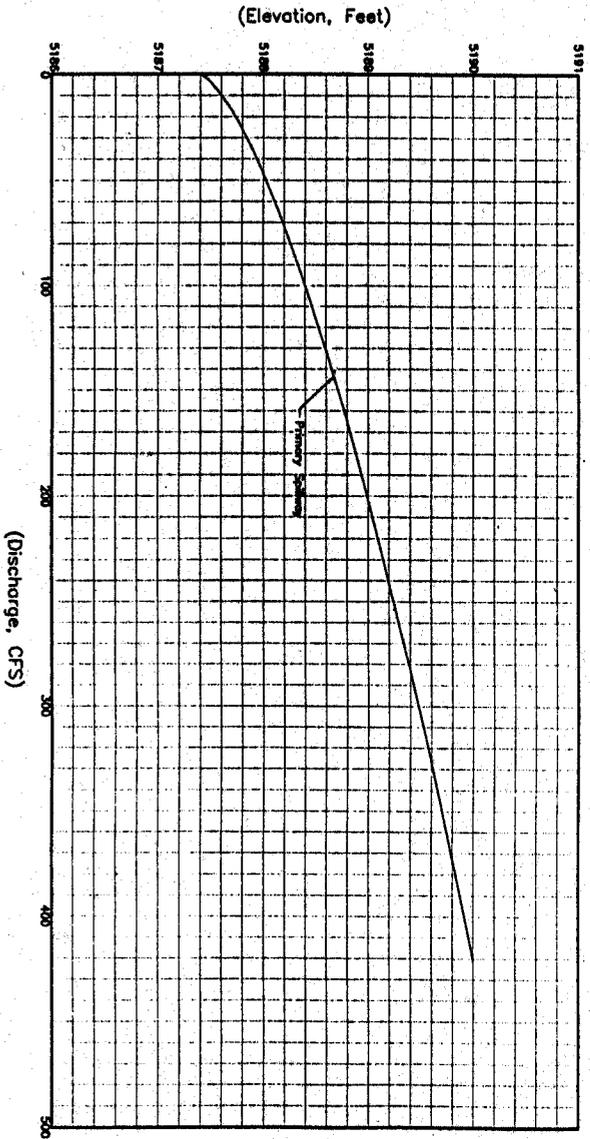
**SHEET** 2 of 11





AREA CAPACITY CURVE

SITE CHARACTERISTICS	
Storage of Primary Spillway Elevation (5187.5)	1.19 Acres
Storage at Top of Dam Crest Elevation (5190.0)	1.77 Acres
Height of Dam	13 Feet
Drainage Area	4200 Acres
$Q_{100}$	1425 cfs
Downstream Culvert Capacity	421 cfs
● Elevation 5179.0	221 cfs
● Downstream Culvert Capacity	374 cfs
● Elevation 5179.0	



SPILLWAY DISCHARGE RATING CURVE

**PURPOSE:** Recreation  
**APPLICATION BY:** SD Dept. of Game, Fish & Parks  
 No. 200430254

**IN unnamed tributary**  
**AT Sec. 12/T2N/R4E**  
**COUNTY Pennington**  
**DATE 8/19/2004**  
**SHEET 3 OF 11**

**SPECIFICATIONS**

Standard Specifications for Roads & Bridges, South Dakota Department of Transportation, 2004 Edition, Supplemental Specifications and/or Special Provisions shall apply where applicable for construction and materials details with the exception of Method of Payment and Basis of Payment. Plans, notes and/or details shall supersede all General Provisions of the Standard Specifications.

**SCOPE OF WORK**

Work covered under this contract, but is not limited to:

1. Construction of a small earthen dam
2. Construction of a concrete chute spillway
3. Trail & Parking Lot Construction
4. Fishing Dock & Bridge Placement

**GENERAL NOTES**

The Contractor shall take care not to damage existing vegetation and trees in the construction site. No trees shall be removed unless such removal has been authorized by the Project Engineer.

Due to work area constraints, some hand work and miscellaneous small equipment may be necessary to accomplish the work. The contractor shall take this into consideration when bidding this project.

The Contractor is advised to visit the site prior to bid preparation to ascertain the amount of work involved.

**WORK SCHEDULE**

The Contractor shall submit a detailed schedule for the proposed work. The Owner/Engineer must approve the sequence and schedule prior to construction.

**COMPLETION DATE**

All work unless noted above must be completed by November 30, 2004.

**UTILITIES**

The Contractor shall notify SOUTH DAKOTA ONE CALL, 1-800-781-7474, to locate any utility that may be located within the project limits. The Contractor is responsible for any damage to utilities and shall be repaired at the Contractor's expense.

**HAUL ROUTES**

The Contractor will be responsible for determining any haul routes from the material source(s) to the project site including any agreements necessary with respective governmental agencies for maintenance and restoration of the routes.

It shall be the responsibility of the contractor to prepare the haul route, maintain the haul route in a good condition satisfactory to the governing agency and upon completion of its use, restore the haul route to a condition at least equal to that which existed at the time hauling operation began.

The fact that other general and normal traffic has used the haul route or a portion of it concurrently shall not relieve the Contractor of his obligation to maintain and restore the haul route as recommended.

**NOTIFICATION TO PROJECT ENGINEER**

1. The Project Engineer shall be notified 3 weeks in advance of the date construction is to begin.
2. The Project Engineer shall be notified prior to any over runs from plans quantities.
3. The Project Engineer shall be notified 24 hours prior to placing any concrete.

**WASTE DISPOSAL SITE**

The owner will supply a waste disposal site located within 1000 feet of the project for excavation material. The Contractor is also to stockpile trees and brush in the same vicinity.

The Contractor must supply his own waste disposal site for all tree stumps and other waste generated on the project.

**TREE REMOVAL**

The Contractor shall remove all trees within the construction limits or as directed by the Project Engineer. The Contractor will pile trees at the designated waste disposal site. Tree removal will be paid at the lump sum price.

**CLEARING & GRUBBING**

Clearing & Grubbing involves the removal of all brush and debris within the construction limits. Clearing & Grubbing will be paid at the lump sum price.

**DEWATERING**

Dewatering will be necessary during construction of the dam. Testing shows the presence of ground water. The dewatering shall be continuous so that the construction site is maintained free of water while constructing the core and dam embankment. Dewatering shall also include the diversion of the creek during construction.

The Contractor will be required to submit a detailed description of his dewatering method and creek diversion plan. The plan must be approved by the Project Engineer before construction can begin. Payment for dewatering will be by the Lump Sum.

**COMPACTED EMBANKMENT**

Compacted Embankment is all suitable material used for fill purposes at a certain area as designated in the plans. A compaction factor of 1.30 is used. Compacted Embankment will be paid for by the cubic yard. All water required for compaction of the Compacted Embankment shall be included in the bid item "Compacted Embankment."

**UNCLASSIFIED EXCAVATION**

Unclassified Excavation is material obtained from earthwork. Suitable material obtained from excavation shall be used for Compacted Embankment. All other excess excavation shall be wasted on site as directed by the Project Engineer. Unclassified Excavation will be paid for by the cubic yard.

**ORDINARY GRADING**

The Contractor may perform grading or surfacing work during daylight hours only unless additional hours are approved by the Project Engineer.

Removal and disposal of all vegetation and debris within the project limits will be considered subsidiary work to other contract items. No separate payment will be made for their removal and disposal.

During construction of the project, existing traffic control devices shall be removed and/or reset as necessary by the contractor to safely control traffic. Removed items shall be neatly stockpiled at the site.

Water for compaction of earth embankments is estimated to be applied at the rate of 15 gallons per cubic yard of embankment minus waste. Payment for water shall be adsorbed into the bid items "Unclassified Excavation and Compacted Embankment."

Compaction shall be by the Ordinary Compaction Method.

**SAVING STOCKPILE AND PLACING TOPSOIL**

Prior to starting construction operations, topsoil shall be removed from construction limits. Following completion of grading operations, topsoil shall be respread evenly over the disturbed areas and the bed shall be prepared for seeding. This depth will be approximately 4 inches over the work limits.

Cost for this work shall be included in the contract unit price per cubic yard of "Topsoil Strip & Place."

**ROCK EXCAVATION**

Previous testing shows the potential for encountering rock in the construction area. Rock shall be removed and paid for by the cubic yard. The Contractor shall notify the Project Engineer when engaging in rock removal.

**IMPERVIOUS LINER CONSTRUCTION**

The Impervious liner will be constructed with on-site sandy silts/silty sands mixed with a minimum of 15% #50-mesh bentonite granules by dry weight. Only the top two feet of existing soils at this site are suitable material for this application.

The Contractor will be required to supply the #50-mesh bentonite granules. The Contractor will mix the granules on site with the existing sand silt/silty sand to obtain the proper mixture. The mixture shall be conditioned to optimum or 3% over optimum moisture content before it is placed.

The Impervious Liner shall be constructed to a depth of 18 inches. The Liner shall be placed and compacted so that each lift is no greater than 6 inches. The material shall be compacted to a minimum of 95% of Standard Proctor Density.

Payment for the Impervious Liner shall include the #50-mesh bentonite granules, mixing the material on site, water for compaction and placing the Impervious Liner. Payment will be made by the cubic yard.

**PURPOSE: Recreation**

**APPLICATION BY:**

SD Dept. of Game, Fish & Parks

No. 200430254

**IN unnamed tributary**

AT Sec. 12/T2N/R4E

COUNTY Pennington

DATE 8/19/2004

SHEET 4 OF 11

**COMPACTED CLAY CORE**

The Compacted Clay Core shall be constructed of the same material as the impervious liner. The material shall be compacted to a minimum of 95% of Standard Proctor Density in lifts no greater than 6 inches.

The Contractor may import clay soils as an alternative to mixing bentonite with the onsite soils. The Contractor must obtain prior approval from the Geotechnical Engineer before importing any clay materials for the core.

Payment for the Compacted Clay Core will be by the cubic yard for compacted in place material. No separate payment will be made for water required to construct the core. Cost of water shall be included in the bid item "Compacted Clay Core."

**WATER FOR COMPACTION**

Cost of water for compaction of the granular material shall be absorbed in the unit price for various contract items. Six (6) percent, plus or minus, moisture will be required at the time of compaction unless otherwise directed by the Engineer.

**GRAVEL BASE COURSE**

Gravel Base Course shall be furnished by the contractor and conform to Section 882 of the SD Standard Specifications 2004 Edition.

Gravel for base course shall conform to the gradation requirements of the Standard Specifications. Compaction shall conform to Section 260.3A of the Standard Specifications, 2004 Edition. Base Course shall be placed and compacted so that minimum thicknesses are met on the various roads and parking lots. The width and limits of miscellaneous areas may be adjusted in the field by the Engineer as necessary.

The aggregate for base course shall consist of sound durable particles of gravel and sand, which may include limited amounts of fine soil particles.

The base course shall conform to the following gradation requirements:

Sieve Size	Percent Passing, by Weight
1"	100
3/4"	80-100
1/2"	68-91
No. 4	46-70
No. 8	34-58
No. 40	13-35
No. 200	3.0-12.0

Plasticity Index: 0-6

Prior to placing the base course, the sub grade shall be shaped to conform to the grading shown on the plans in accordance with South Dakota Standard Specification Section 210-Ordinary Roadway Shaping. The Contractor shall place the base course in an evenly shaped windrow.

The base course shall be placed in accordance with South Dakota Standard Specification Section 260.3-Granular Bases and Surfacing, Construction Requirements.

Invoice weigh tickets shall be provided by the Contractor to confirm established quantities delivered to the project site. Field measurements will also be used to determine adequate application rates.

All costs incurred for weighing, hauling, spreading, compaction including all labor, equipment, materials and incidentals necessary to complete the work, shall be included in the contract unit price bid for "Compacted Base Course."

The Contractor shall collect a minimum 50 lb. sample of material to be used and submit to the testing firm /or GF&P representative selected by the Engineer to determine source approval.

**LIMESTONE**

Limestone shall be furnished by the Contractor. Material shall be crushed limestone and shall conform to the standard specifications, section 882 and shall be from a source approved by the Engineer. The modified gradation specifications shall be as follows:

Sieve Size	Percent Passing, by Weight
3/8"	100
No. 4	60-90
No. 10	20-60
No. 40	15-30
No. 200	0-15

Plasticity Index: 0-3

Liquid Limit: 25

All other requirements of section 882 shall apply. To obtain approval, the contractor shall collect a 10lb. minimum sample and submit to the testing firm selected by the owner for source approval.

Compaction of the limestone shall conform to Section 260.3B & C of the Standard Specifications shall apply.

Cost of water for compaction of the limestone shall be adsorbed in the contract unit bid price for the item.

A woven geotextile fabric shall be used as a separation and reinforcement between the limestone and soil. Geotextile fabric to be installed following manufacturers recommendations and (6 or 7) ft. roll widths. See project manual specifications.

**ENGINEERED FILL**

Engineered fill shall consist of 3/4" clean crushed quartzite leveling course.

**RIERAP**

See Technical Specifications

**GEOTEXTILE FABRIC**

See Technical Specifications

**PURPOSE: Recreation APPLICATION BY: SD Dept. of Game, Fish & Parks**

See Technical Specifications No. 200430254

**FLOWABLE GROUT**

The Contractor shall cover the downstream slope of the dam with 2/3 of the rock quantity scheduled for that area. Next, the Contractor shall fill all voids in the placed rock with grout. Enough excess grout shall be left on the placed rock so that when the remaining 1/3 of rock is placed, all of the voids are filled. The remaining rock shall be placed immediately after the grout is placed to allow proper bonding. Flowable grout shall be furnished and placed by the Contractor and will be paid for by the cubic yard.

**SEEDING & EROSION CONTROL**

The item "Seeding & Erosion Control" includes material, equipment and labor to seed, fertilize and mulch the disturbed areas resulting from work required by this contract.

The seed mixture shall consist of 35% Red Top, 31% Thickspike Wheatgrass, Critero and 30% Annual Ryegrass. The seed mixture shall be free of noxious weed seed and applied at the rate of 20-22 lbs. PLS/acre.

A commercial fertilizer with a minimum guaranteed analysis of 18-46-0 or an approved alternate fertilizer shall be applied to all newly seeded areas at the application rate of one hundred pounds per acre.

Mulch consisting of grasshoy or straw shall be blown on at the rate of two tons per acre and punched in. Mulch shall be free of noxious weed seeds and objectionable foreign matter.

The Contractor shall provide an erosion control plan to the Project Engineer for approval prior to construction.

**BRIDGE INSTALLATION**

The Game, Fish & Parks will supply a pedestrian bridge as shown in the project plans. The bridge will be delivered to the project site and will include all connections as shown in the plans. Bridge installation includes unloading the bridge and placing the Contractor is also responsible for assembling all of the connections shown on the plan sheets and welding the bridge to the bearing plates. Payment for Bridge Installation will be made by the Lump Sum.

**FISHING PIER**

The Contractor shall be responsible for designing, detailing, fabrication, delivery, construction and erection of the fishing pier.

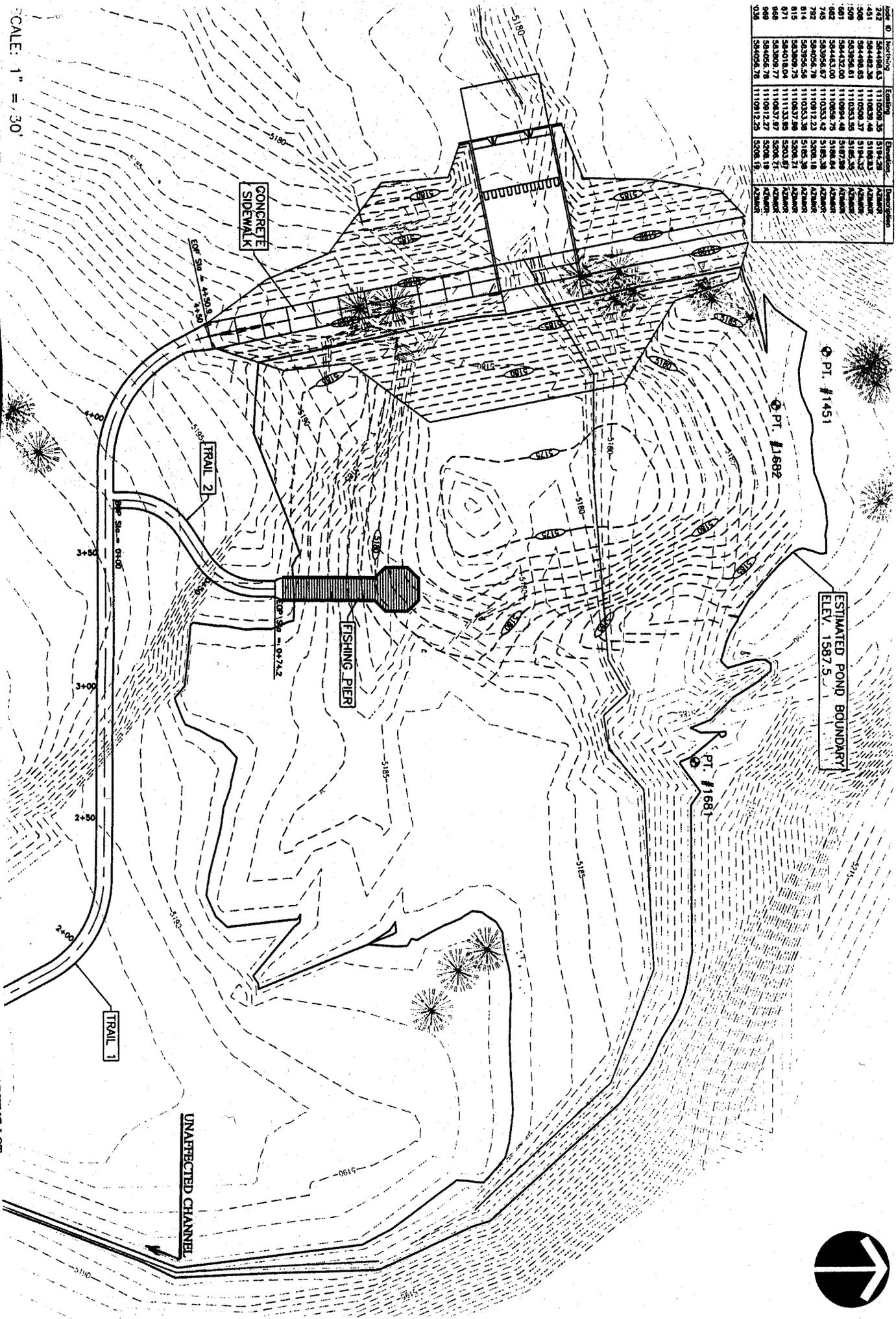
The Contractor shall submit a detailed plan of the fishing pier seeded by a professional engineer registered in South Dakota and experienced in timber design within 3 weeks after award of the contract. Guidelines for the fishing pier will be given in the plan notes and technical specifications.

All materials to construct the fishing pier must be delivered within 8 weeks to the job site after approval of the plan.

**IN unnamed tributary**

AT Sec. 12/T2N/R4E  
COUNTY Pennington  
DATE 8/19/2004  
SHEET 5 OF 11

Node ID	Northings	Eastings	Elevation	Description
232	524488.63	111080.25	5194.28	UNKNOWN
431	524482.28	111082.38	5192.33	UNKNOWN
526	524482.81	111083.38	5192.33	UNKNOWN
681	524482.81	111083.38	5192.33	UNKNOWN
682	524482.00	111089.48	5187.38	UNKNOWN
745	524483.00	111089.75	5186.44	UNKNOWN
792	524486.87	111083.42	5208.18	UNKNOWN
814	524396.56	111081.23	5208.18	UNKNOWN
815	524396.56	111083.38	5185.28	UNKNOWN
871	524398.75	111083.38	5208.21	UNKNOWN
889	524401.04	111133.88	5203.87	UNKNOWN
899	524398.77	111083.38	5208.21	UNKNOWN
926	524402.78	111081.27	5208.19	UNKNOWN
936	524402.78	111081.27	5208.19	UNKNOWN

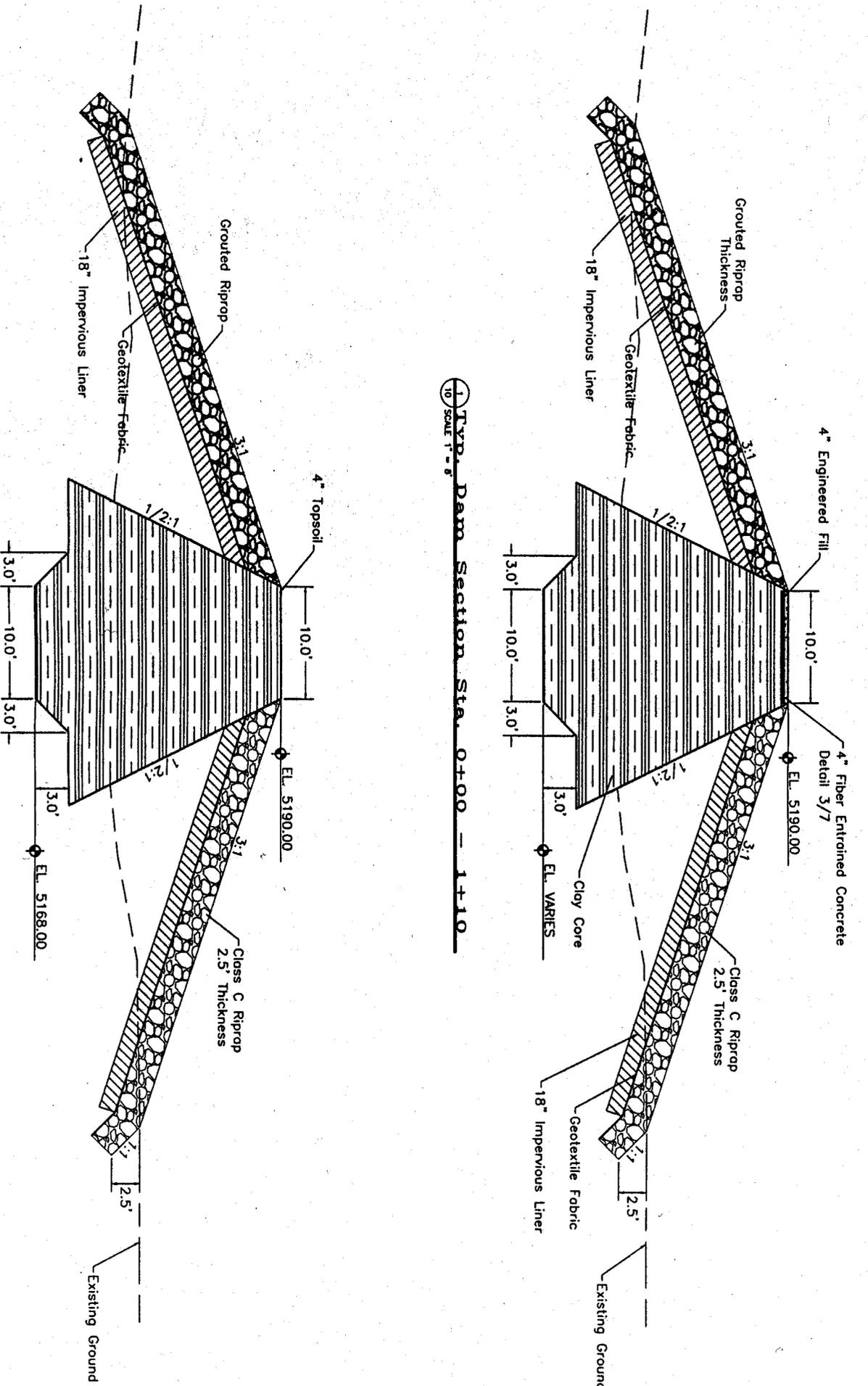


SCALE: 1" = .30'

**PURPOSE:** Recreation  
**APPLICATION BY:**  
 SD Dept. of Game, Fish & Parks  
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**IN unnamed tributary**  
 AT Sec. 12/T2N/R4E  
 COUNTY Pennington  
 DATE 8/19/2004  
 SHEET 6 of 11



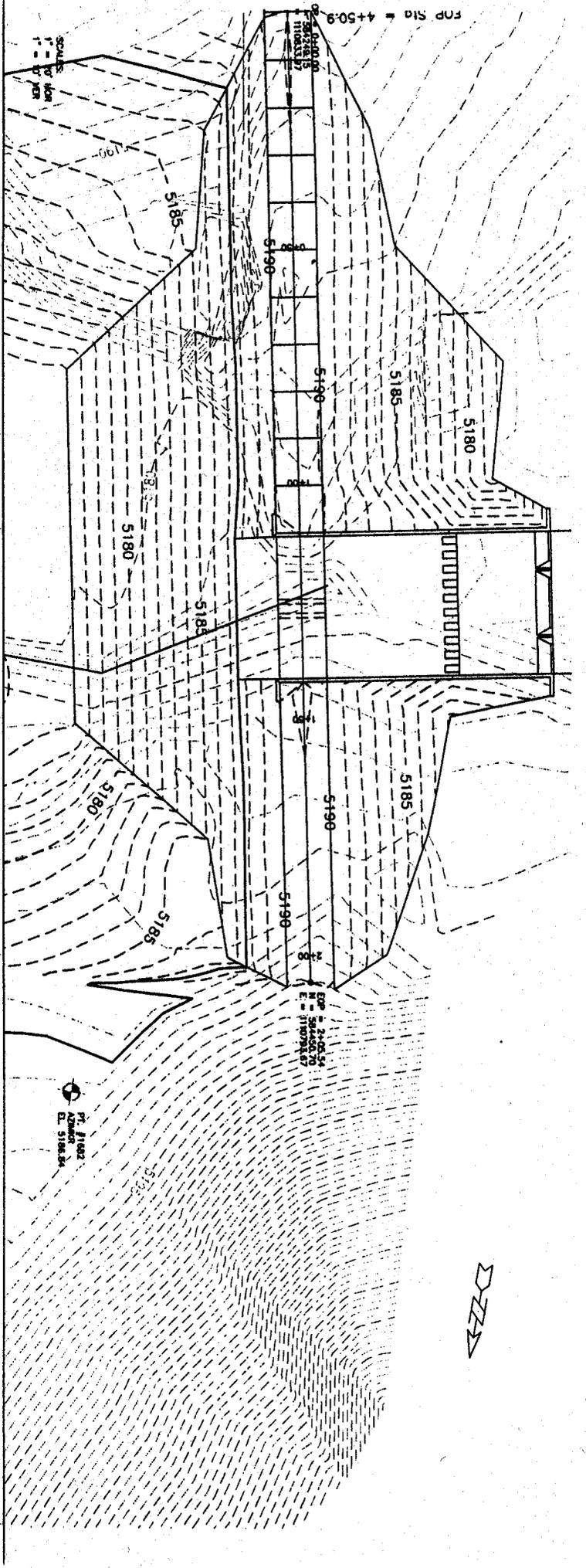


1 Typ. Dam Section Sta. 0+00 - 1+10  
SCALE 1" = 8'

2 Typ. Dam Section Sta. 1+41.5 - 2+05.5  
SCALE 1" = 8'

**PURPOSE:** Recreation  
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 SD Dept. of Game, Fish & Parks  
 No. 200430254

**IN unnamed tributary**  
**AT Sec. 12/T2N/R4E**  
**COUNTY Pennington**  
**DATE 8/19/2004**  
**SHEET 7 OF 11**



**DAM PLAN & PROFILE**

**PURPOSE:** Recreation  
**APPLICATION BY:** SD Dept. of Game, Fish & Parks  
**No.** 200430254

**IN unnamed tributary**  
**AT Sec. 12/T2N/R4E**  
**COUNTY Pennington**  
**DATE 8/19/2004**  
**SHEET 8 OF 11**

160.00 150.00 140.00 130.00 120.00 110.00 100.00 90.00 80.00 70.00 60.00 50.00 40.00 30.00 20.00 10.00 0 10.00 20.00 30.00 40.00 50.00 60.00 70.00 80.00 90.00 100.00 110.00 120.00 130.00 140.00 150.00 160.00

- 1. CUT
- 2. CLAY CORE
- 3. IMPERVIOUS LINER
- 4. RANDOM FILL
- 5. REMOVED

741.32 SF  
 612.23 SF  
 68.19 SF  
 182.20 SF

3

5180.00

5180.00

5175.00

5175.00

5170.00

5170.00

5190.00

5190.00

5185.00

5185.00

- 1. CUT
- 2. CLAY CORE
- 3. IMPERVIOUS LINER
- 4. RANDOM FILL
- 5. REMOVED

793.91 SF  
 402.83 SF  
 112.61 SF  
 42.9 SF  
 27.73 SF

3

5180.00

5180.00

5175.00

5175.00

5170.00

5170.00

5190.00

5190.00

5185.00

5185.00

- 1. CUT
- 2. CLAY CORE
- 3. IMPERVIOUS LINER
- 4. RANDOM FILL
- 5. REMOVED

807.23 SF  
 117.80 SF  
 2.87 SF  
 248.43 SF

3

5190.00

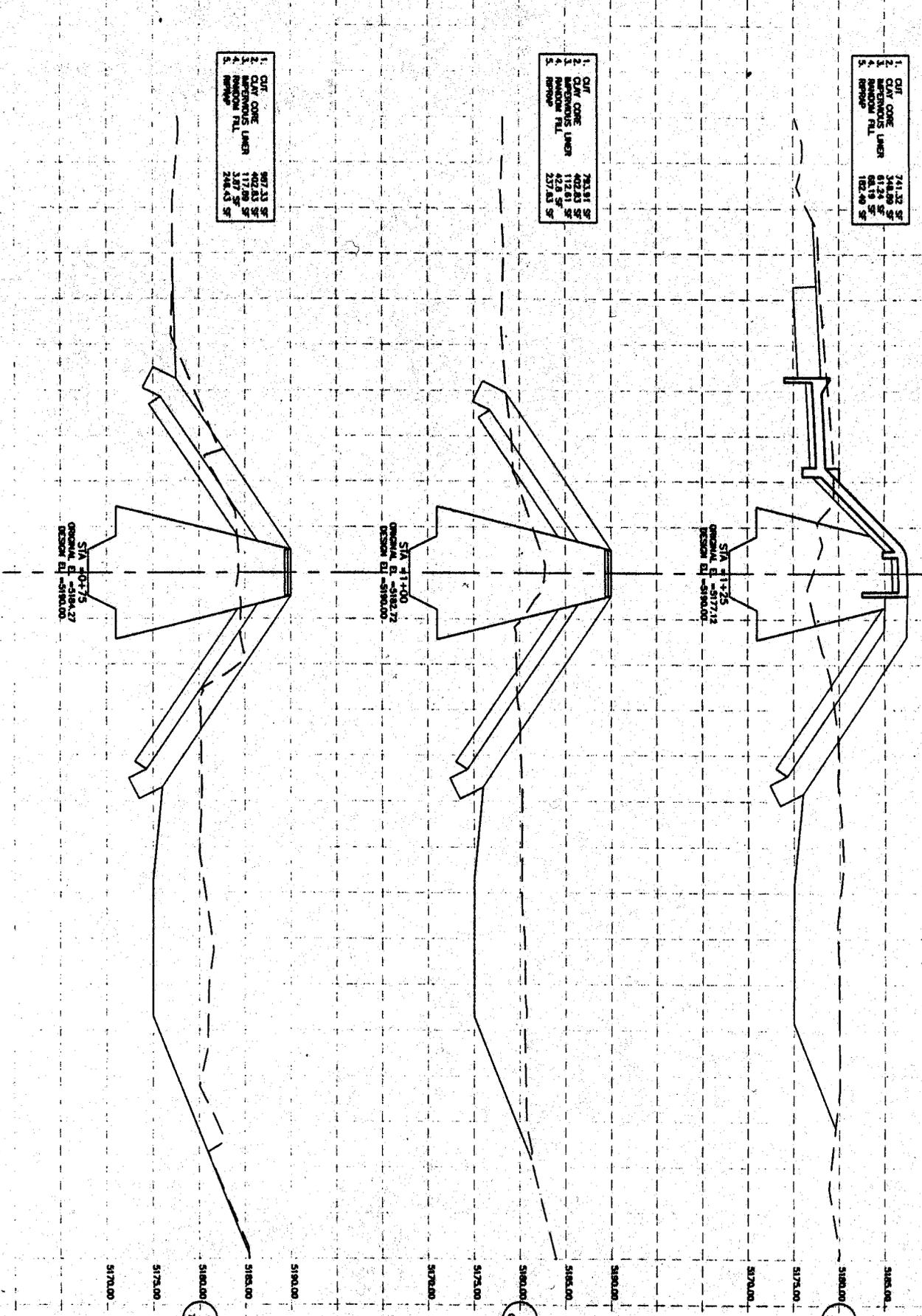
5190.00

5175.00

5175.00

5170.00

5170.00



S/A #0575  
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 Design E. -5190.00

S/A #1100  
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 Design E. -5190.00

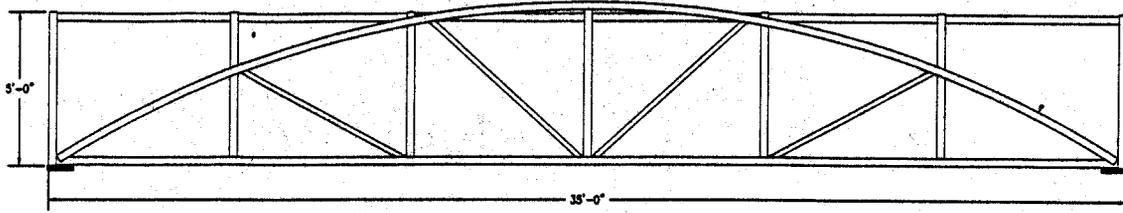
S/A #125  
 Original E. -5172.12  
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**PURPOSE:** Recreation  
**APPLICATION BY:** SD Dept. of Game, Fish & Parks  
 No. 200430254

**IN unnamed tributary**  
**AT Sec. 12/T2N/R4E**  
**COUNTY Pennington**  
**DATE 8/19/2004**  
**SHEET 9 of 11**

**DAM SECTIONS**

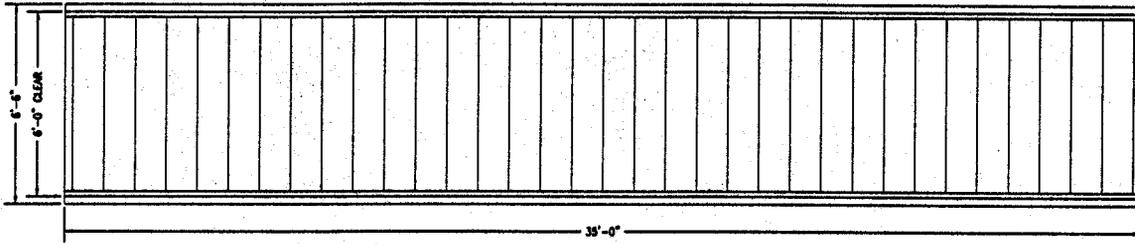
# BRIDGE DETAILS



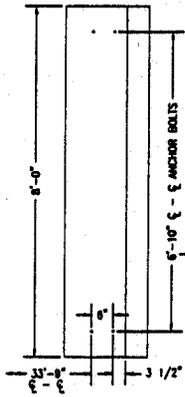
3 **ELEVATION**  
33 SCALE N.T.S.

NOTES:  
THE CONTRACTOR SHALL VERIFY ALL BRIDGE MEASUREMENTS IN THE FIELD BEFORE PLACING THE ABUTMENTS

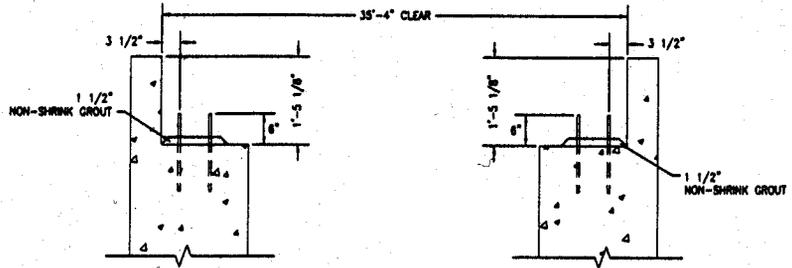
APPROXIMATE LIFTING WEIGHT OF THE BRIDGE IS 8310 LBS.



4 **DECK LEVEL**  
33 SCALE N.T.S.



5 **ANCHOR BOLT PLAN**  
33 SCALE N.T.S.



6 **ANCHOR BOLT ELEVATION**  
33 SCALE N.T.S.

**PURPOSE:** Recreation  
**APPLICATION BY:**  
SD Dept. of Game, Fish & Parks  
No. 200430254

**IN** unnamed tributary  
**AT** Sec. 12/T2N/R4E  
**COUNTY** Pennington  
**DATE** 8/19/2004  
**SHEET** 10 of 11

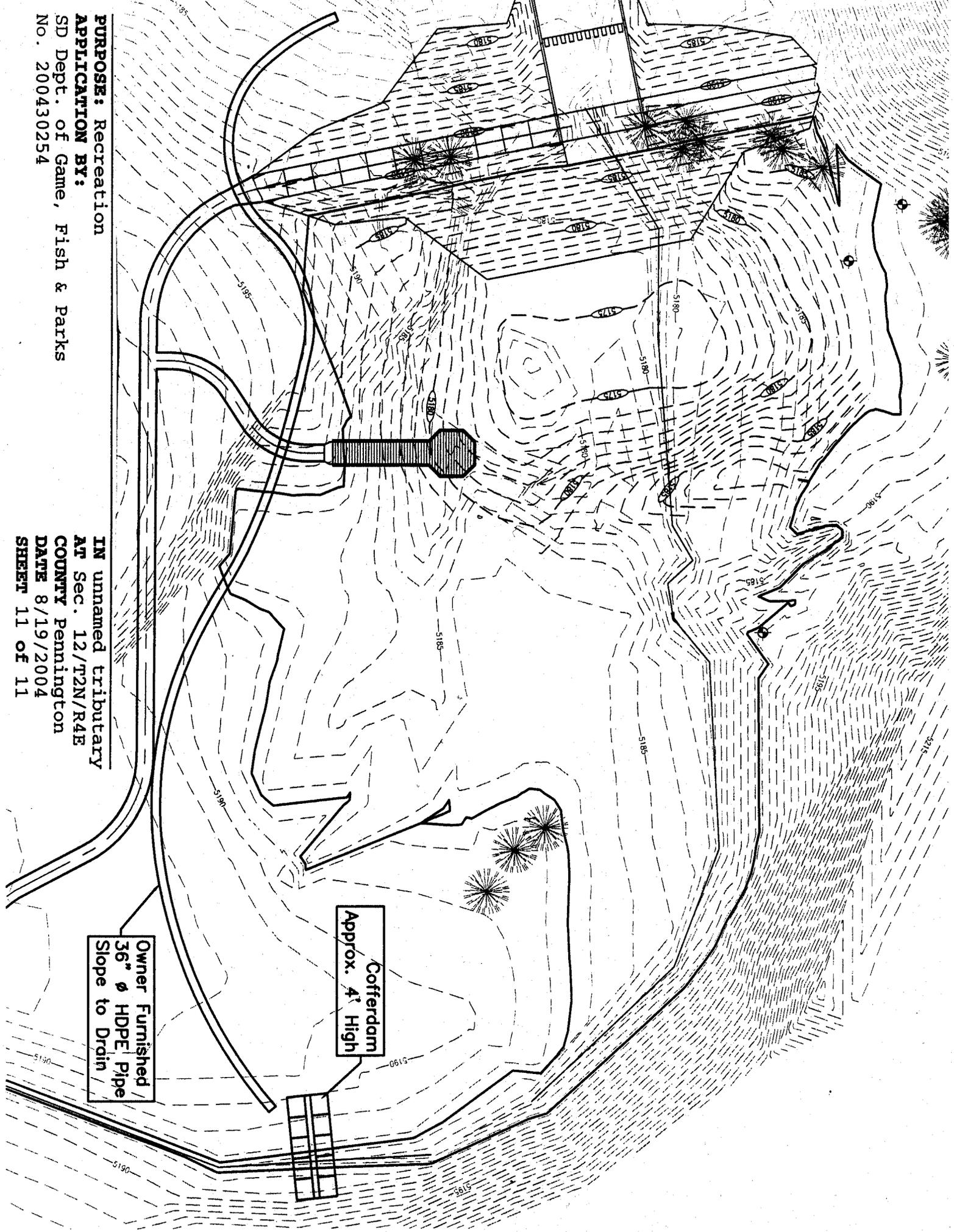
BRIDGE DETAILS

33  
29  
21

Division of Administration  
 Penn Building  
 523 E. Capitol Ave.  
 Pierre, South Dakota 57501-3182  
 Phone: (605) 773-0282



DATE	BY



**PURPOSE:** Recreation

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**IN** unnamed tributary

**AT** Sec. 12/T2N/R4E

**COUNTY** Pennington

**DATE** 8/19/2004

**SHEET** 11 of 11

Cofferdam  
Approx. 4' High

Owner Furnished  
36" Ø HDPE Pipe  
Slope to Drain