

ADDENDUM | No. 1

PROJECT	Lake Vermillion Lift Station and Drainfield Improvements
BID DATE	3:00 PM CST 8/29/2024
BID LOCATION	Online Zoom Meeting, https://gfp.sd.gov/bids-contracts/ Foss Building, 523 East Capitol Avenue, Pierre, SD 57501-3182
ISSUE DATE	8/20/2024
NOTICE	Failure to acknowledge all addenda in the BID may cause rejection of the BID. See Instructions to Bidders.

SCOPE OF THIS ADDENDUM

The following becomes a part of the original project manual and drawings, taking precedence over the items that may conflict. The bidder shall note receipt and make acknowledgment of the Addendum on his/her bid form, incorporating its provision in his/her bid.

PRIOR APPROVALS

N/A

PROJECT MANUAL

The following additions, changes and clarifications have been made to the Project Manual.

Section 33 3213 – PACKAGED WASTEWATER PUMPING STATIONS

2.2.C.1

Delete: Sentence in its entirety.

Replace with: “1-inch stainless steel slide rails to connect base to a stainless steel upper bracket which is bolted to the fiberglass basin.”

DRAWINGS

The following additions, changes and clarifications have been made to the Drawings.

1) Drawing Sheet G-002 - Estimate of Quantities Table

Change Quantity for row 7, 4” PVC Sewer Pipe from 166 FT to 143 FT.

Change Quantity for row 13, 4” Sewer Pipe Bedding Material from 163 FT to 131 FT.



Change Quantity for row 14, Verify Utilities from 3 EA to 5 EA.

Change Description of Work and Materials for row 38, High Capacity Infiltration Laterals to Infiltration Laterals.

2) Drawing Sheet C-000 - General Notes

In the Completion Date section, add at end of first paragraph the following:

*LIQUIDATED DAMAGES FOR WORK NOT COMPLETE BY **APRIL 15, 2025** SHALL BE ASSESSED AT THE AMOUNT SPECIFIED IN TABLE B OF THE SDDOT CURRENT EDITION OF THE STANDARD SPECIFICATION FOR ROADS AND BRIDGES PER WORKING DAY UNTIL THE REMAINING WORK IS DETERMINED COMPLETE.*

3) Drawing Sheet C-003 - General Notes

In the Remove Lift Station, Septic Tank, and Distribution Box section, delete:

THE CONTRACTOR SHALL REMOVE EXISTING LIFT STATION AND SEPTIC TANK AS PER IN THE PLAN DRAWINGS AND/OR DELINEATED IN THE FIELD.

And replace with:

THE CONTRACTOR SHALL REMOVE EXISTING LIFT STATION, SEPTIC TANK, AND DISTRIBUTION BOX AS PER IN THE PLAN DRAWINGS AND/OR DELINEATED IN THE FIELD.

In the Remove Lift Station, Septic Tank, and Distribution Box section, add after first sentence of the second paragraph:

THE CONTRACTOR SHALL REMOVE THE EXISTING SANITARY SEWER PIPE BETWEEN THE LIFT STATION, SEPTIC TANK, COMFORT STATION, AND START OF CAMP PAD SANITARY SEWER LINE.

In the Remove Lift Station, Septic Tank, and Distribution Box section, add after second sentence of the third paragraph:

REMOVAL OF SANITARY SEWER PIPE BETWEEN THE LIFT STATION, SEPTIC TANK, COMFORT STATION, AND START OF CAMP PAD SANITARY SEWER LINE SHALL BE INCIDENTAL TO THE REMOVAL OF THE SEPTIC TANK.

4) Drawing Sheet C-201 - Installs Overall Site

In the install list, add the following items:

- 42. FURNISH AND INSTALL:
1 EA - VERIFY UTILITY*
- 43. FURNISH AND INSTALL:
1 EA - VERIFY UTILITY*

Add the following call outs in the plan view:

- 42. FURNISH AND INSTALL:
1 EA - VERIFY UTILITY*
- 43. FURNISH AND INSTALL:
1 EA - VERIFY UTILITY*



Adjust leader of call out 11 in the plan view to further south to the shown estimated water line location.

5) Drawing Sheet C-202 - Comfort Station Installs & Removals

In the install list, add the following items:

42. FURNISH AND INSTALL:

1 EA - VERIFY UTILITY

43. FURNISH AND INSTALL:

1 EA - VERIFY UTILITY

Add the following call outs in the plan view:

42

43

*PROTECT 2 LINES OF UNDERGROUND POWER UTILITY - THIS IS ESTIMATED LOCATION -
UNDERGROUND POWER TO BOAT RAMP LIGHT POLE AND PICNIC SHELTER*

6) Drawing Sheet C-203 – Force Main / Road Crossing Installs & Removals

Adjust leader of call out 11 in the plan view to further south to the shown estimated water line location.

Add the following note:

*NOTE: BOTH UTILITY MARKERS – SEWER SHALL BE LOCATED APPROXIMATELY 20 FT FROM
EDGE OF ROADWAY ON NORTH AND SOUTH SIDES.*

7) Drawing Sheet C-204 - Drainfield Installs & Removals

Add the following notes in the plan view:

NOTE:

TOPSOIL SHALL ONLY BE REMOVED AS NECESSARY TO INSTALL THE INFILTRATION TRENCHES

NOTE:

*INSTALL DISTRIBUTION BOXES SUCH THAT THE OUTLET INVERT ELEVATION TO THE
DOWNSTREAM DISTRIBUTION BOX IS HIGHER ELEVATION THAN THE DISTRIBUTION BOX INLET
INVERT ELEVATION*

8) Drawing Sheet C-204 - Drainfield Installs & Removals

Adjust leaders of call outs 38 and 39 in the plan view to further east nearer the proposed drainfield.

Project Manual and Drawing inquiries regarding the work should be directed to:

CONTACT PERSON(S)

Banner Associates, Inc. Tel 1-605-692-6342 | Toll Free 1-855-323-6342 | Fax 1-605-692-5714

Kent Johnson

Project Manager

kentj@bannerassociates.com



Joe Stonesifer

Project Engineer - Civil

joes@bannerassociates.com

West Plains Engineering

Tel 1-605-306-8048 |

Jonathan Kennedy

Engineer - Electrical

Jonathan.kennedy@westplainsengineering.com

ATTACHMENTS

1. Drawings – Sheets G-002, C-000, C-003, C-201, C-202, C-203, C-204

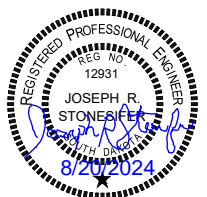


Kent Johnson, PE #8160

ESTIMATE OF QUANTITIES

ITEM NO.	SPEC SECTION	DESCRIPTION OF WORK AND MATERIALS	QTY	UNIT
1	009E0010	Mobilization	1	LS
2	100E0020	Clear And Grub Tree	4	EA
3	100E0100	Clearing	1	LS
4	110E1010	Remove Asphalt Concrete Pavement	60	SY
5	260E1010	Base Course	10	TON
6	260E1030	Base Course, Salvaged	20	TON
7	451E1004	4" PVC Sewer Pipe	143	FT
8	451E1102	2" PVC Force Main	1,404	FT
9	451E3003	2" Pipe Bend	6	EA
10	451E3004	4" Pipe Bend	1	EA
11	451E4380	Tracer Wire Box Type 1	2	EA
12	451E4905	Trench Stabilization Material	17	TON
13	451E4943	4" Sewer Pipe Bedding Material	131	FT
14	451E7510	Verify Utilities	5	EA
15	634E0110	Traffic Control Signs	10	SF
16	634E0120	Traffic Control, Miscellaneous	1	LS
17	634E0275	Type 3 Barricade	5	EA
18	671E4048	48" Manhole Riser Section	9	FT
19	730E0204	Type C Permanent Seed Mixture	50	LB
20	730E1200	Hydroseeding	3,000	SY
21	731E0100	Fertilizing	0.7	TON
22	732E0100	Mulching	1.8	TON
23	734E0102	Type 2 Erosion Control Blanket	880	SY
24	734E0150	6" Dia Erosion Control Wattle	240	FT
25	734E0604	High Flow Silt Fence	585	FT

ITEM NO.	SPEC SECTION	DESCRIPTION OF WORK AND MATERIALS	QTY	UNIT
26	Special	Utility Marker - Sewer	8	EA
27	Special	4" PVC Wye	1	EA
28	Special	2" Sewer Pipe Bedding Material	719	FT
29	Special	Locate and Connect to Camp Pad Sanitary Sewer	1	LS
30	Special	Locate and Connect to Comfort Station Sanitary Sewer	1	LS
31	Special	Remove Lift Station	1	LS
32	Special	Remove Septic Tank	1	LS
33	Special	Remove Distribution Box	1	LS
34	Special	2000 Gal PC Septic Tank	3	EA
35	Special	Lockable Access Door	3	EA
36	Special	Distribution Box	12	EA
37	Special	Sanitary Sewer Service 2-Way Cleanout	2	EA
38	Special	Infiltration Laterals	1,200	FT
39	Special	Granular Bedding Material	300	TON
40	Special	Lift Station	1	LS
41	Special	Compaction Test	4	EA
42	Special	Site Electrical	1	LS



Division of Administration
Foss Building
523 E. Capitol Ave.
Pierre, South Dakota 57501-3182
Phone: (605) 773 - 6082

Department of Game, Fish & Parks

DATE: 9/1/2024

REVISION: AB

REVISION: JB

PROJECT NUMBER: 25649.05

DRAWN BY: [Signature]

CHECKED BY: [Signature]

TITLE: LIFT STATION & DRAINFIELD IMPROVEMENTS
LAKE VERMILLION STATE RECREATION AREA
MCCOOK COUNTY, SOUTH DAKOTA

PAGE: G-002
OF
G-003

SPECIFICATIONS

STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION, 2015 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 SUPERCEDE ALL GENERAL PROVISIONS OF THE STANDARD SPECIFICATIONS.

SCOPE OF WORK

WORK COVERED UNDER THIS CONTRACT INCLUDES, BUT IS NOT LIMITED TO:

1. SITE WORK, INCLUDING CLEARING AND GRUBBING AND TOPSOIL STRIPPING.
2. EARTHWORK, INCLUDING DRAINFIELD INSTALLATION
3. SURFACING, INCLUDING PATCHING
4. AN ON-SITE WASTEWATER SYSTEM INSTALLATION AND LIFT STATION.
5. FINISH GRADING OPERATIONS, INCLUDING TOPSOIL PLACEMENT; SEEDING AND FERTILIZING; AND EROSION CONTROL INSTALLATION.

GENERAL NOTES

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 THE PROJECT.

THE CONTRACTOR IS ADVISED TO VISIT THE SITE PRIOR TO BID PREPARATION TO ASCERTAIN THE AMOUNT OF WORK INVOLVED.

NO FUEL PRICE INDEXING WILL BE PROVIDED BY THE OWNER.

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 THE SUBSEQUENT REPAIR EXPENSE.

HAUL ROUTE

THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING ANY HAUL ROUTE 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 GOVERNMENTAL 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 OPERATIONS BEGAN.

THE FACT THAT OTHER GENERAL AND NORMAL TRAFFIC HAS USED THE HAUL ROUTE OR PORTION OF IT CONCURRENTLY SHALL NOT RELIEVE THE CONTRACTOR OF THE OBLIGATION TO MAINTAIN AND RESTORE THE HAUL ROUTE AS REQUIRED.

WASTE DISPOSAL SITE

THE CONTRACTOR SHALL FURNISH AN OFF-SITE DISPOSAL FACILITY SUITABLE FOR AND RECOGNIZED AS SUCH FOR THE DISPOSAL OF CLEARING AND GRUBBING SPOILS; AND CONSTRUCTION DEBRIS GENERATED BY THIS PROJECT.

NOTIFICATION TO PROJECT ENGINEER

1. THE PROJECT ENGINEER SHALL BE NOTIFIED NO LESS THAN TWO WEEKS IN ADVANCE OF THE DATE CONSTRUCTION IS TO BEGIN.
2. THE PROJECT ENGINEER SHALL BE NOTIFIED PRIOR TO ANY OVER RUNS OF PLAN'S QUANTITIES.
3. THE PROJECT ENGINEER SHALL BE NOTIFIED 48 HOURS PRIOR TO THE PLACEMENT OF CONCRETE.

OWNER RESPONSIBILITIES

1. REMOVE ANY SIGNAGE RESTRICTING THE CONTRACTOR
2. CONSTRUCTION STAKING
3. PERMITTING

CONSTRUCTION STAKING

THE OWNER WILL PROVIDE THE CONSTRUCTION STAKING. CONSTRUCTION STAKING FOR THE PROJECT SHALL INCLUDE PROJECT SITE LIMITS; HORIZONTAL AND VERTICAL CONTROL; ALIGNMENTS AND GRADES; SLOPE INTERCEPTS; AND OTHER PROJECT SPECIFIC FEATURES SUCH AS LINES, RADII, AND CORNERS. SUBSEQUENT STAKING SHALL BE SEQUENCED AND SCHEDULED AS NECESSARY, ALLOWING A MINIMUM OF 5 BUSINESS DAYS FOR THE PREPARATION AND STAKING THEREOF. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING STAKES AND GRADES THEREAFTER. THE CONTRACTOR IS RESPONSIBLE FOR RESTAKING COSTS. NO SEPARATE PAYMENT

WILL BE MADE TO MAINTAIN GRADE STAKES. DIGITAL SURFACE FILES WILL BE MADE AVAILABLE TO THE CONTRACTOR UPON REQUEST.

SEQUENCE OF OPERATIONS

ALL WORK SCHEDULES SHALL BE COORDINATED WITH THE PROJECT ENGINEER IN THE FIELD. THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION SEQUENCE AND SCHEDULE FOR APPROVAL. IT IS RECOGNIZED AND ACKNOWLEDGED THAT MULTIPLE OPERATIONS CAN AND WILL COINCIDE SIMULTANEOUSLY.

COMPLETION DATE

THE PROJECT SHALL BE SUBSTANTIALLY COMPLETE BY **DECEMBER 31, 2024**. LIQUIDATED DAMAGES FOR WORK NOT COMPLETE BY **DECEMBER 31, 2024** SHALL BE ASSESSED AT THE AMOUNT SPECIFIED IN TABLE A OF THE SDDOT CURRENT EDITION OF THE STANDARD SPECIFICATION FOR ROADS AND BRIDGES PER WORKING DAY UNTIL THE REMAINING WORK IS DETERMINED COMPLETE. THE WORK WILL BE COMPLETED AND READY FOR FINAL PAYMENT IN ACCORDANCE WITH THE PROJECT MANUAL ON OR BEFORE **APRIL 15, 2025**. LIQUIDATED DAMAGES FOR WORK NOT COMPLETE BY **APRIL 15, 2025** SHALL BE ASSESSED AT THE AMOUNT SPECIFIED IN TABLE B OF THE SDDOT CURRENT EDITION OF THE STANDARD SPECIFICATION FOR ROADS AND BRIDGES PER WORKING DAY UNTIL THE REMAINING WORK IS DETERMINED COMPLETE.

THE PARK ENTRANCE ROAD WILL BE CLOSED FOR 17 DAYS STARTING APPROXIMATELY OCTOBER 10 AND ENDING APPROXIMATELY OCTOBER 27, 2024 DUE TO A CULVERT REPLACEMENT PROJECT OCCURRING. THE SPECIFIED COMPLETION DATE NOTED ABOVE HAS TAKEN THIS CLOSURE INTO ACCOUNT AND THE CONTRACTOR SHALL MAKE ANY NECESSARY SCHEDULING ARRANGEMENTS DUE TO THIS PLANNED CLOSURE IN ORDER TO COMPLETE THE PROJECT BY THE SPECIFIED COMPLETION DATE.

SEASONAL LIMITATIONS AND TEMPERATURE REQUIREMENTS

SEASONAL LIMITATIONS AND TEMPERATURE REQUIREMENTS, AS SPECIFIED IN THE SDDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, 2015 EDITION, SHALL APPLY FOR THIS PROJECT. UPON WRITTEN REQUEST FROM THE CONTRACTOR, THE SEASONAL LIMITATIONS MAY BE REVIEWED AND MAY BE AMENDED BY THE PROJECT ENGINEER, PROVIDED TEMPERATURE AND WEATHER REQUIREMENTS ARE STILL MET.

ALLOWABLE WORK HOURS

CONSTRUCTION ACTIVITIES, INCLUDING THE HAULING OF MATERIALS, SHALL BE LIMITED TO THE FOLLOWING:

- DAYLIGHT HOURS ONLY (8:00 A.M. - 8:00P.M.), MONDAY – THURSDAY.
- CONSTRUCTION ACTIVITIES FOR THE WEEK SHALL END BY 5:00 P.M. ON FRIDAY.
- NO WEEKEND CONSTRUCTION ACTIVITIES WILL BE ALLOWED.

ADJUSTMENTS TO ALLOWABLE WORK HOURS AND TIME FRAMES MAY BE REQUESTED IN ADVANCE WITH REASONABLE NOTICE TO COORDINATE WITH PARK STAFF AND SHALL BE SUBJECT TO APPROVAL BY THE PROJECT MANAGER IN THE FIELD.

CERTIFICATION AND TESTING

THE CONTRACTOR SHALL PROVIDE CERTIFICATION DOCUMENTATION FOR ALL MATERIALS DELIVERED TO THE PROJECT SITE. APPROPRIATE SAMPLING AND TESTING IN COMPLIANCE WITH THE SDDOT STANDARD SPECIFICATIONS AND/OR THE GOVERNING STANDARD SPECIFIED RESPECTIVE TO THE ITEM SHALL APPLY.

ADDITIONAL RANDOM DENSITIES, AGGREGATE TESTING, DEPTH MEASUREMENTS, AND OTHER PROJECT SPECIFIC PARAMETERS MAY BE REQUESTED AND SHALL BE PROVIDED AT THE OWNER'S EXPENSE. ANY RETESTING DUE TO FAILED INITIAL TESTS SHALL BE PROVIDED AT THE CONTRACTOR'S EXPENSE.

THE ENGINEER SHALL HAVE ACCESS AT ALL TIMES TO ALL PARTS OF THE JOB, AND THE CONTRACTOR MUST FURNISH SUCH PERSONNEL, FACILITIES, EQUIPMENT, TOOLS, AND MATERIALS AS ARE NECESSARY TO MAKE WHATEVER TESTS AND INSPECTION THAT ARE DEEMED NECESSARY.

PROJECT CONTACTS

KENT JOHNSON, PE, PROJECT MANAGER
JOE STONESIFER, PE, PROJECT ENGINEER
BANNER ASSOCIATES, INC.
(855) 323-6342

RYAN TOBIN, ENGINEERING SUPERVISOR
SOUTH DAKOTA GAME, FISH AND PARKS - ENGINEERING
(605) 773-5824

REED PETERSON, PARK MANAGER
SOUTH DAKOTA GAME, FISH, AND PARKS - DIVISION OF PARKS AND RECREATION
(605) 773-5877

MOBILIZATION

LUMP SUM PAYMENT FOR EXPENSES INCURRED BY THE CONTRACTOR BEFORE ACTUAL PROJECT CONSTRUCTION BEGINS; INCLUDING BUT NOT LIMITED TO, BRINGING PERSONNEL, EQUIPMENT, SUPPLIES, AND INCIDENTALS TO THE SITE; ESTABLISHING TEMPORARY OFFICES AND OTHER FACILITIES; CONSTRUCTING SECURITY FENCES; OBTAINING TEMPORARY UTILITIES; AND PAYING PREMIUMS ON BONDS AND INSURANCE POLICIES. PROGRESS PAYMENTS, WHEN APPLICABLE, WILL BE MADE AS FOLLOWS:

1. WHEN 5% OF THE TOTAL ORIGINAL CONTRACT AMOUNT HAS BEEN EARNED FROM OTHER ITEMS ON THE BID SCHEDULE, 50% OF THE AMOUNT BID FOR MOBILIZATION WILL BE PAID, EXCLUSIVE OF ANY AMOUNT ALREADY PAID BY THE CONTRACTOR FOR BOND PREMIUMS.
2. WHEN 50% OF THE TOTAL ORIGINAL CONTRACT AMOUNT HAS BEEN EARNED, THE BALANCE OF THE AMOUNT BID FOR MOBILIZATION WILL BE PAID.

CLEARING

THE CONTRACTOR SHALL REMOVE THE BRUSH AND WOODY VEGETATION FROM THE PROJECT SITE AS PER THE PLAN DRAWINGS AND/OR AS DELINEATED IN THE FIELD IN ACCORDANCE WITH SECTION 100 OF THE SDDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, 2015 EDITION, AS IT PERTAINS TO THE PROJECT.

THE CONTRACTOR SHALL FURNISH AN OFF-SITE DISPOSAL FACILITY SUITABLE FOR AND RECOGNIZED AS SUCH FOR THE DISPOSAL OF THE CLEARING AND GRUBBING SPOILS GENERATED BY THIS PROJECT.

PAYMENT SHALL BE BY LUMP SUM AND SHALL INCLUDE ALL COSTS FOR CLEARING AND GRUBBING, INCLUDING OFF-SITE DISPOSAL, TO COMPLETE THE WORK AS SPECIFIED.

CLEAR AND GRUB TREE

THE CONTRACTOR SHALL CUT CLEARED TREES LEVEL WITH THE GROUND AND GRIND THE STUMP 8" BELOW GROUND LINE. ALL COSTS ASSOCIATED WITH THIS WORK IS CONSIDERED INCIDENTAL TO THE CONTRACT UNIT PRICE FOR CLEAR AND GRUB TREE.

THE CONTRACTOR SHALL FURNISH AN OFF-SITE DISPOSAL FACILITY SUITABLE FOR AND RECOGNIZED AS SUCH FOR THE DISPOSAL OF THE TREES, CLEARING AND GRUBBING SPOILS GENERATED BY THIS PROJECT.

PAYMENT FOR CLEAR AND GRUB TREE SHALL BE BY EACH AND WILL BE FULL COMPENSATION FOR ALL REMOVAL AND DISPOSAL OF TREES, STUMPS AND ASSOCIATED MATERIAL. THE PROJECT ESTIMATES AN AMOUNT OF TREES REQUIRING CLEARING AND GRUBBING, AS INDICATED IN THE PLANS. ADDITIONAL CLEARING AND GRUBBING MAY BE NECESSARY, AS DIRECTED BY THE ENGINEER, AND WILL BE PAID AT THE CONTRACT UNIT PRICE.

THE CONTRACTOR SHALL PROTECT ALL TREES AS INDICATED IN THE PLANS. REMOVAL OF ANY SPECIFICALLY PROTECTED TREES SHALL BE REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE, UNLESS DIRECTED BY THE ENGINEER TO REMOVE A TREE.

TOPSOIL STRIPPING; TOPSOIL PLACEMENT; AND ON-SITE STOCKPILE

THE CONTRACTOR SHALL STRIP 6" TOPSOIL FROM THE PROJECT SITE AS PER THE PLAN DRAWINGS AND/OR AS DELINEATED IN THE FIELD IN ACCORDANCE WITH SECTIONS 120 AND 230 OF THE SDDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, 2015 EDITION, AS THEY PERTAIN TO THE PROJECT.

THE CONTRACTOR SHALL STRIP AND SALVAGE, AND SUBSEQUENTLY PLACE TOPSOIL IN FINISH GRADING OPERATIONS AS PER THE PLAN DRAWINGS AND/OR AS DELINEATED IN THE FIELD IN ACCORDANCE WITH SECTIONS 120 AND 230 OF THE SDDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, 2015 EDITION, AS THEY PERTAIN TO THE PROJECT.

EXCESS TOPSOIL STRIPPINGS GENERATED BY THIS PROJECT SHALL BE STOCKPILED ON-SITE. THE CONTRACTOR SHALL STOCKPILE THE EXCESS TOPSOIL IN A SUITABLE MANNER FOR AND RECOGNIZED AS SUCH FOR THE EXCESS TOPSOIL STRIPPINGS GENERATED BY THIS PROJECT.

TOPSOIL SHALL BE STRIPPED, SALVAGED, AND PLACED FOR INSTALLATION OF DRAINFIELD AND UTILITIES IS INCIDENTAL TO THE PROJECT.



Division of Administration
Foss Building
523 E. Capitol Ave.
Pierre, South Dakota 57501-3182
Phone: (605) 773 - 6082



DATE	9/7/2024
REVISION	
AP	
CHECKED BY	JPS

TITLE
LIFT STATION & DRAINFIELD IMPROVEMENTS
LAKE VERMILION STATE RECREATION AREA
MCCOOK COUNTY, SOUTH DAKOTA

PAGE
C-000
OF
C-005

REMOVE LIFT STATION, SEPTIC TANK, AND DISTRIBUTION BOX

THE CONTRACTOR SHALL REMOVE EXISTING LIFT STATION, SEPTIC TANK, AND DISTRIBUTION BOX AS PER IN THE PLAN DRAWINGS AND/OR DELINEATED IN THE FIELD.

THE EXISTING LIFT STATION, SEPTIC TANK, AND DISTRIBUTION BOX SHALL BE REMOVED FROM THE PROJECT SITE. THE CONTRACTOR SHALL REMOVE THE EXISTING SANITARY SEWER PIPE BETWEEN THE LIFT STATION, SEPTIC TANK, COMFORT STATION, AND START OF CAMP PAD SANITARY SEWER LINE. THE CONTRACTOR SHALL FURNISH AN OFF-SITE DISPOSAL FACILITY SUITABLE FOR AND RECOGNIZED AS SUCH FOR THE DISPOSAL OF THE LIFT STATION, SEPTIC TANK, AND DISTRIBUTION BOX.

PAYMENT FOR REMOVAL OF THE LIFT STATION SHALL BE LUMP SUM, AND SHALL INCLUDE ALL COSTS NECESSARY TO COMPLETE THE WORK AS SPECIFIED. PAYMENT FOR REMOVAL OF THE SEPTIC TANK SHALL BE LUMP SUM, AND SHALL INCLUDE ALL COSTS NECESSARY TO COMPLETE THE WORK AS SPECIFIED. REMOVAL OF SANITARY SEWER PIPE BETWEEN THE LIFT STATION, SEPTIC TANK, COMFORT STATION, AND START OF CAMP PAD SANITARY SEWER LINE SHALL BE INCIDENTAL TO THE REMOVAL OF THE SEPTIC TANK. PAYMENT FOR REMOVAL OF THE DISTRIBUTION BOX SHALL BE LUMP SUM, AND SHALL INCLUDE ALL COSTS NECESSARY TO COMPLETE THE WORK AS SPECIFIED.

SEPTIC SYSTEMS

THE CONTRACTOR SHALL FURNISH AND INSTALL PVC SEWER PIPE AS PER THE PLAN DRAWINGS AND THE DETAILS WITHIN; IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS/RECOMMENDATIONS; AND IN COMPLIANCE WITH ALL SDDANR CHAPTER 74:53:01 REGULATIONS IN REGARD TO INDIVIDUAL AND SMALL ON-SITE WASTEWATER SYSTEMS.

THIS INCLUDES ALL PIPE TO AND BETWEEN THE SEPTIC TANK SERIES; THE FORCEMAIN; THE PIPE TO AND BETWEEN THE DISTRIBUTION BOXES; AND THE DISTRIBUTION LINES TO THE DRAINFIELD ABSORPTION TRENCH LATERALS, IN ACCORDANCE WITH THE PLAN DRAWINGS AND INSTALLATION DETAILS.

INSTALLATION SHALL INCLUDE THE COST OF THE PIPE; ALL NECESSARY COUPLINGS AND FITTINGS NECESSARY; EXCAVATION AND BACKFILLING; AND ANY AND ALL INCIDENTALS NECESSARY.

UTILITY MARKER POSTS SEWER

THE CONTRACTOR SHALL FURNISH AND INSTALL CARSONITE HIGH PERFORMANCE ROADMARKER (CRM 375) OR AN APPROVED EQUAL UTILITY MARKER POSTS FOR SANITARY SEWER. THE UTILITY MARKER POSTS SHALL BE GREEN IN COLOR, STANDARD LENGTH OF 66", AND INCLUDE SHEETING NECESSARY TO IDENTIFY SEWER LINE INSTALLATION. A COMPANY NAME AND/OR NUMBER IS NOT REQUIRED ON THE SHEETING. UTILITY MARKER POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE PLAN DRAWINGS AND DETAILS WITHIN, AND/OR AS DETERMINED IN THE FIELD, AS PER THE MANUFACTURER'S SPECIFICATIONS. MANHOLE MARKERS SHALL BE INSTALLED FOR ALL MANHOLES. MANHOLE MARKERS SHALL BE INSTALLED AS DETAILED ON THE STANDARD PLATES.

MARKER POSTS SHALL BE PAID PER EACH UTILITY MARKER, FURNISHED AND INSTALLED, AND SHALL INCLUDE ALL COSTS NECESSARY TO COMPLETE THE WORK AS SPECIFIED.

2000 GALLON PRE CAST CONCRETE SEPTIC TANK

THE CONTRACTOR SHALL FURNISH AND INSTALL THE 2000 GALLON PRE CAST CONCRETE SEPTIC TANKS AS SUPPLIED BY JOSTEN CONCRETE PRODUCTS, OR AN APPROVED EQUAL, WITH A 48" MANHOLE RISER SECTION AS PER THE PLAN DRAWINGS AND THE DETAILS WITHIN; IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS/RECOMMENDATIONS; AND IN COMPLIANCE WITH ALL SDDANR CHAPTER 74:53:01 REGULATIONS IN REGARD TO INDIVIDUAL AND SMALL ON-SITE WASTEWATER SYSTEMS.

THE DIMENSIONS OF THE TANK MAY VARY BUT SHALL PROVIDE 2,000 GALLON VOLUME EACH AND MEET ALL SPECIFIED ELEVATIONS AS PROVIDED IN THE PLANS.

THE SEPTIC TANK SHALL BE CONSTRUCTED SUCH THAT THE LOWEST CONSTRUCTION JOINT IS AT LEAST 4 FEET ABOVE THE GROUNDWATER TABLE AND IN COMPLIANCE WITH SDDANR CHAPTER 74:53:01 REGULATIONS.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE SEPTIC TANKS THAT RESIST FLOATATION/BUOYANCY AT THE SITE WHEN TANK IS EMPTY.

JOSTEN CONCRETE PRODUCTS
1201 SOUTH VAN EPS AVENUE, SIOUX FALLS, SD 57105
(605) 336-0767

PAYMENT SHALL BE PER EACH SEPTIC TANK, FURNISHED AND INSTALLED, AND SHALL INCLUDE ALL COSTS NECESSARY TO COMPLETE THE WORK AS SPECIFIED, INCLUDING REMOVING ANY EXISTING

LANDSCAPING DURING INSTALLATION. SD GAME, FISH, & PARKS WILL REINSTALL LANDSCAPING AT A LATER DATE NOT PART OF THIS PROJECT.

THE CONTRACTOR SHALL PROTECT ALL PAVING AND SIDEWALK AROUND THE COMFORT STATION. ANY DAMAGED PAVING AND SIDEWALK DAMAGED BY THE CONTRACTOR SHALL BE REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

LOCKABLE ACCESS DOOR

THE CONTRACTOR SHALL FURNISH AND INSTALL A LOCKABLE SEPTIC TANK ACCESS DOOR AS SUPPLIED BY HALLIDAY PRODUCTS, OR APPROVED EQUAL. INSTALLATION SHALL BE AS PER MANUFACTURER'S SPECIFICATIONS.

THE SPECIFIED ACCESS COVER IS THE HALLIDAY PRODUCTS SERIES R1R48.
HALLIDAY PRODUCTS
800-298-1027
WWW.HALLIDAYPRODUCTS.COM

PAYMENT SHALL BE PER EACH AND SHALL INCLUDE ALL COSTS NECESSARY TO COMPLETE THE WORK AS SPECIFIED.

DISTRIBUTION BOXES

THE CONTRACTOR SHALL FURNISH AND INSTALL 6-HOLE DISTRIBUTION BOXES 6HD2, AS MANUFACTURED BY TUF-TITE, OR APPROVED EQUAL. INSTALLATION SHALL BE AS PER THE PLAN DRAWINGS AND THE DETAILS WITHIN; IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS/RECOMMENDATIONS; AND IN COMPLIANCE WITH ALL SDDANR CHAPTER 74:53:01 REGULATIONS IN REGARD TO INDIVIDUAL AND SMALL ON-SITE WASTEWATER SYSTEMS.

FIRST DISTRIBUTION BOXES IN SERIES THAT ACCEPT FORCE MAIN DISCHARGE SHALL BE ADEQUATELY SUPPORTED TO RECEIVE SUCH FLOW. THESE BOXES SHALL BE EQUIPPED WITH INSPECTION PORT LIDS AND A BAFFLE TO DISPERSE INCOMING FLOW. ALL OTHER DISTRIBUTION BOXES SHALL BE EQUIPPED WITH REGULAR LIDS AND WITHOUT BAFFLES.

PAYMENT SHALL BE PER EACH, FURNISHED AND INSTALLED, AND SHALL INCLUDE ALL COSTS NECESSARY TO COMPLETE THE WORK AS SPECIFIED, INCLUDING FITTINGS, BAFFLES, AND LIDS.

DRAINFIELD COMPLETE

THE CONTRACTOR SHALL FURNISH AND INSTALL THE SEPTIC SYSTEM DRAINFIELD COMPLETE WITH QUICK4 STANDARD CHAMBER INFILTRATOR ABSORPTION TRENCH CHAMBERS, AS MANUFACTURED BY INFILTRATOR WATER TECHNOLOGIES, OR AN APPROVED EQUAL. INSTALLATION SHALL BE AS PER THE PLAN DRAWINGS AND THE DETAILS WITHIN; IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS/RECOMMENDATIONS; AND IN COMPLIANCE WITH ALL SDDANR CHAPTER 74:53:01 REGULATIONS IN REGARD TO INDIVIDUAL AND SMALL ON-SITE WASTEWATER SYSTEMS.

THE CONTRACTOR SHALL FURNISH AND INSTALL GRANULAR BEDDING MATERIAL AS PER THE PLAN DRAWINGS AND THE DETAILS WITHIN; AND IN COMPLIANCE WITH ALL SDDANR CHAPTER 74:53:01 REGULATIONS IN REGARD TO INDIVIDUAL AND SMALL ON-SITE WASTEWATER SYSTEMS.

PAYMENT FOR HIGH CAPACITY INFILTRATOR LATERALS SHALL BE BY THE LINEAL FOOT, FURNISHED AND INSTALLED COMPLETE, AND SHALL INCLUDE ALL COSTS NECESSARY TO COMPLETE THE WORK AS SPECIFIED, INCLUDING BUT NOT LIMITED TO FITTINGS, END CAPS, EXCAVATION, STOCKPILING, AND STRIPPING AND PLACING TOPSOIL.

PAYMENT FOR THE GRANULAR BEDDING MATERIAL FOR ABSORPTION TRENCHES SHALL BE PER TON, FURNISHED AND INSTALLED, AND SHALL INCLUDE ALL COSTS NECESSARY TO COMPLETE THE WORK AS SPECIFIED.

SANITARY SEWER GRAVITY PIPE

SCHEDULE 40 POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS SHALL BE MANUFACTURED PIPE FROM POLYVINYL CHLORIDE (PVC) COMPOUND WHICH MEETS THE REQUIREMENTS OF TYPE 1, GRADE 1 (12454-B) POLYVINYL CHLORIDE AS OUTLINED IN ASTM D1785.

THE ENGINEER MAY REQUIRE A TEST OF SPECIMENS NOT TO EXCEED 5 PERCENT OF THE QUANTITY OF PIPE TO BE FURNISHED IN ORDER TO PROVE THE ACCEPTABILITY OF THE PIPE.

PAYMENT FOR SEWER PIPE FURNISHED AND INSTALLED SHALL BE BY THE LINEAL FOOT, AND SHALL INCLUDE ALL COSTS NECESSARY TO COMPLETE THE WORK AS SPECIFIED.

4" SEWER PIPE BEDDING MATERIAL INSTALLATION SHALL INCLUDE THE COST OF MATERIAL AND PAYMENT SHALL BE BY THE LINEAL FOOT.

PAYMENT FOR PIPE BENDS, WYES, AND CLEANOUTS SHALL BE PER EACH, FURNISHED AND INSTALLED, AND SHALL INCLUDE ALL COSTS NECESSARY TO COMPLETE THE WORK AS SPECIFIED. PAYMENT FOR LOCATING AND CONNECTION TO EXISTING COMFORT STATION SANITARY SEWER SHALL BE LUMP SUM, AND SHALL INCLUDE ALL COSTS NECESSARY TO COMPLETE THE WORK AS SPECIFIED. PAYMENT FOR LOCATING AND CONNECTION TO EXISTING CAMP PAD SANITARY SEWER SHALL BE LUMP SUM, AND SHALL INCLUDE ALL COSTS NECESSARY TO COMPLETE THE WORK AS SPECIFIED.

SANITARY SEWER FORCEMAIN PIPE AND FITTINGS

ALL PRESSURE RATED PVC PIPE SHALL COMPLY WITH THE PROVISIONS OF THE AMERICAN SOCIETY FOR TESTING AND MATERIALS STANDARD SPECIFICATION FOR POLY VINYL CHLORIDE (PVC) PRESSURE RATED PIPE (SDR SERIES) ASTM D2241. THE PIPE CLASS SHALL BE CLASS 200 MEETING THE REQUIREMENTS OF SDR 21. PIPE JOINTS SHALL BE PUSH-ON JOINTS USING LOCKED IN REIBER STYLE GASKETS. PVC PIPE SHALL BE AS MANUFACTURED BY WEST LAKE, J-M EAGLE, NORTHERN, OR ENGINEER APPROVED EQUAL.

ALL JOINTS IN PIPING SHALL BE WATERTIGHT AND ALL JOINTS WHICH ARE FOUND EITHER BY OBSERVATION OR ANY SPECIFIED TEST TO LEAK SHALL BE MADE WATERTIGHT BY THE CONTRACTOR.

THE ENGINEER MAY REQUIRE A TEST OF SPECIMENS NOT TO EXCEED 5 PERCENT OF THE QUANTITY OF PIPE TO BE FURNISHED IN ORDER TO PROVE THE ACCEPTABILITY OF THE PIPE.

PAYMENT FOR SEWER PIPE FURNISHED AND INSTALLED SHALL BE BY THE LINEAL FOOT, AND SHALL INCLUDE ALL COSTS NECESSARY TO COMPLETE THE WORK AS SPECIFIED.

KNUCKLE JOINT FITTINGS SHALL BE DUCTILE IRON GASKETED FITTINGS WITH KNUCKLE TYPE RESTRAINTS AS MANUFACTURED BY HARCO, LEEMCO, OR ENGINEER APPROVED EQUAL. FITTINGS AND RESTRAINTS SHALL BE EPOXY COATED DUCTILE IRON AND MADE IN ACCORDANCE WITH ASTM A-536, GRADE 65-45-12 & AWWA C153. BOLTS AND NUTS SHALL BE TYPE 304 STAINLESS STEEL. ALL RESTRAINT DEVICES SHALL CARRY A WATER WORKING PRESSURE RATING EQUAL TO THE FULL RATED PRESSURE OF THE PVC PIPE THEY ARE INSTALLED ON, WITH A MINIMUM 2:1 SAFETY FACTOR IN ANY NOMINAL PIPE SIZE. A THRUST BLOCK WILL BE REQUIRED FOR EACH FITTING.

THE CONTRACTOR SHALL ABANDON OR REMOVE THE EXISTING SANITARY SEWER FORCEMAIN. THE CONTRACTOR SHALL FURNISH AN OFF-SITE DISPOSAL FACILITY SUITABLE FOR AND RECOGNIZED AS SUCH FOR THE DISPOSAL OF THE FORCEMAIN PIPE.

PAYMENT FOR ABANDONMENT AND/OR REMOVAL OF THE EXISTING SANITARY SEWER FORCEMAIN WILL BE INCIDENTAL TO SANITARY SEWER FORCEMAIN PIPE, AND SHALL INCLUDE ALL COSTS NECESSARY TO COMPLETE THE WORK AS SPECIFIED.

2" SEWER PIPE BEDDING MATERIAL INSTALLATION SHALL INCLUDE THE COST OF MATERIAL AND PAYMENT SHALL BE BY THE LINEAL FOOT.

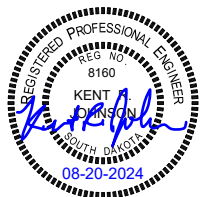
PAYMENT FOR PIPE BENDS SHALL BE PER EACH, FURNISHED AND INSTALLED, AND SHALL INCLUDE ALL COSTS NECESSARY TO COMPLETE THE WORK AS SPECIFIED.

THRUST BLOCKS WILL BE INCIDENTAL TO PIPE BENDS, AND SHALL INCLUDE ALL COSTS NECESSARY TO COMPLETE THE WORK AS SPECIFIED.

PACKAGED WASTEWATER PUMPING STATION ("LIFT STATION")

SEE "PACKAGED WASTEWATER PUMPING STATION" TECHNICAL SPECIFICATIONS.

THESE CONSTRUCTION DRAWINGS AND AFOREMENTIONED TECHNICAL SPECIFICATION SERVE AS A GUIDE FOR COMPLETE PACKAGED WASTEWATER PUMPING STATION INSTALLATION; THEREFORE, ANY ITEMS, EQUIPMENT, MATERIALS, ETC., NOT SPECIFICALLY MENTIONED BUT REASONABLY NECESSARY FOR THE COMPLETE CONSTRUCTION AND INSTALLATION OF A FINISHED PACKAGED WASTEWATER PUMPING STATION SHALL BE SUPPLIED BY CONTRACTOR. THIS PAY ITEM SHALL INCLUDE FURNISH AND INSTALL PIPE, CONNECTION TO EXISTING GRAVITY PIPE FROM THE SEPTIC TANK, CONNECTION TO THE FORCEMAIN PIPE, EXCAVATION, FILL, DEWATERING, GRANULAR EMBEDMENT, VAPOR BARRIER, DRAINAGE FABRIC, ELECTRICAL EQUIPMENT AND CONNECTIONS, CONTROLS AND ENCLOSURES.



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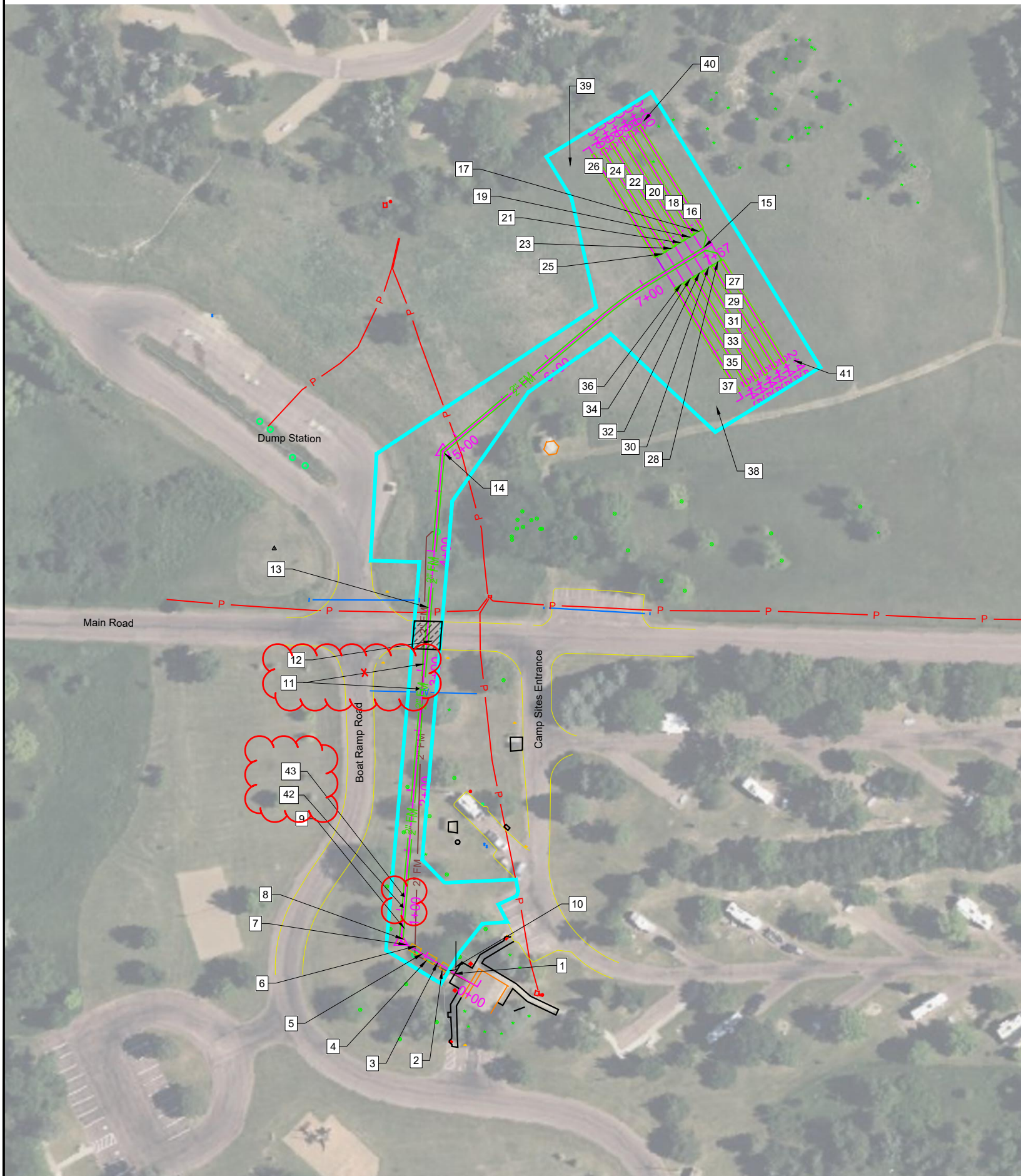
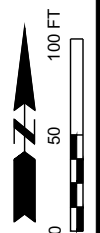
DATE	7/2024
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PROJECT NUMBER	22-49-C9
DRAWN BY	AP
CHECKED BY	JFS

LIFT STATION & DRAINFIELD IMPROVEMENTS
LAKE VERMILLION STATE RECREATION AREA
MCCOOK COUNTY, SOUTH DAKOTA

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INSTALLS OVERALL SITE



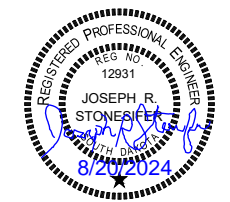
INSTALLS:

1. FURNISH AND INSTALL:
1 LS - LOCATE AND CONNECT TO COMFORT STATION SANITARY SEWER
23 LF - 4" PVC SEWER PIPE
23 LF - 4" SEWER PIPE BEDDING MATERIAL
1 EA - 4" PVC WYE
1 EA - 4" SANITARY SEWER SERVICE 2-WAY CLEANOUT
2. FURNISH AND INSTALL:
1 EA - 2000 GAL PC SEPTIC TANK
1 EA - LOCKABLE ACCESS DOOR
3 LF - 48" MANHOLE RISER SECTION
3. FURNISH AND INSTALL:
6 LF - 4" PVC SEWER PIPE
6 LF - 4" SEWER PIPE BEDDING MATERIAL
4. FURNISH AND INSTALL:
1 EA - 2000 GAL PC SEPTIC TANK
1 EA - LOCKABLE ACCESS DOOR
3 LF - 48" MANHOLE RISER SECTION
5. FURNISH AND INSTALL:
6 LF - 4" PVC SEWER PIPE
6 LF - 4" SEWER PIPE BEDDING MATERIAL
6. FURNISH AND INSTALL:
1 EA - 2000 GAL PC SEPTIC TANK
1 EA - LOCKABLE ACCESS DOOR
3 LF - 48" MANHOLE RISER SECTION
7. FURNISH AND INSTALL:
6 LF - 4" PVC SEWER PIPE
6 LF - 4" SEWER PIPE BEDDING MATERIAL
8. FURNISH AND INSTALL:
1 LS - LIFT STATION
9. FURNISH AND INSTALL:
1 EA - TRACER WIRE BOX TYPE 1
10. FURNISH AND INSTALL:
1 LS - LOCATE AND CONNECT TO CAMP PAD SANITARY SEWER
1 EA - 4" SANITARY SEWER SERVICE 2-WAY CLEANOUT
1 EA - 4" PIPE BEND (45 DEGREE)
10 LF - 4" PVC SEWER PIPE
10 LF - 4" SEWER PIPE BEDDING MATERIAL
11. FURNISH AND INSTALL:
1 EA - UTILITY MARKER - SEWER
1 EA - VERIFY UTILITY
12. FURNISH AND INSTALL:
10 TON - BASE COURSE
17 TON - BASE COURSE, SALVAGED
13. FURNISH AND INSTALL:
1 EA - UTILITY MARKER - SEWER
1 EA - VERIFY UTILITY
14. FURNISH AND INSTALL:
1 EA - UTILITY MARKER - SEWER
1 EA - VERIFY UTILITY
15. FURNISH AND INSTALL:
1 EA - UTILITY MARKER - SEWER
1 EA - TRACER WIRE BOX TYPE 1
16. FURNISH AND INSTALL:
1 EA - DISTRIBUTION BOX
1 LF - 4" PVC SEWER PIPE
100 LF - INFILTRATION CHAMBER
25 TONS - GRANULAR BEDDING MATERIAL
17. FURNISH AND INSTALL:
8 LF - 4" PVC SEWER PIPE
8 LF - 4" SEWER PIPE BEDDING MATERIAL
18. FURNISH AND INSTALL:
1 EA - DISTRIBUTION BOX
1 LF - 4" PVC SEWER PIPE
100 LF - INFILTRATION CHAMBER
25 TONS - GRANULAR BEDDING MATERIAL
19. FURNISH AND INSTALL:
8 LF - 4" PVC SEWER PIPE
8 LF - 4" SEWER PIPE BEDDING MATERIAL
20. FURNISH AND INSTALL:
1 EA - DISTRIBUTION BOX
1 LF - 4" PVC SEWER PIPE
100 LF - INFILTRATION CHAMBER
25 TONS - GRANULAR BEDDING MATERIAL
21. FURNISH AND INSTALL:
8 LF - 4" PVC SEWER PIPE
8 LF - 4" SEWER PIPE BEDDING MATERIAL

INSTALLS:

22. FURNISH AND INSTALL:
1 EA - DISTRIBUTION BOX
1 LF - 4" PVC SEWER PIPE
100 LF - INFILTRATION CHAMBER
25 TONS - GRANULAR BEDDING MATERIAL
23. FURNISH AND INSTALL:
8 LF - 4" PVC SEWER PIPE
8 LF - 4" SEWER PIPE BEDDING MATERIAL
24. FURNISH AND INSTALL:
1 EA - DISTRIBUTION BOX
1 LF - 4" PVC SEWER PIPE
100 LF - INFILTRATION CHAMBER
25 TONS - GRANULAR BEDDING MATERIAL
25. FURNISH AND INSTALL:
8 LF - 4" PVC SEWER PIPE
8 LF - 4" SEWER PIPE BEDDING MATERIAL
26. FURNISH AND INSTALL:
1 EA - DISTRIBUTION BOX
1 LF - 4" PVC SEWER PIPE
100 LF - INFILTRATION CHAMBER
25 TONS - GRANULAR BEDDING MATERIAL
27. FURNISH AND INSTALL:
1 EA - DISTRIBUTION BOX
1 LF - 4" PVC SEWER PIPE
100 LF - INFILTRATION CHAMBER
25 TONS - GRANULAR BEDDING MATERIAL
28. FURNISH AND INSTALL:
8 LF - 4" PVC SEWER PIPE
8 LF - 4" SEWER PIPE BEDDING MATERIAL
29. FURNISH AND INSTALL:
1 EA - DISTRIBUTION BOX
1 LF - 4" PVC SEWER PIPE
100 LF - INFILTRATION CHAMBER
25 TONS - GRANULAR BEDDING MATERIAL
30. FURNISH AND INSTALL:
8 LF - 4" PVC SEWER PIPE
8 LF - 4" SEWER PIPE BEDDING MATERIAL
31. FURNISH AND INSTALL:
1 EA - DISTRIBUTION BOX
1 LF - 4" PVC SEWER PIPE
100 LF - INFILTRATION CHAMBER
25 TONS - GRANULAR BEDDING MATERIAL
32. FURNISH AND INSTALL:
8 LF - 4" PVC SEWER PIPE
8 LF - 4" SEWER PIPE BEDDING MATERIAL
33. FURNISH AND INSTALL:
1 EA - DISTRIBUTION BOX
1 LF - 4" PVC SEWER PIPE
100 LF - INFILTRATION CHAMBER
25 TONS - GRANULAR BEDDING MATERIAL
34. FURNISH AND INSTALL:
8 LF - 4" PVC SEWER PIPE
8 LF - 4" SEWER PIPE BEDDING MATERIAL
35. FURNISH AND INSTALL:
1 EA - DISTRIBUTION BOX
1 LF - 4" PVC SEWER PIPE
100 LF - INFILTRATION CHAMBER
25 TONS - GRANULAR BEDDING MATERIAL
36. FURNISH AND INSTALL:
8 LF - 4" PVC SEWER PIPE
8 LF - 4" SEWER PIPE BEDDING MATERIAL
37. FURNISH AND INSTALL:
1 EA - DISTRIBUTION BOX
1 LF - 4" PVC SEWER PIPE
100 LF - INFILTRATION CHAMBER
25 TONS - GRANULAR BEDDING MATERIAL
38. FURNISH AND INSTALL:
1 EA - UTILITY MARKER - SEWER
39. FURNISH AND INSTALL:
1 EA - UTILITY MARKER - SEWER
40. FURNISH AND INSTALL:
1 EA - UTILITY MARKER - SEWER
41. FURNISH AND INSTALL:
1 EA - UTILITY MARKER - SEWER
42. FURNISH AND INSTALL:
1 EA - VERIFY UTILITY
43. FURNISH AND INSTALL:
1 EA - VERIFY UTILITY

NOTE: FORCEMAIN FURNISH AND INSTALL NOTES ON SHEET C-400.



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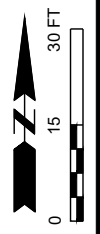
Department of Game, Fish & Parks

DATE	9/1/2024
REVISION	
PROJECT NUMBER	25649.05
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TITLE: LIFT STATION & DRAINFIELD IMPROVEMENTS
LAKE VERMILLION STATE RECREATION AREA
MCCOOK COUNTY, SOUTH DAKOTA

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COMFORT STATION INSTALLS & REMOVALS



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Department of Game, Fish & Parks



DATE	9/2024
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 LAKE VERMILLION STATE RECREATION AREA
 MCCOOK COUNTY, SOUTH DAKOTA

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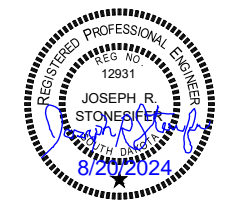
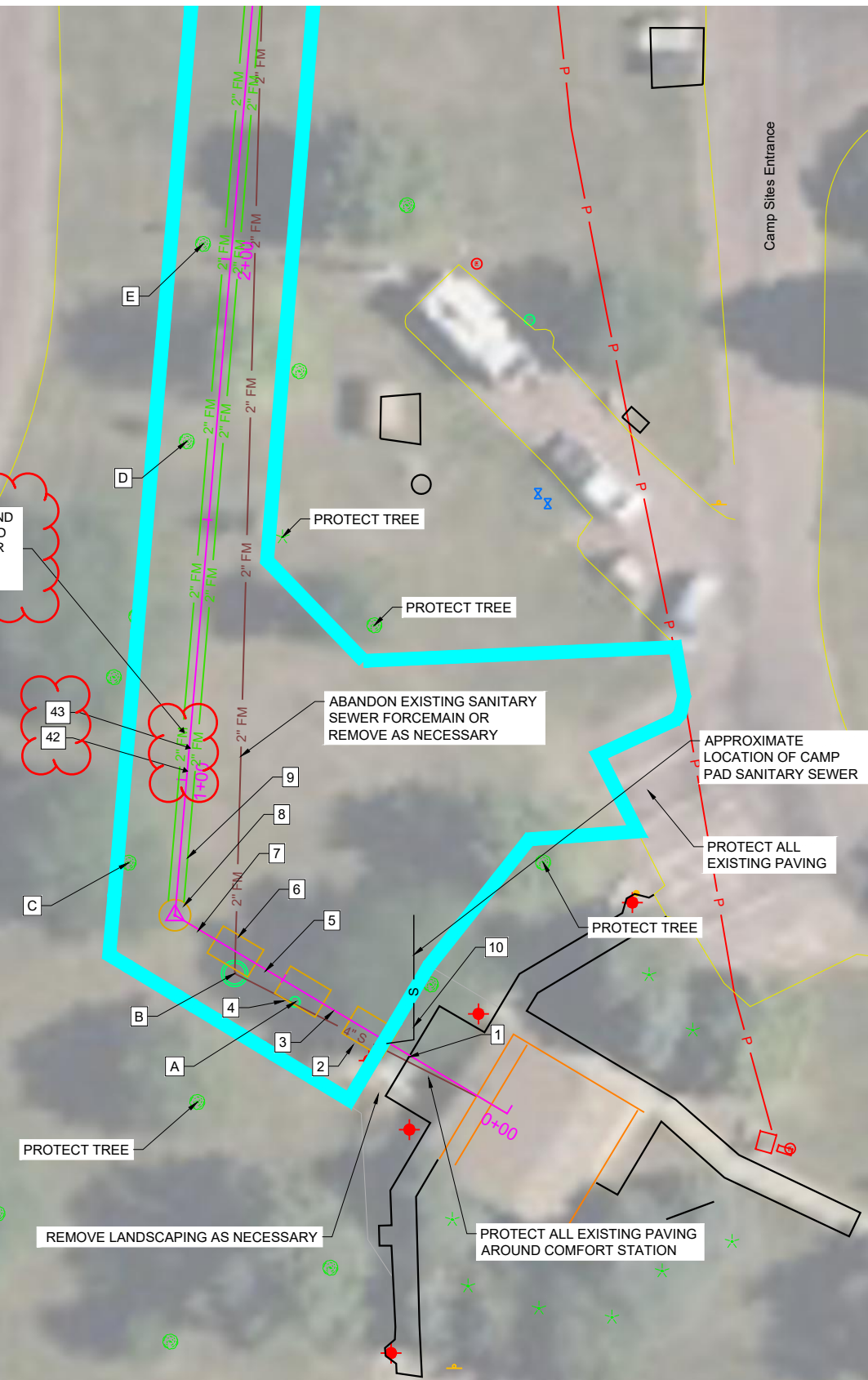
INSTALLS:

1. FURNISH AND INSTALL:
 1 LS - LOCATE AND CONNECT TO COMFORT STATION SANITARY SEWER
 23 LF - 4" PVC SEWER PIPE
 23 LF - 4" SEWER PIPE BEDDING MATERIAL
 1 EA - 4" PVC WYE
 1 EA - 4" SANITARY SEWER SERVICE 2-WAY CLEANOUT
2. FURNISH AND INSTALL:
 1 EA - 2000 GAL PC SEPTIC TANK
 1 EA - LOCKABLE ACCESS DOOR
 3 LF - 48" MANHOLE RISER
3. FURNISH AND INSTALL:
 6 LF - 4" PVC SEWER PIPE
 6 LF - 4" SEWER PIPE BEDDING MATERIAL
4. FURNISH AND INSTALL:
 1 EA - 2000 GAL PC SEPTIC TANK
 1 EA - LOCKABLE ACCESS DOOR
 3 LF - 48" MANHOLE RISER
5. FURNISH AND INSTALL:
 6 LF - 4" PVC SEWER PIPE
 6 LF - 4" SEWER PIPE BEDDING MATERIAL
6. FURNISH AND INSTALL:
 1 EA - 2000 GAL PC SEPTIC TANK
 1 EA - LOCKABLE ACCESS DOOR
 3 LF - 48" MANHOLE RISER
7. FURNISH AND INSTALL:
 6 LF - 4" PVC SEWER PIPE
 6 LF - 4" SEWER PIPE BEDDING MATERIAL
8. FURNISH AND INSTALL:
 1 LS - LIFT STATION
9. FURNISH AND INSTALL:
 1 EA - TRACER WIRE BOX TYPE 1
10. FURNISH AND INSTALL:
 1 LS - LOCATE AND CONNECT TO CAMP PAD SANITARY SEWER
 1 EA - 4" SANITARY SEWER SERVICE 2-WAY CLEANOUT
 1 EA - 4" PIPE BEND (45 DEGREE)
 10 LF - 4" PVC SEWER PIPE
 10 LF - 4" SEWER PIPE BEDDING MATERIAL
42. FURNISH AND INSTALL:
 1 EA - VERIFY UTILITY
43. FURNISH AND INSTALL:
 1 EA - VERIFY UTILITY

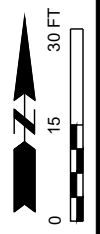
REMOVALS:

- A. 1 LS - REMOVE SEPTIC TANK
- B. 1 LS - REMOVE LIFT STATION
- C. 1 EA - CLEAR AND GRUB TREE
- D. 1 EA - CLEAR AND GRUB TREE
- E. 1 EA - CLEAR AND GRUB TREE

PROTECT 2 LINES OF UNDERGROUND POWER UTILITY - THIS IS ESTIMATED LOCATION - UNDERGROUND POWER TO BOAT RAMP LIGHT POLE AND PICNIC SHELTER



FORCE MAIN / ROAD CROSSING INSTALLS & REMOVALS



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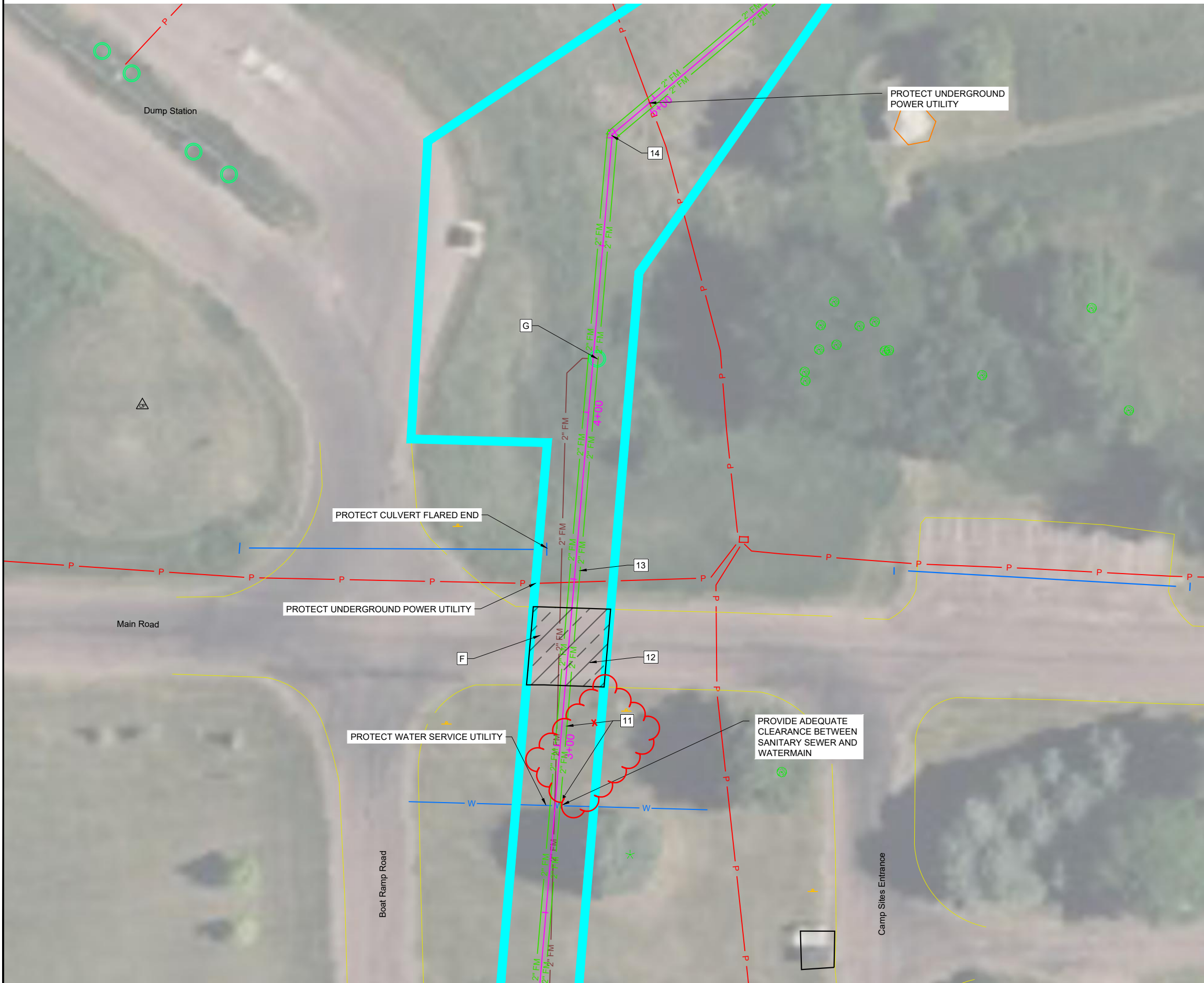
Department of Game, Fish & Parks
South Dakota



PROJECT NUMBER	25649.05
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TITLE
 LIFT STATION & DRAINFIELD IMPROVEMENTS
 LAKE VERMILLION STATE RECREATION AREA
 MCCOOK COUNTY, SOUTH DAKOTA

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INSTALLS:

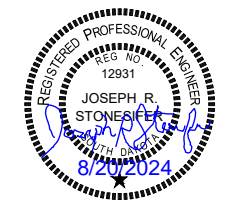
- 11. FURNISH AND INSTALL:
 1 EA - UTILITY MARKER - SEWER
 1 EA - VERIFY UTILITY
- 12. FURNISH AND INSTALL:
 10 TON - BASE COURSE
 17 TON - BASE COURSE, SALVAGED
- 13. FURNISH AND INSTALL:
 1 EA - UTILITY MARKER - SEWER
 1 EA - VERIFY UTILITY
- 14. FURNISH AND INSTALL:
 1 EA - UTILITY MARKER - SEWER
 1 EA - VERIFY UTILITY

REMOVALS:

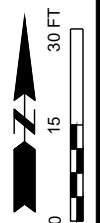
- F. 60 SY - REMOVE ASPHALT CONCRETE PAVEMENT
- G. 1 LS - REMOVE DISTRIBUTION BOX

NOTE: WATERMAIN LOCATION SHOWN ON PLANS IS ESTIMATED LOCATION. CONTRACTOR TO LOCATE WATERMAIN.

NOTE: BOTH UTILITY MARKERS - SEWER SHALL BE LOCATED APPROXIMATELY 20 FT FROM EDGE OF ROADWAY ON NORTH AND SOUTH SIDES.



DRAINFIELD INSTALLS & REMOVALS



NOTE:
TRENCHES ARE SPACED 9 FT ON CENTER

NOTE:
PAYMENT ONLY FOR ACTUAL PIPE LENGTH FROM AND TO DISTRIBUTION BOXES AND CHAMBERS

NOTE:
TOPSOIL SHALL ONLY BE REMOVED AS NECESSARY TO INSTALL THE INFILTRATION TRENCHES

NOTE:
INSTALL DISTRIBUTION BOXES SUCH THAT THE OUTLET INVERT ELEVATION TO THE DOWNSTREAM DISTRIBUTION BOX IS HIGHER ELEVATION THAN THE DISTRIBUTION BOX INLET INVERT ELEVATION

PROVIDE CURVATURE IN FORCEMAINS NOT TO EXCEED MANUFACTURER RECOMMENDATION



INSTALLS:

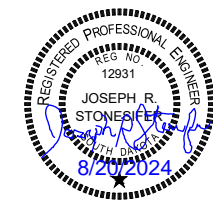
- 15. FURNISH AND INSTALL:
1 EA - UTILITY MARKER - SEWER
1 EA - TRACER WIRE BOX TYPE 1
- 16. FURNISH AND INSTALL:
1 EA - DISTRIBUTION BOX
1 LF - 4" PVC SEWER PIPE
100 LF - INFILTRATION CHAMBER
25 TONS - GRANULAR BEDDING MATERIAL
- 17. FURNISH AND INSTALL:
8 LF - 4" PVC SEWER PIPE
8 LF - 4" SEWER PIPE BEDDING MATERIAL
- 18. FURNISH AND INSTALL:
1 EA - DISTRIBUTION BOX
1 LF - 4" PVC SEWER PIPE
100 LF - INFILTRATION CHAMBER
25 TONS - GRANULAR BEDDING MATERIAL
- 19. FURNISH AND INSTALL:
8 LF - 4" PVC SEWER PIPE
8 LF - 4" SEWER PIPE BEDDING MATERIAL
- 20. FURNISH AND INSTALL:
1 EA - DISTRIBUTION BOX
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25 TONS - GRANULAR BEDDING MATERIAL
- 21. FURNISH AND INSTALL:
8 LF - 4" PVC SEWER PIPE
8 LF - 4" SEWER PIPE BEDDING MATERIAL
- 22. FURNISH AND INSTALL:
1 EA - DISTRIBUTION BOX
1 LF - 4" PVC SEWER PIPE
100 LF - INFILTRATION CHAMBER
25 TONS - GRANULAR BEDDING MATERIAL
- 23. FURNISH AND INSTALL:
8 LF - 4" PVC SEWER PIPE
8 LF - 4" SEWER PIPE BEDDING MATERIAL
- 24. FURNISH AND INSTALL:
1 EA - DISTRIBUTION BOX
1 LF - 4" PVC SEWER PIPE
100 LF - INFILTRATION CHAMBER
25 TONS - GRANULAR BEDDING MATERIAL
- 25. FURNISH AND INSTALL:
8 LF - 4" PVC SEWER PIPE
8 LF - 4" SEWER PIPE BEDDING MATERIAL
- 26. FURNISH AND INSTALL:
1 EA - DISTRIBUTION BOX
1 LF - 4" PVC SEWER PIPE
100 LF - INFILTRATION CHAMBER
25 TONS - GRANULAR BEDDING MATERIAL

INSTALLS:

- 27. FURNISH AND INSTALL:
1 EA - DISTRIBUTION BOX
1 LF - 4" PVC SEWER PIPE
100 LF - INFILTRATION CHAMBER
25 TONS - GRANULAR BEDDING MATERIAL
- 28. FURNISH AND INSTALL:
8 LF - 4" PVC SEWER PIPE
8 LF - 4" SEWER PIPE BEDDING MATERIAL
- 29. FURNISH AND INSTALL:
1 EA - DISTRIBUTION BOX
1 LF - 4" PVC SEWER PIPE
100 LF - INFILTRATION CHAMBER
25 TONS - GRANULAR BEDDING MATERIAL
- 30. FURNISH AND INSTALL:
8 LF - 4" PVC SEWER PIPE
8 LF - 4" SEWER PIPE BEDDING MATERIAL
- 31. FURNISH AND INSTALL:
1 EA - DISTRIBUTION BOX
1 LF - 4" PVC SEWER PIPE
100 LF - INFILTRATION CHAMBER
25 TONS - GRANULAR BEDDING MATERIAL
- 32. FURNISH AND INSTALL:
8 LF - 4" PVC SEWER PIPE
8 LF - 4" SEWER PIPE BEDDING MATERIAL
- 33. FURNISH AND INSTALL:
1 EA - DISTRIBUTION BOX
1 LF - 4" PVC SEWER PIPE
100 LF - INFILTRATION CHAMBER
25 TONS - GRANULAR BEDDING MATERIAL
- 34. FURNISH AND INSTALL:
8 LF - 4" PVC SEWER PIPE
8 LF - 4" SEWER PIPE BEDDING MATERIAL
- 35. FURNISH AND INSTALL:
1 EA - DISTRIBUTION BOX
1 LF - 4" PVC SEWER PIPE
100 LF - INFILTRATION CHAMBER
25 TONS - GRANULAR BEDDING MATERIAL
- 36. FURNISH AND INSTALL:
8 LF - 4" PVC SEWER PIPE
8 LF - 4" SEWER PIPE BEDDING MATERIAL
- 37. FURNISH AND INSTALL:
1 EA - DISTRIBUTION BOX
1 LF - 4" PVC SEWER PIPE
100 LF - INFILTRATION CHAMBER
25 TONS - GRANULAR BEDDING MATERIAL
- 38. FURNISH AND INSTALL:
1 EA - UTILITY MARKER - SEWER
- 39. FURNISH AND INSTALL:
1 EA - UTILITY MARKER - SEWER
- 40. FURNISH AND INSTALL:
1 EA - UTILITY MARKER - SEWER
- 41. FURNISH AND INSTALL:
1 EA - UTILITY MARKER - SEWER

REMOVALS:

- H. 1 EA - CLEAR AND GRUB TREE



Division of Administration
Foss Building
523 E. Capitol Ave.
Pierre, South Dakota 57501-3182
Phone: (605) 773 - 6082

Department of Game, Fish & Parks

DATE: 9/1/2024
REVISION: AB
PROJECT NUMBER: 25649.05
DRAWN BY: [Signature]
CHECKED BY: [Signature]

TITLE: LIFT STATION & DRAINFIELD IMPROVEMENTS
LAKE VERMILLION STATE RECREATION AREA
MCCOOK COUNTY, SOUTH DAKOTA

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