



2022 PINE GLENN STREET AND UTILITY IMPROVEMENTS

CITY OF STURGIS PUBLIC WORKS DEPARTMENT
STURGIS, SOUTH DAKOTA
CLIENT PROJECT # PINEGLENN

RELEASED FOR BIDDING

FINAL NOV 2, 2022
Completion

UTILITY AND EMERGENCY TELEPHONE NUMBERS

EMERGENCY:	911
SOUTH DAKOTA ONE CALL	1-(800) 781-7474
BLACK HILLS ENERGY	(888) 890-5554
CENTURYLINK	(605) 394-4720
MIDCO	(605) 787-3371
MDU	(605) 642-2654
VAST BROADBAND	(605) 721-2000
CITY OF STURGIS WATER	(605) 347-3916
CITY OF STURGIS WASTEWATER	(605) 347-3916
CITY OF STURGIS PUBLIC WORKS	(605) 347-3916

OWNER CONTACT INFORMATION

RICK J. BUSH, CPWP-M
DIRECTOR OF PUBLIC WORKS
CITY OF STURGIS
OFFICE (605) 347-3916

ENGINEER CONTACT INFORMATION

THEODORE F. SCHULTZ - PE
FOTH INFRASTRUCTURE & ENVIRONMENT, LLC
510 NINTH STREET, SUITE 200
RAPID CITY, SOUTH DAKOTA 57701
(605) 381-0433

PROPERTY ADDRESS

NEAR INTERSECTION OF PINE GLENN DR./DOLAN CREEK RD.
IN STURGIS, SOUTH DAKOTA 57785

UTILITY NOTES

WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.

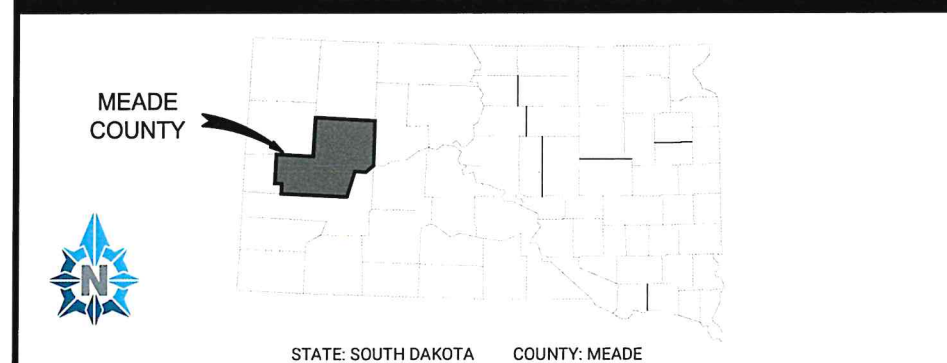
THE CONTRACTOR IS REQUIRED TO UTILIZE THE UTILITY ONE-CALL SERVICE AT (800) 781-7474 AT LEAST 48 HOURS PRIOR TO EXCAVATING ANYWHERE ON THE PROJECT. THE CONTRACTOR MUST ALSO CONTACT THE AIRPORT AND THE FAA AT LEAST 48 HOURS IN ADVANCE FOR LOCATES.

UTILITY CONFLICTS DISCOVERED DURING CONSTRUCTION WILL BE ADDRESSED AT THE TIME OF DISCOVERY.

LOCATION MAP

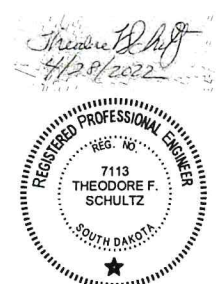


STATE & COUNTY LOCATION



INDEX OF SHEETS

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C0.02	ALIGNMENT DIAGRAM
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APRIL 28, 2022

CABLE TV

	EXISTING	DEMO/REMOVAL	PROPOSED
CABLE TELEVISION - BURIED			
CABLE TELEVISION - OVERHEAD			
CABLE TELEVISION - EQUIPMENT			
CABLE TELEVISION - PEDESTAL			

ELECTRIC

	EXISTING	DEMO/REMOVAL	PROPOSED
ELECTRICAL - EQUIPMENT			
ELECTRICAL - GROUND - RECEPTACLE			
ELECTRICAL - GROUND - ROD			
ELECTRICAL - JUNCTION BOX			
ELECTRICAL - LIGHT FIXTURE			
ELECTRICAL - LIGHT HANDHOLE			
ELECTRICAL - OVERHEAD CABLE			
ELECTRICAL - PEDESTAL			
ELECTRICAL - POLE			
ELECTRICAL - TOWER			
ELECTRICAL - UNDERGROUND CABLE			
ELECTRICAL - UNDERGROUND DUCT			
ELECTRICAL - HANDHOLE			
ELECTRICAL - UNDERGROUND STRUCTURE			

FIBER OPTIC

	EXISTING	DEMO/REMOVAL	PROPOSED
FIBER OPTIC - JUNCTION BOX			
FIBER OPTIC - UNDERGROUND CABLE	FO	FO	FO

MISCELLANEOUS UTILITY

	EXISTING	DEMO/REMOVAL	PROPOSED
MISCELLANEOUS UTILITY - OVERHEAD CABLE	OH	OH	OH
MISCELLANEOUS UTILITY - GUY ANCHOR			
MISCELLANEOUS UTILITY - GUY POLE			
MISCELLANEOUS UTILITY			
MISCELLANEOUS UTILITY - MANHOLE			
MISCELLANEOUS UTILITY - POLE			

NATURAL GAS

	EXISTING	DEMO/REMOVAL	PROPOSED
NATURAL GAS - APPURTENANCE			
NATURAL GAS - PIPE CENTERLINE (PLAN)			
NATURAL GAS - HIGH PRESSURE (PLAN)			
NATURAL GAS - PIPE MAIN			
NATURAL GAS - PIPE SERVICE			
NATURAL GAS - STRUCTURE			
NATURAL GAS - VENT			

SANITARY SEWER

	EXISTING	DEMO/REMOVAL	PROPOSED
SANITARY SEWER - ABANDONED			
SANITARY SEWER - PIPE CENTERLINE (PLAN)			
SANITARY SEWER - CLEANOUT			
SANITARY SEWER - FORCEMAIN	FM	FM	FM
SANITARY SEWER - LIFT STATION	LS	LS	LS
SANITARY SEWER - PIPE WALL			
SANITARY SEWER - SERVICE LATERAL			
SANITARY SEWER - STRUCTURE			
SANITARY SEWER - STRUCTURE ABANDONED			
SANITARY SEWER - TUNNEL			
SANITARY SEWER (PROFILE) LENGTH-DIA. MATERIAL @ GRADE			

STORM SEWER

	EXISTING	DEMO/REMOVAL	PROPOSED
STORM SEWER - ABANDONED			
STORM SEWER - PIPE CENTERLINE (PLAN)			
STORM SEWER - CULVERT			
STORM SEWER - INLET OR CATCH BASIN			
STORM SEWER - PIPE			

STORM SEWER

	EXISTING	DEMO/REMOVAL	PROPOSED
STORM SEWER - SERVICE LATERAL			
STORM SEWER - STRUCTURE			
STORM SEWER (PROFILE) LENGTH-DIA. MATERIAL @ GRADE			

TELEPHONE

	EXISTING	DEMO/REMOVAL	PROPOSED
TELEPHONE - JUNCTION BOX			
TELEPHONE - OVERHEAD CABLE			
TELEPHONE - PEDESTAL			
TELEPHONE - STRUCTURE			
TELEPHONE - UNDERGROUND CABLE			

WATER SERVICE

	EXISTING	DEMO/REMOVAL	PROPOSED
WATER - APPURTENANCE			
WATER - PIPE CENTERLINE			
WATER - HYDRANT			
WATER - PIPE			
WATER - STRUCTURE			
WATER - STRUCTURE - PATTERN			
WATER - VALVE			
WATER - WELL			
WATER - PROFILE			

TELECOMMUNICATIONS - MISC

	EXISTING	DEMO/REMOVAL	PROPOSED
TELECOM - MISCELLANEOUS			
TELECOM - MISCELLANEOUS - JUNCTION BOX			
TELECOM - MISCELLANEOUS - STRUCTURE			

CONTOURS AND TINN

	EXISTING	PROPOSED
CONTOUR - MAJOR		
CONTOUR - MAJOR - IDENTIFIER	695	695
CONTOUR - MINOR		
CONTOUR - MINOR - IDENTIFIER		
TRIANGULATED IRREGULAR NETWORK - WATERSHED		
VOLUME SURFACE - CUT		
VOLUME SURFACE - FILL		

CONTROL

	EXISTING	DEMO/REMOVAL	PROPOSED
CONTROL - GENERAL			
CONTROL - IRON ROD			
CONTROL - PIPE			
CONTROL - REBAR			

DRAINAGE

	EXISTING	DEMO/REMOVAL	PROPOSED
DRAINAGE - DITCH - CENTERLINE			
DRAINAGE - DITCH - EDGE OF WATER			
DRAINAGE - FLOW			
DRAINAGE - POND EDGE			
DRAINAGE - TILE DRAIN	TD	TD	TD
DRAINAGE - TRACED FLOW			
DRAINAGE - ARROW			
DRAINAGE - BASIN			
DRAINAGE - BASIN - POST DEVELOPMENT 1A			
DRAINAGE - BASIN - POST DEVELOPMENT - TIME OF CONCENTRATION			
DRAINAGE - BASIN - PRE DEVELOPMENT 1A			
DRAINAGE - BASIN - PRE DEVELOPMENT - TIME OF CONCENTRATION			
CH-DRAIN-BASIN-USLE			

DRIVEWAY

	EXISTING	DEMO/REMOVAL	PROPOSED
DRIVEWAY - ASPHALT EDGE			
DRIVEWAY - ASPHALT CENTERLINE			
DRIVEWAY - CONCRETE EDGE			
DRIVEWAY - GRAVEL EDGE			
DRIVEWAY - ASPHALT PATTERN			

DRIVEWAY

	EXISTING	DEMO/REMOVAL	PROPOSED
DRIVEWAY - CONCRETE PATTERN			
DRIVEWAY - GRAVEL PATTERN			
EASEMENT			
EASEMENT - PERMANENT			
EASEMENT - TEMPORARY			
EROSION CONTROL			
EROSION CONTROL - WATTLE OR DITCH CHECK			
EROSION CONTROL - SILT FENCE			
EROSION CONTROL - CONSTRUCTION ENTRANCE			
EROSION CONTROL - CONSTRUCTION ENTRANCE SYMBOL			
WETLAND DISTURBED AREA			
RESTORATION TYPE 1			
PLANTINGS			
PLANTING - BUSH			
L-PLNT-CONF			
L-PLNT-DECD			
PLANTING - EDGE			
PLANTING - SHRUB			
PLANTING - STUMP			
PLANTING - TREE			
PLANTING - TREE LINE			
PROPERTY			
PROPERTY - LOTLINE			
PROPERTY - PARCEL			
PROPERTY - PROPERTY			
PROPERTY - QUARTER SECTION			
PROPERTY - RIGHT OF WAY			
PROPERTY - RIGHT OF WAY MARKER			
PROPERTY - SETBACK			
PROPERTY - SECTION LINE			
TOPOGRAPHY - GENERAL			
GEOTECHNICAL - SOILS BOUNDARY			
GEOTECHNICAL - SOIL BORING	BORING #	BORING #	BORING #
RIVERS AND STREAMS AND LAKES			
RIVER OR STREAM - EDGE OF WATER			
ROADWAY			
ROADWAY - ASPHALT EDGE			
ROADWAY - ASPHALT OUTLINE			
ROADWAY - ASPHALT PATTERN			
ROADWAY - ASPHALT SHOULDER			
ROADWAY - TRAFFIC CONTROL BARREL	PI		PI
ROADWAY - CENTERLINE			
ROADWAY - CONCRETE EDGE			
ROADWAY - CONCRETE OUTLINE			
ROADWAY - CONCRETE PATTERN			

ROADWAY

	EXISTING	DEMO/REMOVAL	PROPOSED
ROADWAY - CURB BACK			
ROADWAY - CURB FACE			
ROADWAY - GUARDRAIL			
ROADWAY - GRAVEL EDGE			
ROADWAY - GRAVEL OUTLINE/PATTERN			
ROADWAY - GRAVEL PATTERN			
ROADWAY - GRAVEL SHOULDER			
ROADWAY - GUTTER			
ROADWAY - JOINTS			
ROADWAY - SHOULDER			
ROADWAY - SLOPE INTERCEPT			

SITE TOPO

	EXISTING	DEMO/REMOVAL	PROPOSED
SITE - BUILDING FOUNDATION			
SITE - BUILDING OUTLINE			
SITE - BUILDING RUINS			
SITE - CONCRETE PATTERN			
SITE - CONCRETE SLAB			
SITE - FENCE - BARBED WIRE			
SITE - FENCE - CHAIN LINK			
SITE - FENCE - FIELD			
SITE - FENCE - WOOD			
SITE - GATE			
SITE - LIGHT			
SITE - MAILBOX			
SITE - SEPTIC TANK			
SITE - SIGN			

PROFILE

	EXISTING	DEMO/REMOVAL	PROPOSED
C-PROF-DTCH			
C-PROF-GRAD			
GRADE ELEVATION (PROFILE)			

APPROVED BY:
I HEREBY CERTIFY THAT THE PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY OR UNDER MY DIRECT SUPERVISION AND THAT I AM A duly LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
7113
THEODORE F. SCHULTZ
SIGNATURE:
THEODORE F. SCHULTZ
TYPED OR PRINTED NAME:
DATE: 4/28/2022
REG NO: 7113

CLIENT PROJECT NO: PINE GLENN FOTH PROJECT NO: 21S100.00
DESIGNED BY: KRM CHECKED BY: TFS DRAWN BY: MLH
LETTING DATE: CAD DATE: 5/2/2022 8:25:19 AM

NO	DATE	BY	REVISION DESCRIPTION
1			
2			
3			
4			



PINE GLENN STREET AND UTILITY IMPROVEMENTS

STURGIS, SOUTH DAKOTA

CIVIL STANDARDS
SYMBOLGY AND ABBREVIATIONS

SHEET NO.

G0.01

GENERAL PROJECT NOTES	
CONSTRUCTION SEQUENCE	
1.	A PRECONSTRUCTION MEETING MUST BE HELD BEFORE ANY CONSTRUCTION ACTIVITIES TAKE PLACE.
2.	THE CONTRACTOR IS REQUIRED TO NOTIFY THE SD DANR OF ALL OFFSITE DISPOSAL LOCATIONS, INCLUDING ESTIMATED QUANTITIES, PRIOR TO EXPORTING MATERIAL FROM THE SITE.
3.	ONCE CONSTRUCTION BEGINS CONTINUOUS PROGRESS MUST BE MADE UNTIL SUBSTANTIAL COMPLETION HAS BEEN OBTAINED.
4.	CONTRACTOR SHALL INSTALL EROSION CONTROLS AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER BEFORE ANY GRADING ACTIVITIES TAKE PLACE.
5.	CONTRACTOR IS REQUIRED TO PROVIDE A TRAFFIC CONTROL PLAN PRIOR TO CONSTRUCTION THAT FOLLOWS THE REQUIREMENTS OF THE TRAFFIC CONTROL PLAN SHEET(S). INSTALL ALL TRAFFIC CONTROL AND PROVIDE ACCESS AREAS AS SHOWN.
6.	TRAFFIC WILL BE MAINTAINED AT ALL TIMES.
7.	CONTRACTOR SHALL STRIP / SALVAGE, STOCKPILE PRIOR TO CONSTRUCTION AND RESPREAD TO EXISTING TOPSOIL DEPTHS.
8.	CONTRACTOR SHALL INSTALL DRIVEWAY CULVERTS AND RE-INSTALL ANY STORM SEWER DISTURBED DURING CONSTRUCTION.
9.	RESTORATION SHALL BE COMPLETED PROMPTLY FOLLOWING APPROVED PIPE INSTALLATION AND BACKFILL OPERATIONS.
10.	EROSION CONTROL DEVICES SHALL BE REMOVED AFTER VEGETATION IS ESTABLISHED.
GENERAL NOTES	
1.	CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PLAN TO ENGINEER PRIOR TO CONSTRUCTION FOR APPROVAL.
2.	ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH CURRENT MUTCD STANDARDS AND SECTION 634 OF THE SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, CURRENT EDITION.
3.	CONTRACTOR SHALL REMOVE ALL SIGNS, PROTECT AND CONFIRM WITH OWNER PRIOR TO REINSTALLATION. OWNER MAY PROVIDE NEW SIGNAGE PRIOR TO INSTALLATION. ALL TRAFFIC CONTROL AND STREET SIGNS DAMAGED OR MOVED BY THE CONTRACTOR SHALL BE RESET, REPLACED OR REPAIRED WITHOUT ADDITIONAL PAYMENT.
4.	CONTRACTOR SHALL PROVIDE ACCESS TO TRAFFIC AT ALL TIMES. COORDINATE WITH PROPERTY OWNERS FOR ALL WORK BLOCKING DRIVEWAYS.
5.	ALL MANHOLES SHALL BE ADJUSTED TO FINISHED GRADE. THIS WORK IS INCIDENTAL TO THE PROJECT UNLESS A SPECIFIC BID ITEM IS INCLUDED IN THE PROJECT MANUAL.
6.	THE MOST CURRENT EDITION OF THE SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES WITH SUPPLEMENTAL SPECIFICATIONS AND ERRATA, STANDARD PLATES AND REQUIRED PROVISIONS, SUPPLEMENTAL SPECIFICATIONS, AND/OR SPECIAL PROVISIONS AS INCLUDED IN THE PROJECT MANUAL ARE HEREBY MADE A PART OF THESE SPECIFICATIONS IN ITS ENTIRETY UNLESS OTHERWISE REVISED, DELETED, OR SUPPLEMENTED HEREIN.
7.	THE SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES WITH SUPPLEMENTAL SPECIFICATIONS AND ERRATA CAN BE DOWNLOADED FROM THE SDDOT'S WEBSITE AT http://www.sddot.com/ .
8.	SANITARY SEWER SHALL BE CONSTRUCTED ACCORDING TO THE SPECIFICATIONS AND SHALL MEET THE CITY OF STURGIS, SD AND DANR REQUIREMENTS
9.	WATER SPECIFICATIONS SHALL BE CONSTRUCTED ACCORDING TO THE SPECIFICATIONS AND SHALL MEET THE CITY OF STURGIS, SD AND DANR REQUIREMENTS.
10.	THE CONSTRUCTION LIMITS SHALL BE WITHIN THE RIGHT OF WAY AND CITY PROPERTY. THE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING A STAGING/STOCKPILE AREA FOR MATERIALS AND/ OR EQUIPMENT. MATERIAL STORAGE AND VEHICLE AND EQUIPMENT TRAFFIC SHALL BE LIMITED TO CITY PROPERTY. THE CONTRACTOR SHALL WORK WITH THE ENGINEER TO DELINEATE STORAGE AREAS. THE CONTRACTOR IS RESPONSIBLE FOR THE SECURITY AND PROTECTION OF ALL STORED MATERIALS. CONSTRUCTION LIMITS SHALL BE KEPT NEAT AND ORDERLY DURING NON-WORKING HOURS. THE CONTRACTOR SHALL RECLAIM THE AREA TO THE SATISFACTION OF THE ENGINEER. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE PROPERTY OWNERS RELATING TO ACCESS TO THEIR PROPERTY AND ANY SUBSEQUENT DAMAGES.
11.	THE CONTRACTOR WILL BE RESPONSIBLE FOR ORGANIZING THIRD PARTY ACCEPTANCE TESTS AND A BACKUP TEST IF REQUIRED. THE CITY MUST RECEIVE ALL TEST RESULTS DIRECTLY FROM THE TESTING AGENCY. ALL TESTS REQUIRED WILL BE PAID BY THE CONTRACTOR AND MEET THE APPROPRIATE TESTING REQUIREMENTS.
12.	DRAINAGE IS THE CONTRACTOR'S RESPONSIBILITY. CONTRACTOR SHALL BE AWARE OF EXISTING DRAINAGE CONDITIONS AND FACILITIES, AND SHALL PROVIDE FOR DRAINAGE DURING ALL PHASES OF CONSTRUCTION. DAMAGE CAUSED BY IMPROPER TEMPORARY DRAINAGE FACILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE ENGINEER.
13.	THE CONTRACTOR SHALL COOPERATE WITH AND COORDINATE HIS EFFORTS TO WORK WITH THE UTILITY COMPANIES AND THEIR CONTRACTORS. EACH BIDDER SHALL BE RESPONSIBLE PRIOR TO BID LETTING, FOR DETERMINING THE EFFECTS OF UTILITY WORK ON THE PROJECT WORK SCOPE AND SCHEDULE, AND SHALL ACCOUNT FOR ALL SUCH EFFECTS IN HIS BID. NO CONSIDERATION WILL BE GIVEN TO THE CONTRACTOR AFTER THE BID LETTING ON ACCOUNT OF UTILITY WORK DONE BY OTHERS.
14.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING WATER FOR COMPACTION OF GRANULAR MATERIALS AND TRENCH BACKFILL AS REQUIRED. THE COST OF LOADING TRANSPORTING AND APPLYING WATER SHALL BE INCIDENTAL TO THE VARIOUS ITEMS WHERE WATER IS REQUIRED. THE CONTRACTOR MAY OBTAIN WATER FROM THE CITY.
15.	THE CONTRACTOR SHALL MAINTAIN THE COMPLETED SUBGRADE AND BASE COURSE. WHERE DISTURBED BY SUBSEQUENT CONSTRUCTION ACTIVITY OR ADVERSE WEATHER, THE CONTRACTOR SHALL SCARIFY, RESHAPE AND COMPACT THE MATERIAL TO REQUIRED DENSITY. ADDITIONAL PAYMENT SHALL NOT BE MADE FOR MAINTENANCE.

GENERAL PROJECT NOTES	
RESTORATION NOTES	
1.	SOIL LAYERS SHALL BE SEGREGATED DURING CONSTRUCTION ACTIVITIES, FOLLOWED BY REPLACEMENT OF SOILS IN KIND.
2.	EROSION CONTROL MATTING WILL BE USED TO STABILIZE SLOPES WHERE CHANNELIZED FLOW IS PRESENT.
UTILITY NOTES	
1.	CONTRACTOR IS RESPONSIBLE FOR MAINTAINING WATER AND SEWER SERVICE AT ALL TIMES DURING CONSTRUCTION. IF BYPASS PUMPING OR POTABLE WATER REROUTING IS FOUND TO BE NECESSARY, CONTRACTOR SHALL NOTIFY OWNER AND ENGINEER. BYPASS PUMPING AND POTABLE WATER REROUTING CONSISTS OF CHANGING THE PATH OF FLOW TO ALLOW WORK TO TAKE PLACE IN THAT AREA. CONTRACTOR SHALL PROVIDE A REROUTING AND DISINFECTION PLAN TO THE ENGINEER AND OWNER FOR APPROVAL PRIOR TO WORK. BYPASS PUMPING AND WATER REROUTING SHALL BE PAID FOR ON A TIME AND MATERIALS BASIS UP TO THE BID ITEM AMOUNT.
2.	EXISTING WATER MAIN ABANDONMENT. AFTER SUCCESSFUL COMPLETION OF CONNECTION TO NEW WATER MAIN, EXISTING WATER MAIN SHALL AND ALL ASSOCIATED SERVICES, CURB STOP AND BOX, HYDRANTS, ETC. SHALL BE ABANDONED ACCORDING TO CITY REQUIREMENTS. ABANDONMENT SHALL BE PAID FOR AS A LUMP SUM AMOUNT.
3.	CONTRACTOR IS RESPONSIBLE AND SHALL MAINTAIN ALL DRAINAGE WITHIN THE PROJECT WORK AREA, INCLUDING RIGHT-OF-WAY ACCESS LOCATIONS DURING CONSTRUCTION.
4.	ALL SANITARY SEWER AND WATER MAIN SHALL BE BACKFILLED PER TRENCH CONSTRUCTION DETAILS AND AS DESIGNATED ON THE PLAN PROFILE SHEETS.
5.	ALL SANITARY SEWER AND WATER MAIN SHALL HAVE A CHECK DAM PLACED EVERY 250-FEET IN DISTANCE AT A MAXIMUM.
6.	SUPPORT EXISTING UTILITIES AT CROSSINGS AS NECESSARY TO PREVENT DAMAGE OR INTERRUPTION OF SERVICE.
7.	CONTRACTOR SHALL COORDINATE WITH THE APPLICABLE UTILITY COMPANIES AND THE CITY OF STURGIS FOR SERVICES OR UTILITIES ENCOUNTERED ON THE SITE. THIS COORDINATION SHALL BE INCIDENTAL TO THE PROJECT.
8.	THE INFORMATION ON THESE DRAWINGS CONCERNING THE TYPE, SIZE, AND LOCATION OF UTILITIES HAS BEEN SHOWN BASED UPON THE BEST INFORMATION AVAILABLE. THE UTILITY LOCATIONS SHOWN WERE BASED ON FIELD LOCATES AND FROM OWNER'S RECORDS. THE SIZE AND LOCATION OF UNDERGROUND UTILITIES WAS NOT VERIFIED BY EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
9.	<u>WATER MAIN JOINT & FITTING RESTRAINT</u> - RESTRAINED JOINTS SHALL BE USED. ALL VALVES, FITTINGS, AND JOINTS WITHIN THE SPECIFIED RESTRAINED LENGTH SHALL BE RESTRAINED USING THE EBBA, OR APPROVED EQUAL RESTRAINING SYSTEMS. SEE SHEET N-13 AND STURGIS WATER SPECS. <u>PIPE DEFLECTION IS PROHIBITED</u> . PIPE RESTRAINT DEVICES AND LABOR SHALL BE INCIDENTAL TO THE COST OF THE WATER MAIN INSTALLATION AND NO ADDITIONAL PAYMENT WILL BE MADE.
10.	<u>WATER SERVICE DISCONNECTION/RECONNECTION</u> - EXISTING SERVICES SHALL BE DISCONNECTED AND RECONNECTED TO THE NEW MAIN AS SHOWN ON THE PLANS. A TAPPING SADDLE AND CORPORATION STOP SHALL BE INSTALLED FOR EACH SERVICE CONNECTION. A SERVICE LINE SHALL BE INSTALLED FROM THE CORPORATION STOP. WATER SERVICES SCHEDULED FOR DISCONNECTION FROM THE EXISTING MAIN AS SHOWN IN THE PLANS SHALL BE DISCONNECTED BY EXPOSING AND SHUTTING THE CORPORATION STOP AND CUTTING AND CAPPING OR PLUGGING THE LINE USING A MANUFACTURED CAP OR PLUG. EXISTING CURB STOP BOX TO BE REMOVED AS PART OF DISCONNECT. EXISTING DISCONNECTED SERVICE LINES SHALL BE ABANDONED IN PLACE.
11.	THRUST BLOCKS SHALL BE PROVIDED AT FIRE HYDRANTS AND OTHER SELECT FITTINGS AS SHOWN IN THE DETAILS. REFER TO THE THRUST BLOCK DETAIL FOR SIZING. THRUST BLOCKS SHALL BE CURED FOR AT LEAST 4 HOURS BEFORE BEING COVERED AND AT LEAST 48 HOURS PRIOR TO THE MAIN BEING ACTIVATED. THRUST BLOCKS ARE CONSIDERED INCIDENTAL TO WATER MAIN INSTALLATION AND NO ADDITIONAL PAYMENT WILL BE MADE.
12.	ALL VALVE BOXES SHALL BE RATED "HEAVY DUTY".
13.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING SOUTH DAKOTA ONE CALL 1-800-781-7474 TO HAVE UTILITIES FIELD LOCATED.
MATERIALS MANAGEMENT NOTES	
1.	DUE TO LIMITED SITE STORAGE AREA, ALL UNSUITABLE EXCAVATED MATERIAL WILL BE DISPOSED OF OFF SITE AND IS THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR WILL NEED TO INFORM THE OWNER OF OFFSITE DISPOSAL OF EXCAVATED MATERIAL.
2.	IN THE EVENT OF A SPILL OR IF CONTAMINATED MATERIAL IS ENCOUNTERED, INFORM THE OWNER AND ENGINEER, AND CONTACT THE SDANR TO DETERMINE APPROPRIATE ACTION.
3.	CONTRACTOR SHALL DISPOSE OF ALL MISCELLANEOUS DEBRIS EXCAVATED ON THE PROJECT.
4.	CONTRACTOR SHALL COMPLETE STREET CLEANING OF CONSTRUCTION DEBRIS TRACKED OFF CONSTRUCTION SITE DURING MOBILIZATION, CONSTRUCTION ACTIVITIES AND DEMOBILIZATION.
SUBSURFACE UTILITY INFORMATION	
1.	WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSE BY SUCH WORK.

GENERAL PROJECT NOTES	
2.	THE SUBSURFACE UTILITY INFORMATION SHOWN WITHIN THIS PLAN SET IS SHOWN TO UTILITY QUALITY LEVEL IN ACCORDANCE WITH THE LEGEND PROVIDED BELOW. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF C/ASCE38-02, ENTITLES STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA.
UTILITY QUALITY LEVELS	
LEVEL D -	INFORMATION COMES SOLELY FROM EXISTING UTILITY RECORDS
LEVEL C -	SURVEYING ABOVE GROUND UTILITY FACILITIES, SUCH AS MANHOLES, VALVE BOXES, ETC; AND CORRELATING THIS INFORMATION WITH EXISTING UTILITY RECORDS.
LEVEL B -	THE USE OF SURFACE GEOPHYSICAL TECHNIQUES TO DETERMINE THE EXISTENCE AND HORIZONTAL POSITION OF UNDERGROUND UTILITIES.
LEVEL A -	THE USE OF NONDESTRUCTIVE DIGGING EQUIPMENT AT HORIZONTAL AND VERTICAL POSITION OF UNDERGROUND UTILITIES, AS WELL AS THE TYPE, SIZE, CONDITION, MATERIAL AND OTHER CHARACTERISTICS.
THE UNDERGROUND UTILITIES IN THIS DRAWING SET FOR THIS PROJECT ARE AS FOLLOWS: LEVEL D/C	
GRADE STAKES, BENCHMARKS AND MONUMENTS	
1.	THE CONTRACTOR IS RESPONSIBLE FOR SURVEYING AND STAKING DURING THE PROJECT.
2.	ALL STAKES, STONES, AND MONUMENTS NOW IN PLACE AND MARKING LINES AND CORNERS OF BOUNDARIES WHICH ARE LIKELY TO BE AFFECTED BY THE WORK HEREIN PROVIDED FOR SHALL BE CAREFULLY PRESERVED BY THE CONTRACTOR. IN NO CASE SHALL ANY EXCAVATION BE MADE WITHIN FIVE FEET (5') OF ANY SUCH STAKE, STONE OR MONUMENT UNTIL THEY HAVE BEEN PROPERLY RESET, WITNESSED, OR OTHERWISE CARED FOR BY A SD LICENSED SURVEYOR AND PERMISSION IS GIVEN TO PROCEED WITH THE WORK.
SUBMITTALS	
1.	CONTRACTOR IS REQUIRED TO SUBMIT THE FOLLOWING ITEMS TO THE CITY FOR APPROVAL PRIOR TO BEGINNING CONSTRUCTION. ALL MATERIAL MUST BE NEW.
1.1.	CONSTRUCTION SCHEDULE
1.2.	TRAFFIC CONTROL PLAN
1.3.	ASPHALT AND CONCRETE MIXES
1.4.	AGGREGATE BASE GRADATION
1.5.	SHOP DRAWINGS OR PRODUCT LISTS
1.6.	WATER SHOP DRAWINGS.
1.7.	SANITARY SEWER SHOP DRAWINGS (MANHOLES, ETC.).
1.8.	CMP CULVERTS AND ENDS
CONSTRUCTION SCHEDULE	
1.	THE CONTRACTOR SHALL PREPARE A CONSTRUCTION SCHEDULE FOR APPROVAL TO THE ENGINEER THAT WILL ENSURE THE COMPLETION OF THE PROJECT WITHIN THE TIME FRAME SPECIFIED. THIS SCHEDULE MUST BE PROVIDED TO THE ENGINEER FOR REVIEW A MINIMUM OF 3 DAYS PRIOR TO THE PRECONSTRUCTION MEETING. THE NOTICE TO PROCEED WILL NOT BE ISSUED UNTIL THE SCHEDULE HAS BEEN APPROVED BY THE CITY. THE CONSTRUCTION SCHEDULE SHALL BE IN BAR OR NETWORK DIAGRAM FORM AND SHOW THE START AND COMPLETION DATES FOR SIGNIFICANT ITEMS OF WORK IN THEIR RESPECTIVE PHASES. SIGNIFICANT ITEMS OF WORK INCLUDES BUT IS NOT LIMITED TO: EROSION CONTROL, REMOVALS, GRADING, SANITARY SEWER, BASE COURSE, PAVING LAYER, AND RESTORATION. WHEN APPLICABLE THE SCHEDULE SHALL INCLUDE SUBMISSION DATES FOR SHOP DRAWINGS, MANUFACTURING AND INSTALLATION OF MATERIALS, SUPPLIES, EQUIPMENT, AND TESTING FOR VARIOUS PARTS OF THE WORK.
2.	THE CONSTRUCTION SCHEDULE SHALL BE UPDATED ON A BI-WEEKLY BASIS. IF IT APPEARS THE RATE OF PROGRESS IS SUCH THAT THE CONTRACT WILL NOT BE COMPLETED WITHIN THE TIME FRAME ALLOWED THE CONTRACTOR WILL BE REQUIRED TO PROVIDE WRITTEN DOCUMENTATION AS TO WHAT MEASURES THEY WILL TAKE TO COMPLETE THE PROJECT WITHIN THE SPECIFIED TIME FRAME OR TO PROSECUTE WORK IN A SATISFACTORY MANNER.
3.	THE CONTRACTOR WILL APPOINT SOMEONE TO INTERFACE WITH THE PROPERTY OWNERS AFFECTED BY CONSTRUCTION. THE CONTRACTOR WILL PROVIDE SCHEDULES OF WHEN ANY WORK WILL BE DONE THAT AFFECTS TRAFFIC ON DOLAN CREEK ROAD. THE CONTRACTOR WILL CONTACT EACH LANDOWNER EACH TIME THE LANDOWNERS WILL BE IMPACTED. THE CITY ENGINEER RESERVES THE RIGHT TO DIRECT THE CONTRACTOR TO CHANGE THE MODE OF COMMUNICATION TO MEET THE NEEDS OF THE LANDOWNERS.
4.	CONTRACTOR MAY ONLY WORK ON WATERLINE PORTION DURING NORMAL BUSINESS HOURS 7 AM-7 PM M-S.
5.	NO PROPERTY SHALL BE WITHOUT WATER OR SANITARY SEWER SERVICE FOR MORE THAN EIGHT HOURS. EACH PROPERTY SHALL RECEIVE A TWO DAY NOTICE OF ANY SERVICE DISRUPTION.
6.	TRASH PICKUP - THE CONTRACTOR SHALL PROVIDE NOTIFICATION OF WORK TO ALL AFFECTED PROPERTY OWNERS AND COORDINATE WITH SOLID WASTE COLLECTION CONTRACTORS.
7.	MAIL DELIVERY - CONTRACTOR SHALL COORDINATE WITH THE POSTAL SERVICE FOR MAIL DELIVERY TO ALL PROPERTIES AFFECTED BY THE PROJECT. EXISTING CURB SIDE MAILBOXES SHALL BE RELOCATED AS NEEDED AND AS APPROVED BY OWNER AND POSTAL SERVICE. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS WORK.
INCIDENTAL WORK	
1.	THE FOLLOWING ITEMS SHALL BE INCIDENTAL TO OTHER ITEMS OF WORK. INCIDENTAL WORK SHALL INCLUDE ALL MISCELLANEOUS ITEMS NOT INCLUDED IN THE REGULAR ITEMS COVERED BY UNIT PRICES IN THE PROPOSAL BUT WHICH MUST BE PERFORMED IN ORDER TO PROPERLY COMPLETE THE WORK. THUS, THIS IS NOT A COMPREHENSIVE LIST.

APPROVED BY:

THEODORE F. SCHULTZ

7113

SIGNATURE:

THEODORE F. SCHULTZ

TYPED OR PRINTED NAME:

THEODORE F. SCHULTZ

DATE:

4/29/2022

7113

CLIENT PROJECT NO: PINE GLENN FOTH PROJECT NO: 21S100.00

DESIGNED BY: KRM CHECKED BY: TFS DRAWN BY: MLH

LETTING DATE: CAD DATE: 5/2/2022 8:25:22 AM

NO	DATE	BY	REVISION DESCRIPTION
1.			
2.			
3.			
4.			

Foth

PINE GLENN STREET AND UTILITY IMPROVEMENTS

STURGIS, SOUTH DAKOTA

GENERAL

GENERAL PROJECT NOTES

SHEET NO.

G0.02

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STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

Also known as an Erosion and Sediment Control Plan (ESCP)

NARRATIVE

OWNER

CITY OF STURGIS
1040 HARLEY-DAVIDSON WAY
STURGIS, SD 57785
CITY MANAGER: DANIEL AINSLIE
EMAIL ADDRESS: DAINSLIE@STURGISGOV.COM
PHONE NUMBER: 605 347-4422

DESIGN ENGINEER

FOTH
501 NINTH STREET - SUITE 200
RAPID CITY, SD 57701
REGISTERED ENGINEER: TED F. SCHULTZ
EMAIL ADDRESS: TED.SCHULTZ@FOTH.COM
PHONE NUMBER: 605 381-0433

1. THIS SWPPP APPEARS TO FULFILL THE TECHNICAL CRITERIA FOR EROSION CONTROL AND THE REQUIREMENTS OF THE CITY OF STURGIS. I UNDERSTAND THAT ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE NEEDED IF UNFORESEEN EROSION PROBLEMS OCCUR OR IF THE SUBMITTED PLAN DOES NOT FUNCTION AS INTENDED. THE REQUIREMENTS OF THIS PLAN SHALL RUN WITH THE LAND AND BE THE OBLIGATION OF THE PRIMARY RESPONSIBLE PARTY UNTIL SUCH TIME AS THE PLAN IS PROPERLY COMPLETED, MODIFIED OR VOIDED.

SIGNED: _____
NAME/TITLE DATE

THE ENGINEER WILL BE RESPONSIBLE TO MAINTAIN AN ORIGINAL COPY OF THE SWPPP. ANY MODIFICATIONS TO THE SWPPP MUST BE DOCUMENTED AND MADE PART OF THE SWPPP.

PRIME CONTRACTOR

1. THE "DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES - CONTRACTOR CERTIFICATION FORM" (SD FORM - 2110LD) IS TO BE EXECUTED BY THE PRIME CONTRACTOR OR HIS REPRESENTATIVE AFTER THE AWARD OF THE CONTRACT. WORK MAY NOT BEGIN ON THE PROJECT UNTIL THIS SECTION IS SIGNED.

2. THE FORM CERTIFIES UNDER PENALTY OF LAW THAT THE CONTRACTOR UNDERSTANDS AND WILL COMPLY WITH THE TERMS AND CONDITIONS OF THE SURFACE WATER DISCHARGE GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES FOR THE PROJECT.

NOTICE OF INTENT

1. A NOTICE OF INTENT (NOI) FOR COVERAGE UNDER THE GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES WILL BE FOLLOWED. A COPY OF THE PERMIT MUST BE KEPT ON SITE AT THE CONTRACTOR STAGING AREA. A GENERIC COPY MAY BE DOWNLOADED FROM
<https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/stormwater/StormWaterConstruction.aspx>

MODIFICATIONS TO THE SWPPP

1. THE ENGINEER MAY ORDER CHANGES TO THE SWPPP AND/OR THE CONTRACTOR IS RESPONSIBLE TO REQUEST CHANGES TO THE SWPPP IF UNFORESEEN CHANGES OCCUR, OR THE SWPPP DOES NOT PERFORM AS INTENDED, OR TO IMPROVE THE EFFECTIVENESS OF THE SWPPP, OR TO COMPLY WITH THE SD DNR PERMIT. THE ENGINEER WILL EVALUATE AND DETERMINE IF ANY CONTRACTOR REQUESTED CHANGES TO THE SWPPP SHOULD BE MADE. THE CONTRACTOR IS RESPONSIBLE TO IMPLEMENT THESE CHANGES AS SOON AS PRACTICAL. ALL APPROVED CHANGES TO THE SWPPP MUST BE DOCUMENTED BY THE ENGINEER.

KEEPING THE SWPPP CURRENT

INSPECTIONS

1. THE CONTRACTOR WILL BE REQUIRED TO PERFORM INSPECTIONS ON THE PROJECT AT THE FOLLOWING MINIMUM FREQUENCY UNTIL THE SITE HAS REACHED FINAL STABILIZATION AND A NOTICE OF TERMINATION IS SUBMITTED TO THE SDDNR:

- 1.1. PRIOR TO THE REMOVAL OF ANY SURFACING OR TOPSOIL.
- 1.2. ONCE EVERY SEVEN CALENDAR DAYS (MINIMUM). WHEN RUNOFF IS UNLIKELY DUE TO WINTER CONDITIONS THE INSPECTIONS MAY BE REDUCED TO ONCE A MONTH.
- 1.3. WITHIN 24 HOURS AFTER EVERY RAINFALL OF ½ INCH OR GREATER.
- 1.4. AFTER A SNOW MELT THAT CAUSES EROSION.
- 1.5. WITHIN 24 HOURS OF A COMPLAINT BEING MADE TO THE CONTRACTOR OR ENGINEER.

2. THE ENGINEER RESERVES TO RIGHT TO PERFORM INSPECTIONS MORE FREQUENTLY THAN IDENTIFIED AND ADDITIONAL INSPECTIONS WILL BE MADE IF OBVIOUS ITEMS OF NON-COMPLIANCE EXIST. IF THE CONTRACTOR FAILS TO ATTEND ANY INSPECTION IT DOES NOT RELIEVE THEM OF THEIR RESPONSIBILITY TO COMPLY WITH ANY CORRECTIVE OR MAINTENANCE ACTIONS NEEDED.

3. ITEMS NOTED AS BEING NON-COMPLIANT OR NEEDING MAINTENANCE AS A RESULT OF THE INSPECTIONS MUST BE CORRECTED AS SOON AS PRACTICAL. THE SITE SHALL CONTINUE TO BE CONSIDERED IN NON-COMPLIANCE UNTIL THE ISSUE HAS BEEN CORRECTED TO THE SATISFACTION OF THE ENGINEER.

NOTICE OF TERMINATION

1. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE SWPPP UNTIL A NOTICE OF TERMINATION (NOT) OF COVERAGE UNDER THE GENERAL PERMIT HAS BEEN ISSUED. THE N.O.T. WILL BE PREPARED BY THE CONTRACTOR FOR SUBMITTAL TO THE CITY AND THEN THE SDDNR WHEN ALL STORM WATER DISCHARGES COVERED BY THE PERMIT ARE ELIMINATED AND FINAL STABILIZATION HAS BEEN ACHIEVED ON ALL PORTIONS OF THE SITE FOR WHICH THE PERMITTEE IS RESPONSIBLE. FINAL STABILIZATION MEANS EITHER OR A COMBINATION OF:

- 1.1. ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED AND A UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70% OF THE NATIVE COVER FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES HAS BEEN ESTABLISHED, OR EQUIVALENT PERMANENT STABILIZATION MEASURES (SUCH AS THE USE OF RIPRAP, GABIONS, OR GEOTEXTILES) HAVE BEEN EMPLOYED; OR
- 1.2. FOR CONSTRUCTION PROJECTS ON LAND USED FOR AGRICULTURAL PURPOSES, FINAL STABILIZATION MAY BE ACCOMPLISHED BY RETURNING THE DISTURBED LAND TO ITS PRE-CONSTRUCTION AGRICULTURAL USE. AREAS

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DISTURBED THAT WERE NOT PREVIOUSLY USED FOR AGRICULTURAL ACTIVITIES, SUCH AS BUFFER STRIPS IMMEDIATELY ADJACENT TO "WATERS OF THE STATE," AND AREAS WHICH ARE NOT BEING RETURNED TO THEIR PRE-CONSTRUCTION AGRICULTURAL USE MUST MEET THE FINAL STABILIZATION CRITERIA IN (1) ABOVE.

PROJECT DESCRIPTION

1. THIS PROJECT CONSISTS OF A WATER LINE, SANITARY SEWER, AGGREGATE BASE COURSE, AND ASPHALT PAVEMENT PATCHING. THE CONTRACTOR IS NOT ALLOWED TO WORK IN THE CHANNEL, AND MUST PROTECT MATERIAL FROM GOING IN THE CHANNEL.

EXISTING SITE CONDITIONS

1. THE EXISTING SITE IS GRASS, AND SMALL COBBLES. THE EXISTING SOIL IS SILTY CLAY WITH SMALL COBBLES. THE EXISTING PINE GLENN DRIVE IS GRAVEL AND DIRT SOUTH OF DOLAN CREEK ROAD. THE EXISTING PINE GLENN DRIVE IS ASPHALT NORTH OF DOLAN CREEK ROAD.

ADJACENT AREAS

1. THE SURROUNDING AREAS CONSIST OF PRIVATE PROPERTY MOSTLY BEING LOW DENSITY.

AREA AND VOLUME DISTURBED

1. THE TOTAL SURFACE AREA TO BE DISTURBED DURING THIS PHASE IS APPROXIMATELY 1.1 ACRES. IT IS ESTIMATED THAT THE FINAL GRADE WILL BE SIMILAR TO EXISTING AFTER INSTALLATION OF THE WATER AND SANITARY SEWER LINES.

EROSION/SEDIMENT CONTROL SEQUENCE AND TIME SCHEDULE

1. PLACE SEED MIX NO MORE THAN 14 DAYS AFTER FINAL GRADING IS COMPLETE.

PERMANENT STABILIZATION MEASURES

1. SEED WILL BE USED FOR PERMANENT STABILIZATION OF ALL DISTURBED AREAS NOT PAVED THROUGHOUT THE PROJECT LIMITS.

GOOD HOUSEKEEPING

1. NONSTRUCTURAL BMPS SUCH AS GOOD HOUSEKEEPING MEASURES CAN, TO SOME DEGREE, PREVENT THE DEPOSITION OF POLLUTANTS ON THE URBAN LANDSCAPE OR REMOVE POLLUTANTS AT THEIR SOURCE. THE SOURCE OF POLLUTANTS FOR ASSIMILATION INTO STORM WATER IS THE LAND SURFACE ITSELF, ESPECIALLY THE IMPERVIOUS SURFACES IN THE URBAN AREA. THUS, IT IS EXPECTED THAT WHEN NONSTRUCTURAL MEASURES ARE EFFECTIVELY IMPLEMENTED, THEY WILL REDUCE THE AMOUNT OF POLLUTANTS BEING DEPOSITED ON LAND SURFACES FOR EVENTUAL CONTACT WITH STORM WATER AND TRANSPORTED TO THE RECEIVING WATER SYSTEM. THEREFORE, THE CONTRACTOR SHOULD EVALUATE AND DETERMINE WHICH APPROPRIATE GOOD HOUSEKEEPING MEASURES LISTED BELOW COULD BE USED.
2. OPERATION AND MAINTENANCE: TO ASSURE THAT EQUIPMENT AND WORK RELATED PROCESSES ARE WORKING WELL, THE FOLLOWING PRACTICES CAN BE IMPLEMENTED:
 - 2.1. MAINTAIN DRY AND CLEAN FLOORS AND GROUND SURFACES BY USING BROOMS, SHOVELS, VACUUM CLEANERS, OR CLEANING MACHINES RATHER THAN WET CLEANUP METHODS.
 - 2.2. REGULARLY PICK UP AND DISPOSE OF GARBAGE AND WASTE MATERIAL.
 - 2.3. MAKE SURE ALL EQUIPMENT AND RELATED PROCESSES ARE WORKING PROPERLY AND PREVENTATIVE MAINTENANCE IS KEPT UP WITH ON BOTH.
 - 2.4. ROUTINELY INSPECT EQUIPMENT AND PROCESSES FOR LEAKS OR CONDITIONS THAT COULD LEAD TO DISCHARGES OF CHEMICALS OR CONTACT OF STORM WATER WITH RAW MATERIALS, INTERMEDIATE MATERIALS, WASTE MATERIALS, OR PRODUCTS USED ON SITE.
 - 2.5. ASSURE ALL SPILL CLEANUP PROCEDURES ARE UNDERSTOOD BY EMPLOYEES. TRAINING OF EMPLOYEES ON PROPER CLEANUP PROCEDURES SHALL BE IMPLEMENTED.
 - 2.6. DESIGNATE SEPARATE AREAS OF THE SITE FOR AUTO PARKING, VEHICLE REFUELING, AND ROUTINE MAINTENANCE.
 - 2.7. CLEAN UP LEAKS, DRIPS, AND OTHER SPILLS IMMEDIATELY.
 - 2.8. COVER AND MAINTAIN DUMPSTERS AND WASTE RECEPTACLES.
3. MATERIAL STORAGE PRACTICES: IMPROPERLY STORING MATERIAL ON SITE CAN LEAD TO THE RELEASE OF MATERIALS AND CHEMICALS THAT CAN CAUSE STORM WATER RUNOFF POLLUTION. PROPER STORAGE TECHNIQUES INCLUDE THE FOLLOWING:
 - 3.1. PROVIDE ADEQUATE AISLE SPACE TO FACILITATE MATERIAL TRANSFER AND EASE OF ACCESS FOR INSPECTION.
 - 3.2. STORE CONTAINERS, DRUMS, AND BAGS AWAY FROM DIRECT TRAFFIC ROUTES TO PREVENT ACCIDENTAL SPILLS. 3. STACK CONTAINERS ACCORDING TO MANUFACTURER'S INSTRUCTIONS TO AVOID DAMAGING THE CONTAINERS FROM IMPROPER WEIGHT DISTRIBUTION. 4. STORE CONTAINERS ON PALLETS OR SIMILAR DEVICES TO PREVENT CORROSION OF CONTAINERS THAT RESULTS FROM CONTAINERS COMING IN CONTACT WITH MOISTURE ON THE GROUND. 5. STORE TOXIC OR HAZARDOUS LIQUIDS WITHIN CURBED AREAS OR SECONDARY CONTAINERS.
 - 3.3. ASSIGN RESPONSIBILITY OF HAZARDOUS MATERIAL INVENTORY TO A LIMITED NUMBER OF PEOPLE WHO ARE TRAINED TO HANDLE SUCH MATERIALS.
4. MATERIAL INVENTORY PRACTICES. AN UP-TO-DATE INVENTORY KEPT ON ALL MATERIALS (BOTH HAZARDOUS AND NONHAZARDOUS) PRESENT ON SITE WILL HELP TRACK HOW MATERIALS ARE STORED AND HANDLED ONSITE, AND IDENTIFY WHICH MATERIALS AND ACTIVITIES POSE THE MOST RISK TO THE ENVIRONMENT. THE FOLLOWING DESCRIPTION PROVIDES THE BASIC STEPS IN COMPLETING A MATERIAL INVENTORY:
 - 4.1. IDENTIFY ALL CHEMICAL SUBSTANCES PRESENT AT WORK SITE, PERFORM A WALK-THROUGH OF THE SITE, REVIEW PURCHASE ORDERS, LIST ALL CHEMICAL SUBSTANCES USED, AND OBTAIN MATERIAL SAFETY DATA SHEETS (MSDS) FOR ALL CHEMICALS. NAME AND TYPE OF SUBSTANCE, STOCK NUMBER
 - 4.2. LABEL ALL CONTAINERS. LABELS SHALL PROVIDE EXPIRATION DATE, HEALTH HAZARDS, HANDLING SUGGESTIONS, AND FIRST AID INFORMATION. THIS INFORMATION CAN ALSO BE FOUND ON AN MSDS. INVENTORY WHICH CHEMICALS REQUIRE SPECIAL
 - 4.3. CLEARLY MARK ON THE HAZARDOUS MATERIALS HANDLING, STORAGE, USE, AND DISPOSAL CONSIDERATIONS. DECISIONS ON THE AMOUNTS OF HAZARDOUS MATERIALS THAT ARE STORED ON SITE SHALL INCLUDE AN EVALUATION OF ANY EMERGENCY CONTROL SYSTEMS THAT ARE IN PLACE. ALL STORAGE AREAS SHALL BE DESIGNED TO CONTAIN ANY SPILLS.
5. TRAINING AND PARTICIPATION. FREQUENT AND PROPER TRAINING IN GOOD HOUSEKEEPING TECHNIQUES REDUCES THE

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POSSIBILITY OF CHEMICALS OR EQUIPMENT THAT WILL BE MISHANDLED. REDUCING WASTE GENERATION IS ANOTHER IMPORTANT POLLUTION PREVENTION TECHNIQUE. THE FOLLOWING ARE WAYS TO GET PEOPLE INVOLVED IN GOOD HOUSEKEEPING PRACTICES:

- 5.1. PROVIDE INFORMATION SESSIONS ON GOOD HOUSEKEEPING PRACTICES IN TRAINING PROGRAMS.
- 5.2. DISCUSS GOOD HOUSEKEEPING AT MEETINGS.
- 5.3. PUBLICIZE POLLUTION PREVENTION CONCEPTS THROUGH POSTERS OR SIGNS.

METHODS OF ENSURING SURFACE WATER QUALITY

1. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE NO SEDIMENT LADEN WATERS LEAVE THE PROJECT WITHOUT EXPOSURE TO AN EROSION OR SEDIMENT CONTROL DEVICE.
2. THE ONLY NON STORM WATER DISCHARGE ALLOWED BY THE GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES IS UNCONTAMINATED GROUND WATER OR WATERS, USED AS A BEST MANAGEMENT PRACTICE, TO WASH VEHICLES AND CONTROL DUST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN A GENERAL PERMIT TO DISCHARGE UNDER THE SOUTH DAKOTA SURFACE WATER DISCHARGE SYSTEM FOR TEMPORARY DISCHARGE ACTIVITIES IN SOUTH DAKOTA (DEWATERING PERMIT) FOR ALL OTHER NON STORM WATER DISCHARGES. ALL MONITORING, TESTING, AND OTHER REQUIREMENTS OF THE DEWATERING PERMIT ARE THE RESPONSIBILITY OF THE CONTRACTOR.
3. PUMPING (MECHANICALLY DISCHARGING) SEDIMENT LADEN WATER INCLUDING PONDED STORM WATER OR CONTAMINATED TRENCH DEWATERING INTO THE STORM SEWER OR OFF THE PROJECT SITE IS NOT COVERED UNDER THE GENERAL PERMIT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN AND COMPLY WITH A DEWATERING PERMIT FOR THESE ACTIVITIES. THE ENGINEER MAY NOTIFY THE SDDENR IF THE CONTRACTOR IS OBSERVED PUMPING SEDIMENT LADEN WATER INTO THE STORM SEWER OR OFF SITE. PUMPING SEDIMENT LADEN WATER THROUGH INLET PROTECTION IS NOT ALLOWED AS A BMP.
4. IN LIEU OF PUMPING SEDIMENT LADEN WATER THE FOLLOWING ARE SOME METHODS THE CONTRACTOR MAY USE TO CONTROL SEDIMENT LADEN WATER.
 - 4.1. THE BEST METHOD IS FOR THE CONTRACTOR TO MAINTAIN POSITIVE DRAINAGE DURING ALL PHASES OF THE PROJECT TO PREVENT WATER FROM PONDING ON THE PROJECT.
 - 4.2. TREAT THE SEDIMENT LADEN WATER ONSITE THROUGH THE USE OF FILTER BAGS, DEFLOCCULATING CHEMICALS, SEDIMENT BASINS, OR A PORTABLE CONTAINMENT SYSTEM.
 - 4.3. PUMP OR DISCHARGE THE WATER TO OTHER PORTIONS OF THE SITE. THIS IS ALLOWED IF THE WATERS DO NOT LEAVE THE PROJECT LIMITS.
5. NO PAYMENT WILL BE MADE TO THE CONTRACTOR TO COMPLY WITH A DEWATERING PERMIT UNLESS OTHERWISE SPECIFIED AND IT WILL BE CONSIDERED INCIDENTAL TO THE VARIOUS BID ITEMS.

SEDIMENT CONTROL MEASURES

INSTALLATION OF SEDIMENT CONTROL MEASURES

1. THE CONTRACTOR SHALL NOT BEGIN THE REMOVAL OF SURFACING OR TOPSOIL WITHIN THE APPLICABLE WORK AREA UNTIL ALL APPLICABLE SEDIMENT CONTROL MEASURES ARE PLACED. SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AS NECESSARY AS CONSTRUCTION PROGRESSES AND THESE SEDIMENT CONTROL DEVICES SHALL BE INSTALLED WITHIN 24 HOURS AT LOCATIONS IDENTIFIED ON THE SWPPP.

PERMANENT EROSION CONTROL MEASURES

TOPSOIL

1. THE FOLLOWING INFORMATION IS TO PROVIDE AN INFORMATIONAL GUIDELINE TO THE CONTRACTOR REGARDING TOPSOIL PLACEMENT AND THE SWPPP.
2. GENERALLY, TOPSOIL WILL BE PLACED OVER ALL DISTURBED AREAS TO A DEPTH OF 6 INCHES. THE PLACEMENT OF THE TOPSOIL SHALL BE AS SOON AS POSSIBLE UPON COMPLETION OF THE GRADING OPERATIONS. TOPSOIL WILL BE PLACED OVER ALL DISTURBED AREAS TO A DEPTH OF 6 INCHES UNLESS OTHERWISE SPECIFIED BY THE ENGINEER. THE PLACEMENT OF THE TOPSOIL SHALL BE COMPLETED WITHIN 5 DAYS OF FINAL GRADING. SOIL STABILIZATION SHALL BE IN ACCORDANCE WITH THE SWPPP.
3. CONTRACTOR FURNISHED TOPSOIL: TOPSOIL PLACED SHALL BE SCREENED AND PULVERIZED AND MEET THE REQUIREMENTS OF THE FOLLOWING TABLE:

TOPSOIL REQUIREMENTS	MINIMUM	MAXIMUM
MATERIAL PASSING #10 SIEVE	95%	-
CLAY	5%	50%
SILT	10%	70%
SAND AND GRAVEL	10%	60%
ORGANIC MATTER (AS DETERMINED BY WEIGHT)	4%	15%
pH (ASTM D 5268)	6.0	8.0

4. THE TOPSOIL PROVIDED SHALL BE SMOOTH, UNIFORM, AND FREE OF STONES 1 INCH OR LARGER IN ANY DIMENSION, ROOTS AND OTHER EXTRANEEOUS OR UNDESIRABLE MATERIAL HARMFUL TO PLANT GROWTH. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THE PROSPECTIVE SOURCE FOR THE TOPSOIL AT LEAST 1 MONTH PRIOR TO TIME OF PLACEMENT TO ALLOW ADEQUATE TIME FOR INSPECTING, TESTING AND APPROVING THE SOURCE. A COMPANION TOPSOIL TEST MAY BE PERFORMED ON SITE AFTER PLACEMENT. TEXTURE SHALL BE DETERMINED BY THE METHOD DESCRIBED IN AASHTO T 88.

APPROVED BY:	
I HEREBY CERTIFY THAT THE SWPPP SPECIFICATION, OR REPORT WAS REVIEWED AND APPROVED BY MY DIRECT SUPERVISOR OR THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.	
7113 THEODORE F. SCHULTZ	
SIGNATURE: <i>[Signature]</i>	
TYPED OR PRINTED NAME: THEODORE F. SCHULTZ	
DATE: 4/25/2020	REG. NO: 7113

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

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PERMANENT EROSION CONTROL MEASURES -(CONT)

SALVAGED TOPSOIL

1. IF THE CONTRACTOR CHOOSES TO USE CONTRACTOR FURNISHED TOPSOIL INSTEAD OF SALVAGED TOPSOIL, NO ADDITIONAL COMPENSATION WILL BE MADE FOR THEIR EFFORTS.

SEEDBED PREPARATION

1. THE INITIAL PREPARATION OF THE NEWLY GRADED AREA FOR SEEDING SHALL CONSIST OF REMOVING EXISTING GRASS, VEGETATION AND TURF. DO NOT MIX INTO TOPSOIL. LOOSEN SOIL TO A DEPTH OF AT LEAST 6 INCHES. REMOVE STONES LARGER THAN 1" IN ANY DIMENSION, STICKS, ROOTS, TRASH AND OTHER EXTRANEEOUS MATTER. GRADE THE PLANTING AREAS TO A SMOOTH, UNIFORM SURFACE THAT IS LOOSE AND UNIFORMLY FINE TEXTURED. GRADE TO WITHIN +/- 0.5" OF THE FINISH ELEVATION. ROLL AND RAKE, REMOVE RIDGES, PULVERIZE SOIL CLOS TO LESS THAN 1" AND FILL DEPRESSIONS TO MEET FINISH GRADES. THE CONTRACTOR WILL NEED PRIOR AUTHORIZATION FROM THE ENGINEER TO COMMENCE SEEDING. SEEDBED PREPARATION SHALL BE INCIDENTAL TO THE APPROPRIATE "SEED MIXTURE" PAY ITEM.

SEED TESTING

1. SEED SHALL BE TESTED WITHIN 9 MONTHS PRIOR TO PLANTING, EXCLUSIVE OF THE CALENDAR MONTH IN WHICH THE TEST WAS COMPLETED. TESTING SHALL BE PERFORMED IN ACCORDANCE WITH SD STANDARD SPECIFICATION FOR ROADS AND BRIDGES SECTION 730.2C. THE CERTIFIED TEST REPORT SHALL BE FURNISHED TO THE ENGINEER PRIOR TO THE START OF THE SEEDING OPERATIONS.

LABELING

1. EACH BAG OF SEED DELIVERED TO THE PROJECT SHALL BEAR A TAG WHICH CONFORMS TO THE SD STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES SECTION 730.2D. THERE WILL BE NO PAYMENT FOR SEED USED WITHOUT THE PROPER LABELING.

SEEDING

1. CONSTRUCTION REQUIREMENTS: SEEDING AND FERTILIZING SHALL COMPLY WITH SECTIONS 730 AND 731 OF THE SDDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES. IF THE SEASONAL LIMITATIONS FOR SEEDING AS SPECIFIED IN SECTION 730 INTERFERE WITH THE TIMEFRAME LISTED WITHIN THE SOIL SURFACE STABILIZATION PRACTICES SECTION, THEN AN ALTERNATE TEMPORARY SOIL STABILIZATION PRACTICE MUST BE USED. PAYMENT WILL BE MADE TO THE CONTRACTOR FOR THESE ALTERNATE PRACTICES IF CAUSED BY THE CONDITIONS AND SEQUENCING OF THE PLANS AND/OR SPECIFICATIONS AND NOT THE RESULT OF THE CONTRACTOR'S NEGLIGENCE.
2. ANY AREAS DISTURBED BEYOND THE CONSTRUCTION LIMITS DUE TO CONTRACTOR'S CARELESSNESS SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE.

SEED MIX SECTION 730

1. SEED SHALL BE A LAWN MIX TO MATCH EXISTING
2. SEED SHALL BE PLACED APRIL 1 THROUGH JUNE 1 OR AUGUST 15 THROUGH SEPTEMBER 15.
3. MAINTENANCE: BARE SPOTS OR LOCATIONS OF EROSION SHALL BE RE-SEEDING AND MAINTAINED BY THE CONTRACTOR FOR AN ADDITIONAL 4 WEEKS AND THE AREA HAS MET THE VEGETATIVE COVER WITH A DENSITY OF 70% OF THE NATIVE COVER FOR UNPAVED AREAS. THIS ADDITIONAL MATERIAL AND LABOR SHALL BE AT NO ADDITIONAL COST TO THE OWNER.
4. SEED WILL BE MEASURED AND PAID FOR IN ACCORDANCE WITH THE SD STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES SECTION 730.4 AND 730.5.
5. SEED SHALL BE DELIVERED TO THE PROJECT IN BAGS WITH SEED TAGS ATTACHED. THE TAGS WILL BE COLLECTED FROM THE BAGS AND GIVEN TO THE ENGINEER DURING SEEDING.
6. MAINTENANCE: MAINTAIN AND ESTABLISH TURF FOR 45 DAYS BY WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING, REPLANTING AND PERFORMING OTHER OPERATIONS AS REQUIRED TO ESTABLISH HEALTHY, VIABLE TURF. ROLL, REGRADE AND REPLANT BARE OR ERODED AREAS AND REMULCH TO PRODUCE A UNIFORMLY SMOOTH TURF. PROVIDE MATERIALS AND INSTALLATION THE SAME AS THOSE USED IN THE ORIGINAL INSTALLATION. FILL IN AS NECESSARY SOIL SUBSIDENCE THAT MAY OCCUR BECAUSE OF SETTLING OR OTHER PROCESSES. REPLACE MATERIALS AND TURF DAMAGED OR LOST IN AREAS OF SUBSIDENCE.
7. BARE SPOTS OR LOCATIONS OF EROSION SHALL BE RE-SEEDING AND MAINTAINED BY THE CONTRACTOR FOR AN ADDITIONAL 45 DAYS AND UNTIL THE AREA HAS MET THE VEGETATIVE COVER REQUIREMENT OF 70% OF THE NATIVE COVER. THIS ADDITIONAL MATERIAL AND LABOR SHALL BE AT NO ADDITIONAL COST TO THE OWNER.
8. SEED WILL BE MEASURED AND PAID FOR IN ACCORDANCE WITH THE SD STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES SECTION 730.4 AND 730.5.

FERTILIZING	
-------------	--

1. THE CONTRACTOR SHALL APPLY AN ALL-NATURAL SLOW RELEASE FERTILIZER PRIOR TO SEEDING OR PLACING SOD. THE ALL-NATURAL FERTILIZER SHALL HAVE A MINIMUM GUARANTEED ANALYSIS OF 4-6-4 AND BE USDA CERTIFIED BIOBASED. IT SHOULD PROVIDE A MINIMUM OF 4% (N) NITROGEN WITH A MINIMUM WATER INSOLUBLE NITROGEN (WIN) FRACTION OF 3.2%. A MINIMUM OF 6% (P2O5) AVAILABLE PHOSPHATE, A MINIMUM OF 4% (K2O) SOLUBLE POTASH, AND A MAXIMUM CARBON TO NITROGEN RATIO (C:N RATIO) OF 5:1. THE ALL-NATURAL FERTILIZER SHALL BE FREE OF WEED-SEED AND PATHOGENS ACCOMPLISHED THROUGH THERMOPHILIC COMPOSTING, AND NOT MECHANICAL OR CHEMICAL STERILIZATION, TO ASSURE PRESENCE OF BENEFICIAL SOIL MICROBIOLOGY. THE FERTILIZER SHALL HAVE A NEAR NEUTRAL PH, A LOW SALT INDEX, A LOW BIOLOGICAL OXYGEN DEMAND, CONTAIN ORGANIC HUMIC AND FULVIC ACIDS, AND HAVE HIGH AEROBIC ORGANISM COUNTS. THE FERTILIZER SHALL ALSO BE STABLE, FREE OF BAD ODORS, AND BE UNATTRACTIVE AS A FOOD SOURCE FOR ANIMALS. IT SHOULD ALSO BE IN A GRANULAR FORM THAT IS EASILY SPREAD.
2. THE APPLICATION RATE IS 34 POUNDS PER 1,000 SQUARE FEET.
3. MAINTENANCE: BARE SPOTS OR LOCATIONS OF EROSION SHOULD BE RE-SEED AT NO ADDITIONAL COST TO THE CITY.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
 Also known as an Erosion and Sediment Control Plan (ESCP)

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

Also known as an Erosion and Sediment Control Plan (ESCP)

APPROVED BY:

I HEREBY CERTIFY THAT THE PLAN SPECIFICATION, OR REPORT WAS PREPARED BY OR UNDER MY DIRECT SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF ILLINOIS.

7113
THEODORE F. SCHULTZ

SIGNATURE

THEODORE F. SCHULTZ

TYPED OR PRINTED NAME

7113

CLIENT PROJECT NO: PINE GLENN FOTH PROJECT NO: 21S100.00
DESIGNED BY: KRM CHECKED BY: TFS DRAWN BY: MLH
LETTING DATE: CAD DATE: 5/2/2022 8:25:31 AM

NO	DATE	BY	REVISION DESCRIPTION
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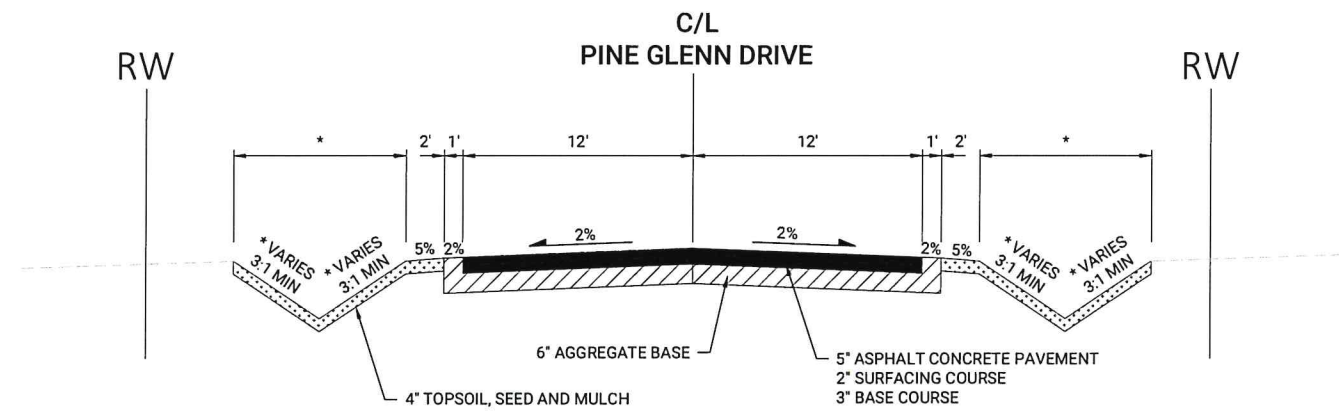
PINE GLENN STREET AND UTILITY IMPROVEMENTS

STURGIS, SOUTH DAKOTA

CIVIL STANDARDS
STORMWATER POLLUTION PREVENTION PLAN

SHEET NO.

G0.04



TYPICAL FINISHED SECTION

* VARIES: REFER TO CROSS SECTIONS
FOR DITCH AND SIDE SLOPES

APPROVED BY:	
I HEREBY CERTIFY THAT THE DESIGN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF SOUTHERN NEBRASKA.	
7113	THEODORE F. SCHULTZ
SIGNATURE: <i>Theodore F. Schultz</i>	
THEODORE F. SCHULTZ	
TYPE OR PRINTED NAME	
DATE: 4/28/2022	REG NO: 7113

CLIENT PROJECT NO:	PINE GLENN	FOTH PROJECT NO:	21S100.00
DESIGNED BY:	KRM	CHECKED BY:	TFS
LETTING DATE:		CAD DATE:	5/2/2022
		DRAWN BY:	MLH
			8:25:39 AM

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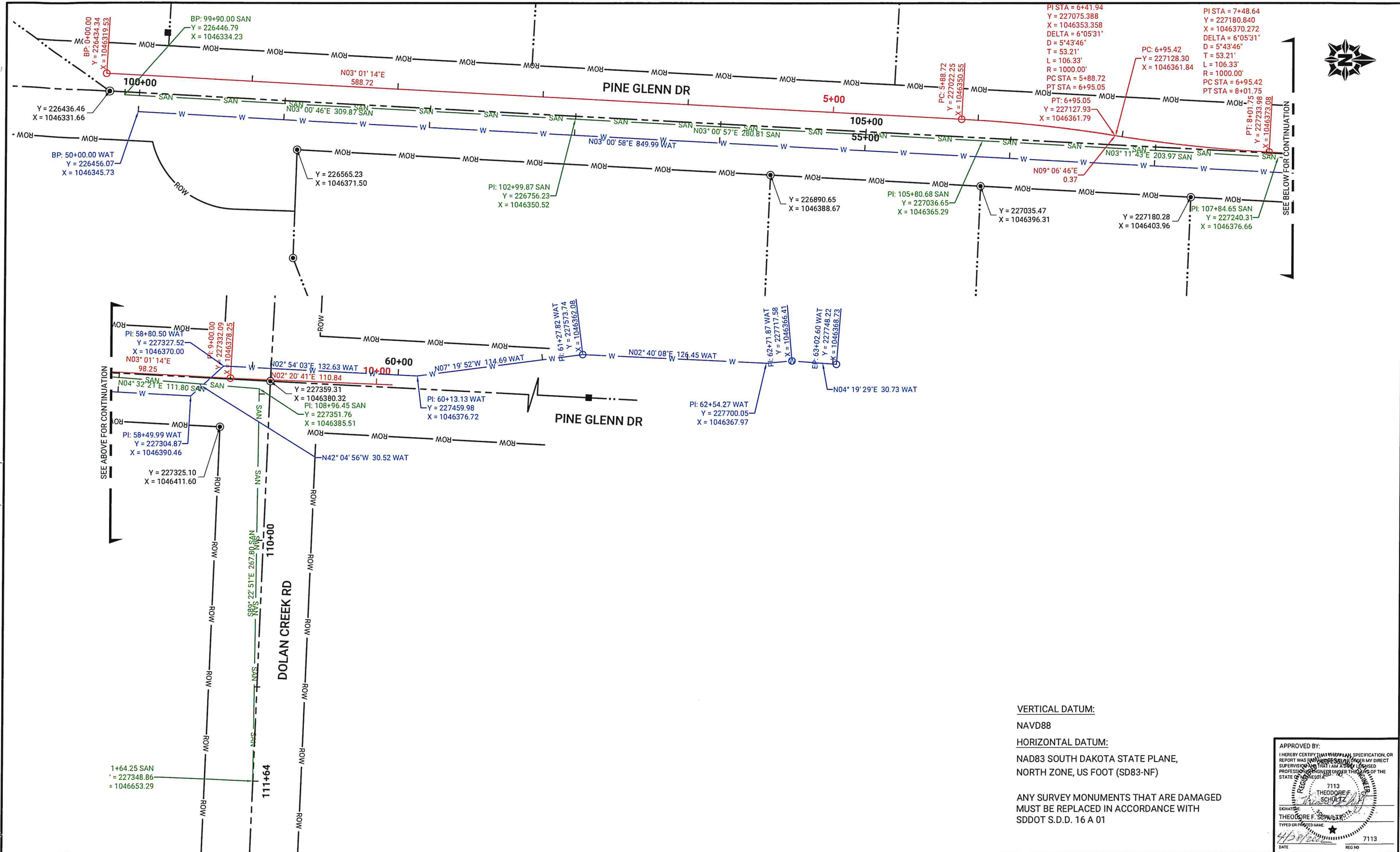
PINE GLENN STREET AND UTILITY IMPROVEMENTS

STURGIS, SOUTH DAKOTA

TYPICAL SECTION

SHEET NO.

C0.01



VERTICAL DATUM:
NAVD88
HORIZONTAL DATUM:
NAD83 SOUTH DAKOTA STATE PLANE,
NORTH ZONE, US FOOT (SD83-NF)

ANY SURVEY MONUMENTS THAT ARE DAMAGED
MUST BE REPLACED IN ACCORDANCE WITH
SDDOT S.D.D. 16 A 01

APPROVED BY:
I HEREBY CERTIFY THAT THE PLAN, SPECIFICATION, OR
REPORT WAS PREPARED OR UNDER MY DIRECT
SUPERVISION AND THAT I AM A duly LICENSED
PROFESSIONAL ENGINEER UNDER THE LAWS OF THE
STATE OF SOUTH DAKOTA

7113
THEODORE F. SCHULTZ
SIGNATURE: *Theodore F. Schultz*
THEODORE F. SCHULTZ
TYPED OR PRINTED NAME
DATE: 4/28/2022 REG NO: 7113

CLIENT PROJECT NO: PINE GLENN	FOTH PROJECT NO: 21S100.00	NO	DATE	BY	REVISION DESCRIPTION		PINE GLENN STREET AND UTILITY IMPROVEMENTS	ALIGNMENT DIAGRAM	SHEET NO. C0.02
DESIGNED BY: KRM	CHECKED BY: TFS	1							
DRAWN BY: MLH		2							
LETTING DATE: CAD DATE: 5/2/2022	8:25:45 AM	3							
		4							



TRAFFIC REQUIREMENTS FIGURE
NOT TO SCALE

GENERAL NOTES

1. CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLAN 2 WEEKS PRIOR TO START OF CONSTRUCTION. PLAN SHALL MEET THE SOUTH DAKOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (SDMUTCD).
2. THE SUBMITTED TRAFFIC CONTROL PLAN SHALL IDENTIFY SIDEWALK AND TRAIL CLOSURE SIGNS AND BARRICADES.
3. MAINTAIN EMERGENCY ACCESS AT ALL TIMES.
4. CONTRACTOR RESPONSIBLE FOR RESTORING ANY DAMAGES TO SITE ACCESS ROUTES.
5. CONTRACTOR SHALL PROVIDE ACCESS TO RESIDENCES AT THE END OF EACH WORKING DAY.
6. CONTRACTOR SHALL REQUEST "NO PARKING" SIGNS FROM THE CITY OF STURGIS TRAFFIC DEPARTMENT NO LESS THAN 5 BUSINESS DAYS PRIOR TO ENFORCEMENT.
7. CONTRACTOR SHALL PROVIDE 12-24 HOUR NOTICE PRIOR TO TEMPORARY DRIVEWAY CLOSURE.

LEGEND

- DETOUR ROUTE
- /// ROAD CLOSED TO THRU TRAFFIC
- CONSTRUCTION HAUL ROUTE

PHASING NOTES:

PHASE 1 - Dolan Creek Sanitary Sewer Main:

Close Dolan Creek Road. Maintain single lane at Butte View Drive/Dolan Creek Rd with stop sign each way. Allow one lane for traffic in each direction. Provide detour signage to direct traffic from the west to route to Glenn Dr. and Butte View Dr. Open Dolan Creek Rd. upon completion of sewer main and open with gravel surface to two-way traffic.

PHASE 2 - Pine Glenn Dr./Meadow Dr. Water Main:

Close intersection of Pine Glenn Dr./Meadow Dr. and provide Meadow Dr. detour. Upon completion of the water main at Meadow Dr. open the intersection with gravel surface to two-way traffic and continue water main to the west.

PHASE 3 - Pine Glenn Dr./Dolan Creek Rd. West & East:

Close the intersection of Pine Glenn Dr./West Dolan Creek Rd. and provide a detour for Dolan Creek Rd. Provide east Dolan Creek Rd. detour to Butte View Dr. Upon completion of water main open the intersection with gravel surface to two-way traffic and continue water main to the west. Maintain single lane access to the south Pine Glenn Dr. residents. Provide the appropriate detours and single lane signage as trenching allows.

PHASE 4 - Pine Glenn Dr. South/Dolan Creek Rd.:

Maintain single lane access on Pine Glenn Dr. south and north and access to a single lane on Dolan Creek as trenching allows. Provide the appropriate detours and single lane signage.

PHASE 1-4 Paving

Upon completion of all utility trenching, testing and granular placement perform asphalt concrete paving mobilization and complete utility patching on Dolan Creek Rd. and North Pine Glenn Dr. and reopen to traffic. Salvage granular material from these phases for use and incorporation into the Pine Glenn granular base in Phase 5

PHASE 5 - South Pine Glenn Dr. Grading

Provide single lane access on the existing gravel surfacing on Pine Glenn South. Upon completion of utilities install the east lane granular material and salvage existing gravel from Pine Glenn for incorporation into the granular base. Provide a single lane of access on south Pine Glenn for the project. Complete asphalt concrete mobilization for Phase 5 upon completion of granular base.

PHASE 5 - Paving

Switch lanes as required to allow access as possible during paving activities.

APPROVED BY:

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7113
THEODORE F. SCHULTZ
DATE: 4/28/2022
REG NO: 7113

CLIENT PROJECT NO: PINE GLENN FOTH PROJECT NO: 21S100.00
DESIGNED BY: KRM CHECKED BY: TFS DRAWN BY: MLH
LETTING DATE: CAD DATE: 5/2/2022 8:25:51 AM

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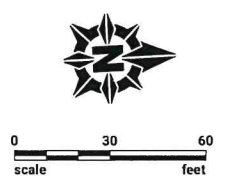
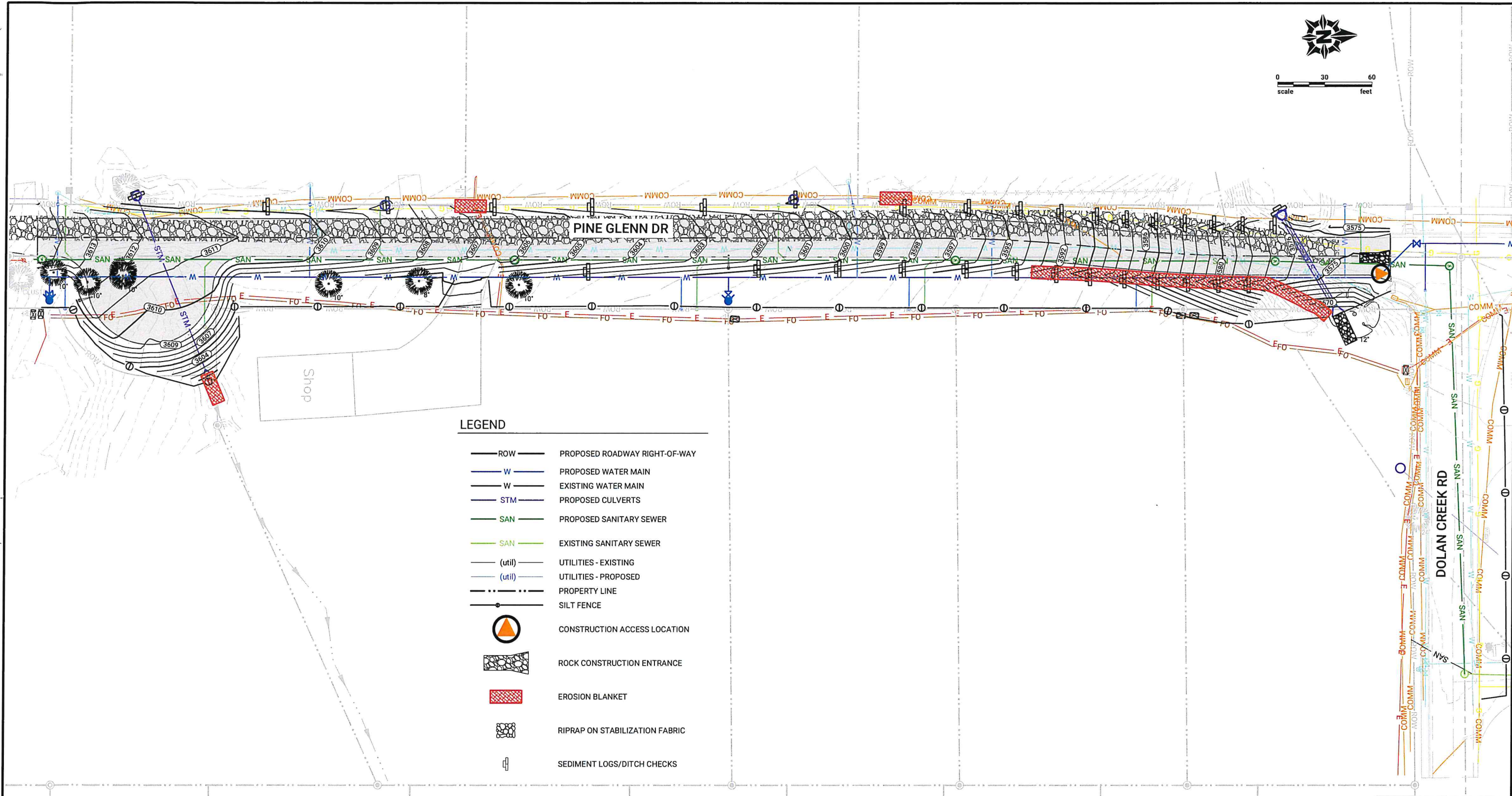
PINE GLENN STREET AND UTILITY IMPROVEMENTS

STURGIS, SOUTH DAKOTA

TRAFFIC CONTROL

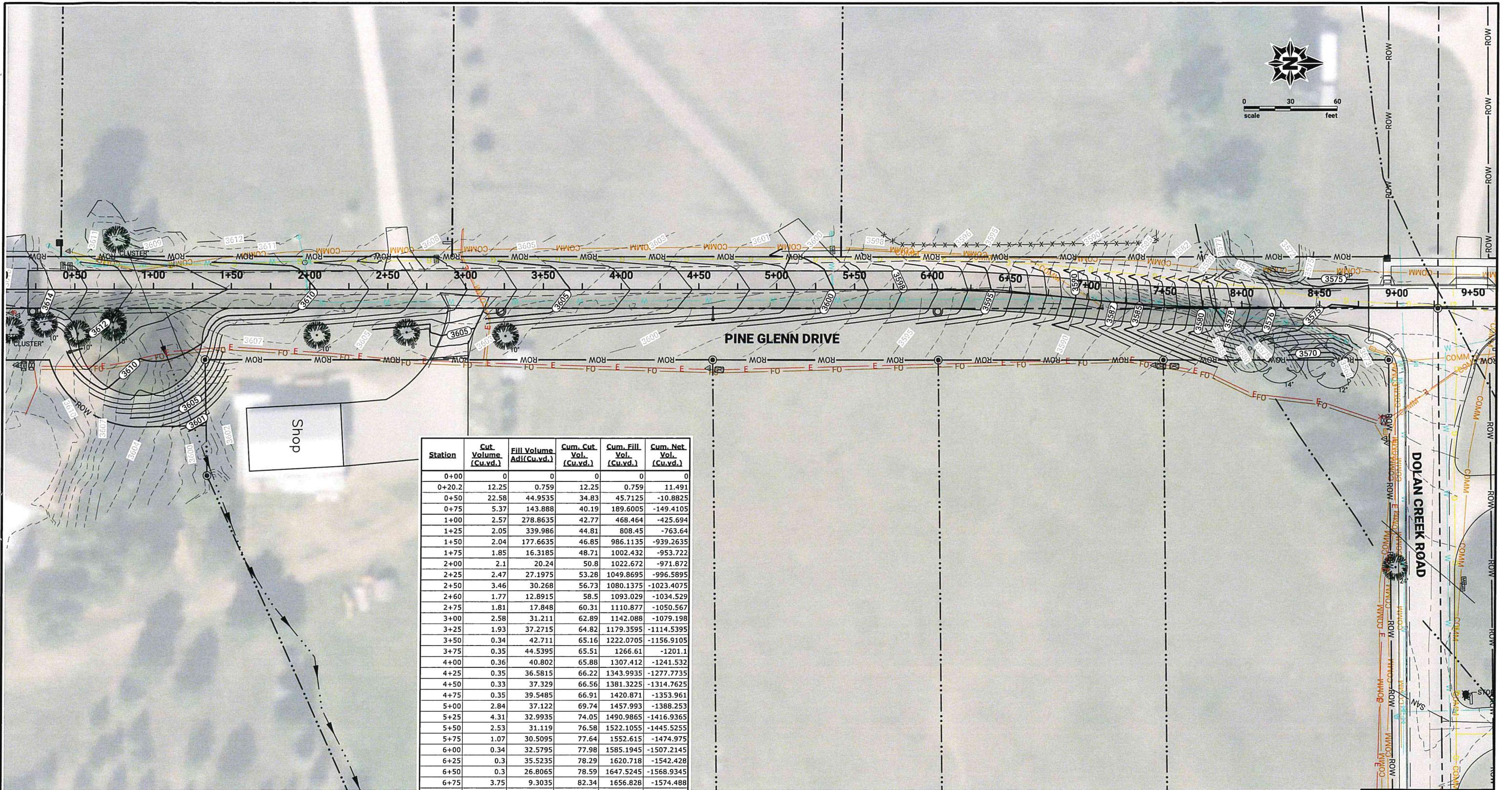
SHEET NO.

C1.01



APPROVED BY:

THEODORE F. SCHULTZ
7113
THEODORE F. SCHULTZ
7113



Station	Cut Volume (Cu.yd.)	Fill Volume Adj (Cu.yd.)	Cum. Cut Vol. (Cu.yd.)	Cum. Fill Vol. (Cu.yd.)	Cum. Net Vol. (Cu.yd.)
0+00	0	0	0	0	0
0+20.2	12.25	0.759	12.25	0.759	11.491
0+50	22.58	44.9535	34.83	45.7125	-10.8825
0+75	5.37	143.888	40.19	189.6005	-149.4105
1+00	2.57	278.8635	42.77	468.464	-425.694
1+25	2.05	339.986	44.81	808.45	-763.64
1+50	2.04	177.6635	46.85	986.1135	-939.2635
1+75	1.85	16.3185	48.71	1002.432	-953.722
2+00	2.1	20.24	50.8	1022.672	-971.872
2+25	2.47	27.1975	53.28	1049.8695	-996.5895
2+50	3.46	30.268	56.73	1080.1375	-1023.4075
2+60	1.77	12.8915	58.5	1093.029	-1034.529
2+75	1.81	17.848	60.31	1110.877	-1050.567
3+00	2.58	31.211	62.89	1142.088	-1079.198
3+25	1.93	37.2715	64.82	1179.3595	-1114.5395
3+50	0.34	42.711	65.16	1222.0705	-1156.9105
3+75	0.35	44.5395	65.51	1266.61	-1201.1
4+00	0.36	40.802	65.88	1307.412	-1241.532
4+25	0.35	36.5815	66.22	1343.9935	-1277.7735
4+50	0.33	37.329	66.56	1381.3225	-1314.7625
4+75	0.35	39.5485	66.91	1420.871	-1353.961
5+00	2.84	37.122	69.74	1457.993	-1388.253
5+25	4.31	32.9935	74.05	1490.9865	-1416.9365
5+50	2.53	31.119	76.58	1522.1055	-1445.5255
5+75	1.07	30.5095	77.64	1552.615	-1474.975
6+00	0.34	32.5795	77.98	1585.1945	-1507.2145
6+25	0.3	35.5235	78.29	1620.718	-1542.428
6+50	0.3	26.8065	78.59	1647.5245	-1568.9345
6+75	3.75	9.3035	82.34	1656.828	-1574.488
7+00	21.25	0.6555	103.6	1657.4835	-1553.8835
7+25	63.96	0.023	167.56	1657.5065	-1489.9465
7+50	128.3	0	295.85	1657.5065	-1361.6565
7+75	186.61	0	482.46	1657.5065	-1175.0465
8+00	123.03	0.0345	605.5	1657.541	-1052.041
8+25	27.89	26.887	633.39	1684.428	-1051.038
8+50	22.1	48.1045	655.49	1732.5325	-1077.0425
8+75	28.54	21.252	684.04	1753.7845	-1069.7445
8+81.83	7.5	0	691.53	1753.7845	-1062.2545
9+00	8.43	0	699.96	1753.7845	-1053.8245

APPROVED BY:
I HEREBY CERTIFY THAT THE PLAN SPECIFICATION, OR REPORT WAS REVIEWED AND APPROVED BY MY DIRECT SUPERVISOR AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE BOARD OF THE STATE OF SOUTH DAKOTA.
7113
THEODORE F. SCHULTZ
7113
THEODORE F. SCHULTZ
7113
7113

CLIENT PROJECT NO: PINE GLENN FOTH PROJECT NO: 21S100.00
DESIGNED BY: KRM CHECKED BY: TFS DRAWN BY: MLH
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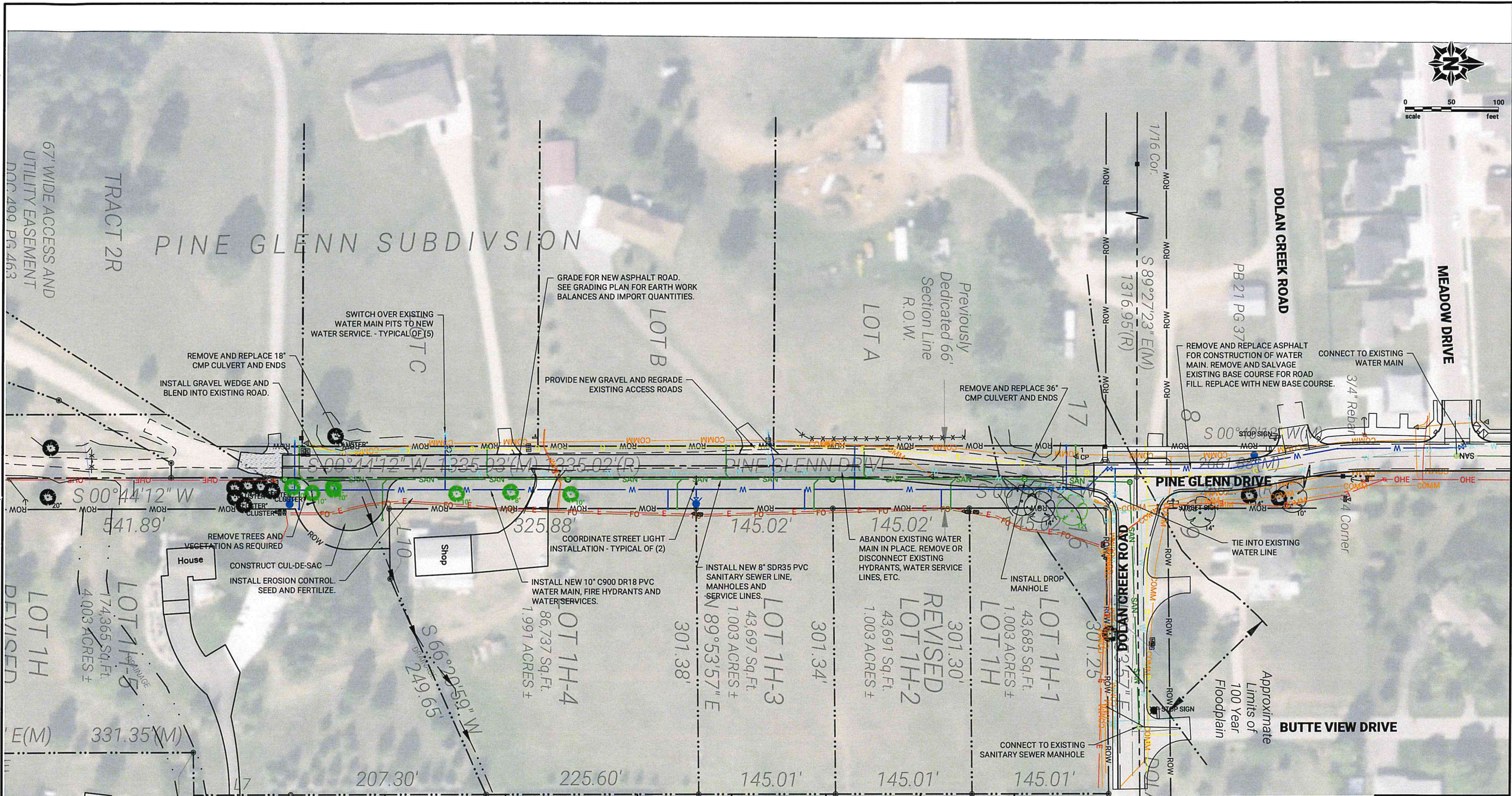


PINE GLENN STREET AND UTILITY IMPROVEMENTS

STURGIS, SOUTH DAKOTA

CIVIL SITE
GRADING PLAN

SHEET NO.
C1.03



APPROVED BY:
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A duly LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF SOUTH DAKOTA.

7113
THEODORE F. SCHUBERT
4/28/2022

DATE: 4/28/2022 REG NO: 7113

CLIENT PROJECT NO: PINE GLENN FOTH PROJECT NO: 21S100.00
DESIGNED BY: KRM CHECKED BY: TFS DRAWN BY: MLH
LETTING DATE: CAD DATE: 5/2/2022 8:26:24 AM

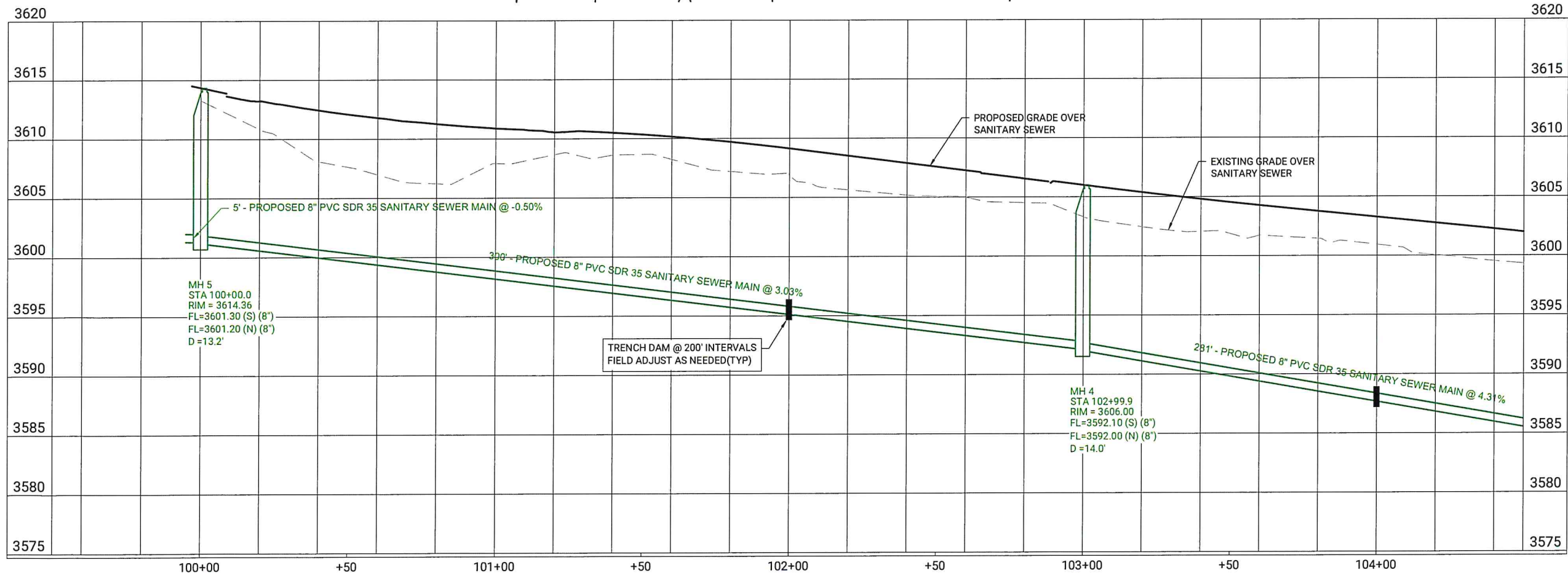
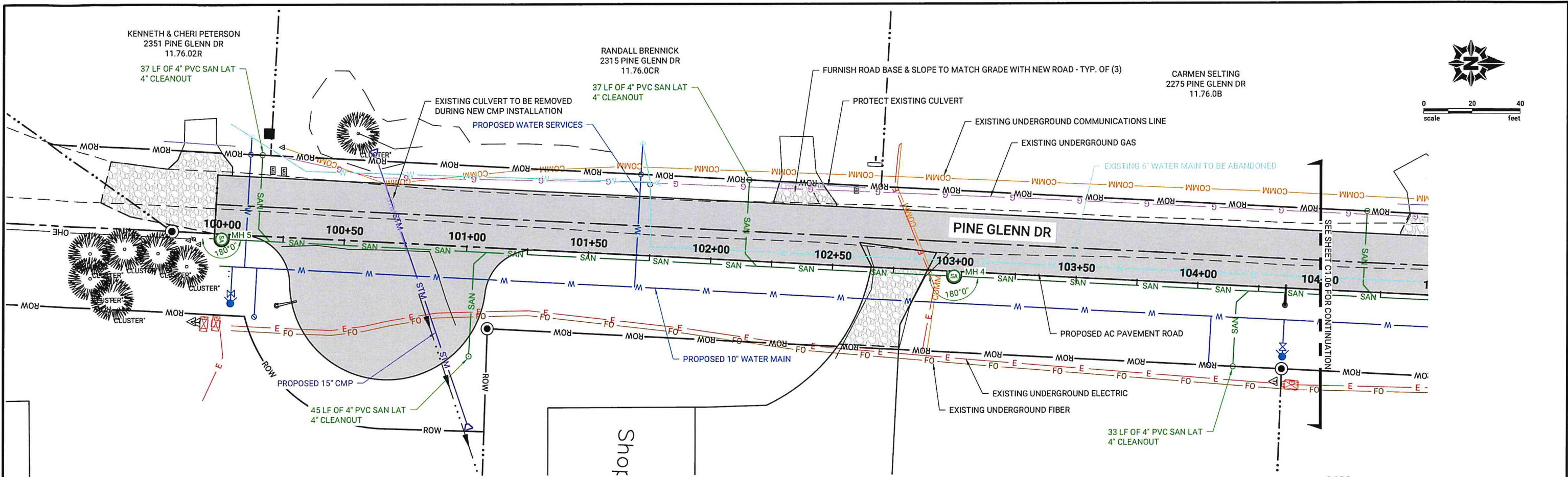
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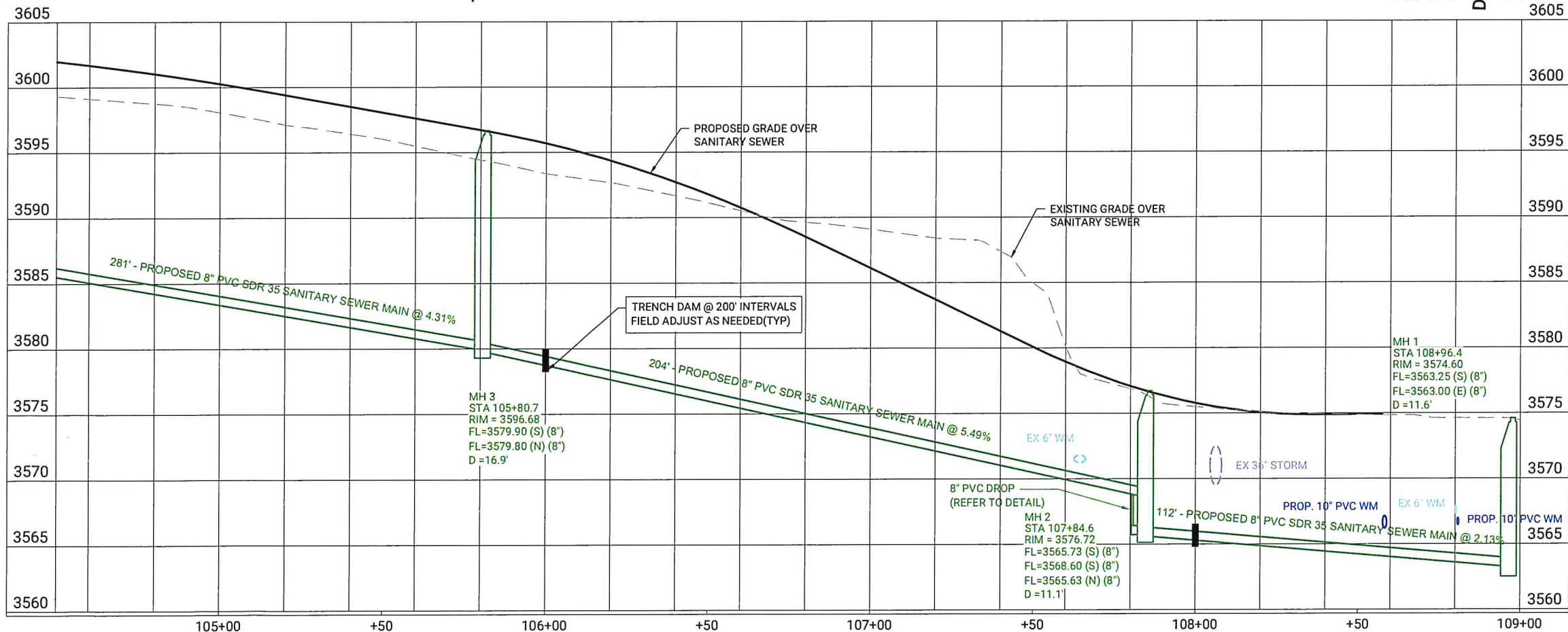
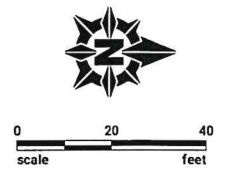
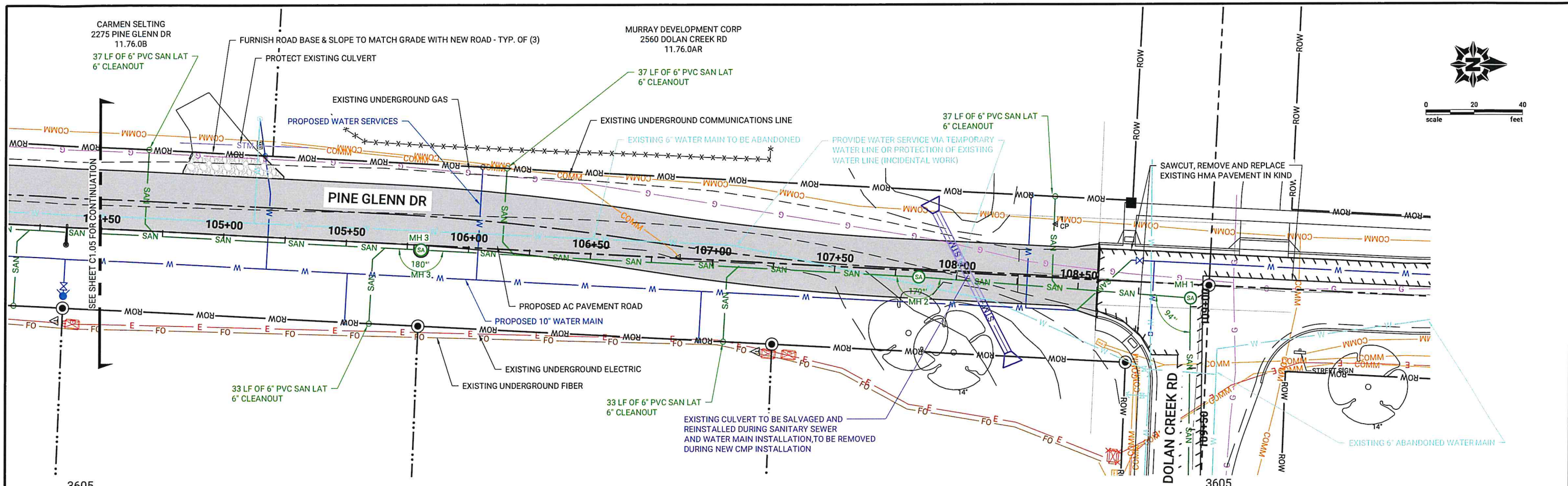


PINE GLENN STREET AND UTILITY IMPROVEMENTS
STURGIS, SOUTH DAKOTA

CIVIL SITE
SITE PLAN

SHEET NO.
C1.04





APPROVED BY:
 I HEREBY CERTIFY THAT THE DESIGN, SPECIFICATION, OR REPORT WAS PREPARED BY OR UNDER MY DIRECT SUPERVISION AND THAT I AM A duly LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF SOUTH DAKOTA.
 REG. NO. 7113
 SIGNATURE: Theodore F. Schultz
 THEODORE F. SCHULTZ
 TYPED OR PRINTED NAME
 DATE: 4/28/2022
 REG. NO. 7113

CLIENT PROJECT NO: PINE GLENN FOTH PROJECT NO: 21S100.00
 DESIGNED BY: KRM CHECKED BY: TFS DRAWN BY: MLH
 LETTING DATE: CAD DATE: 12/10/2021 9:50:53 AM

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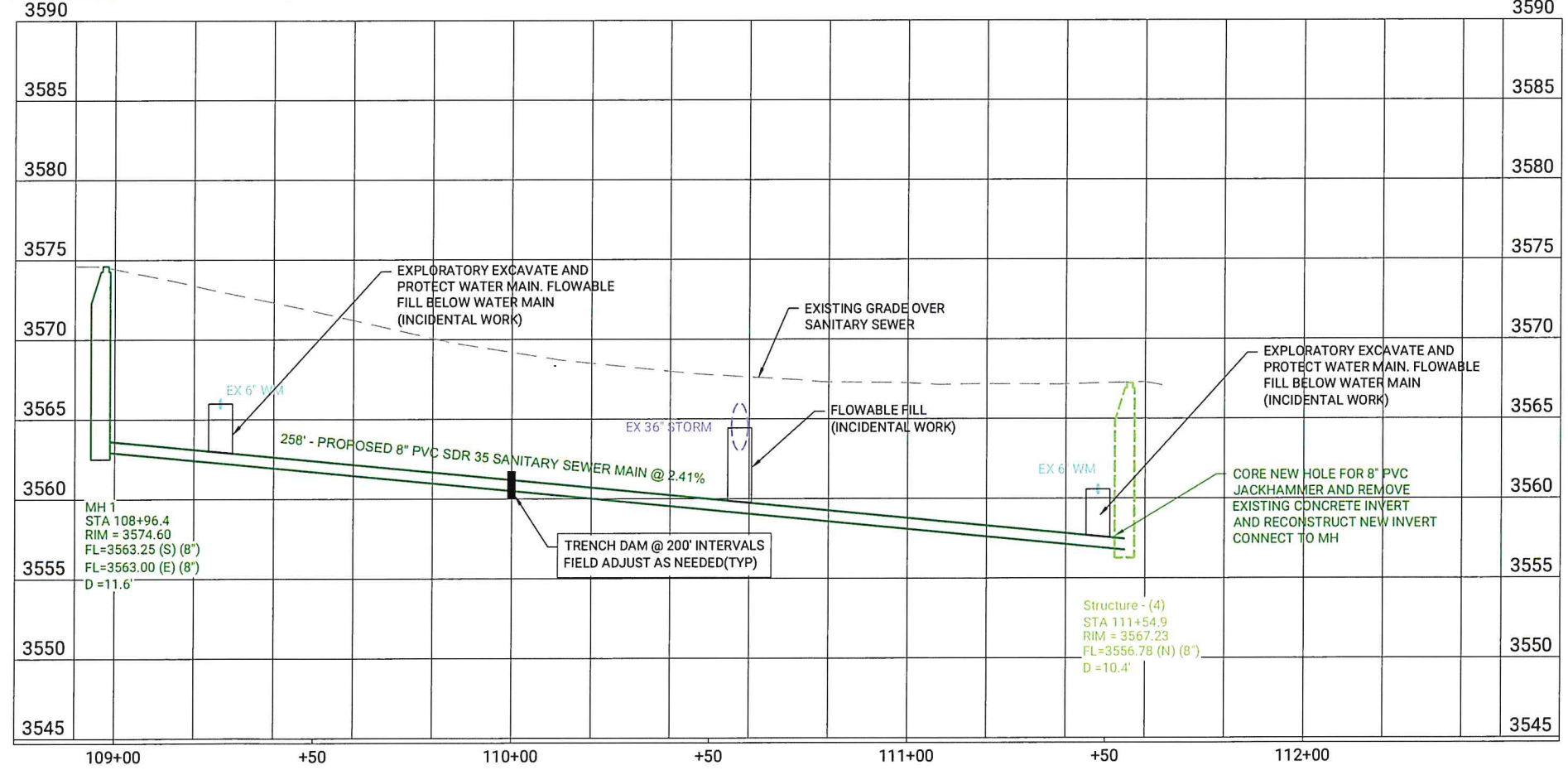
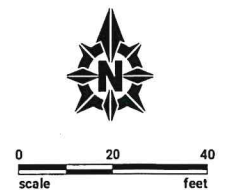
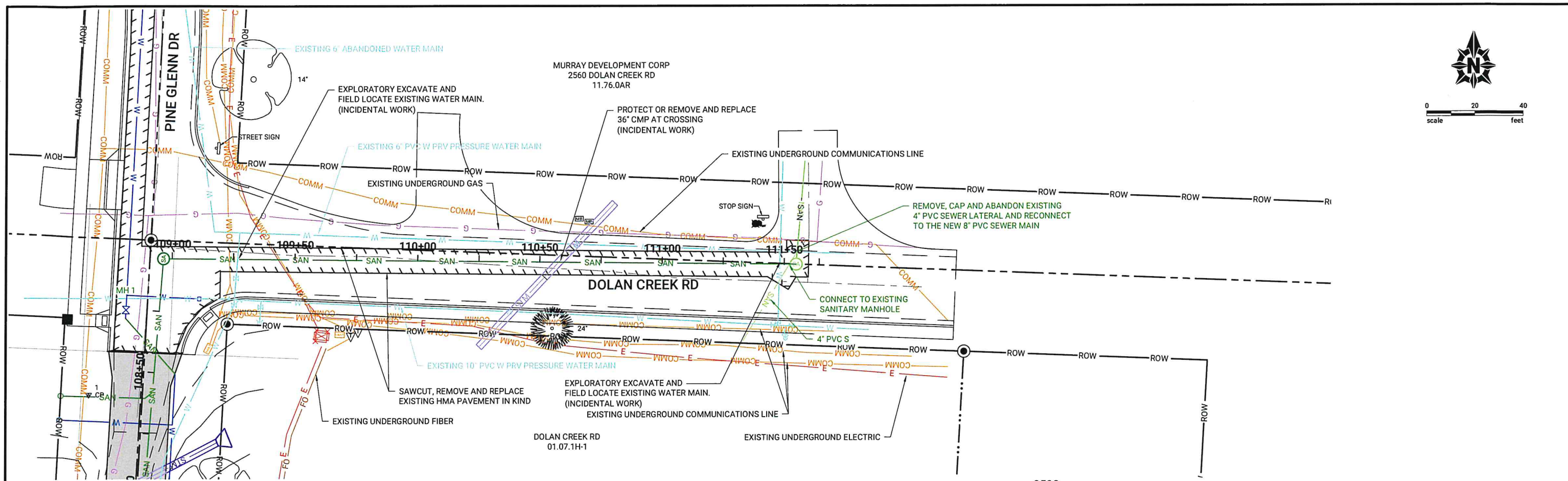


PINE GLENN STREET AND UTILITY IMPROVEMENTS

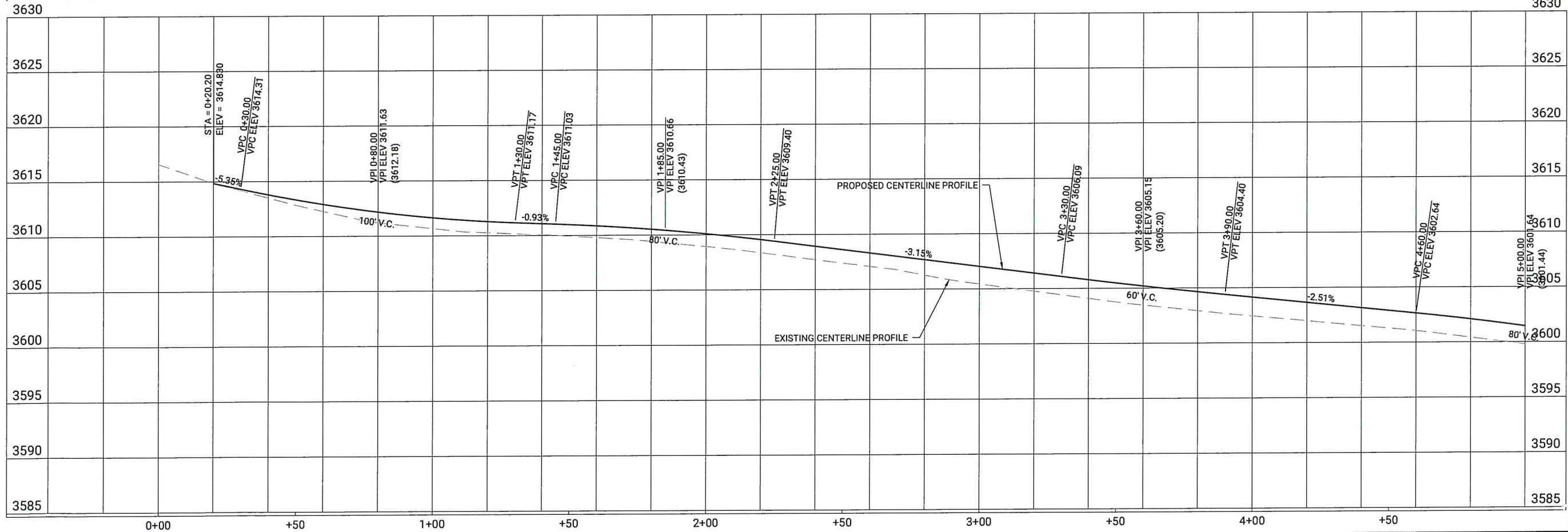
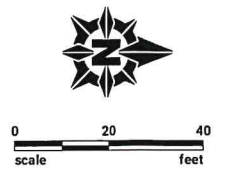
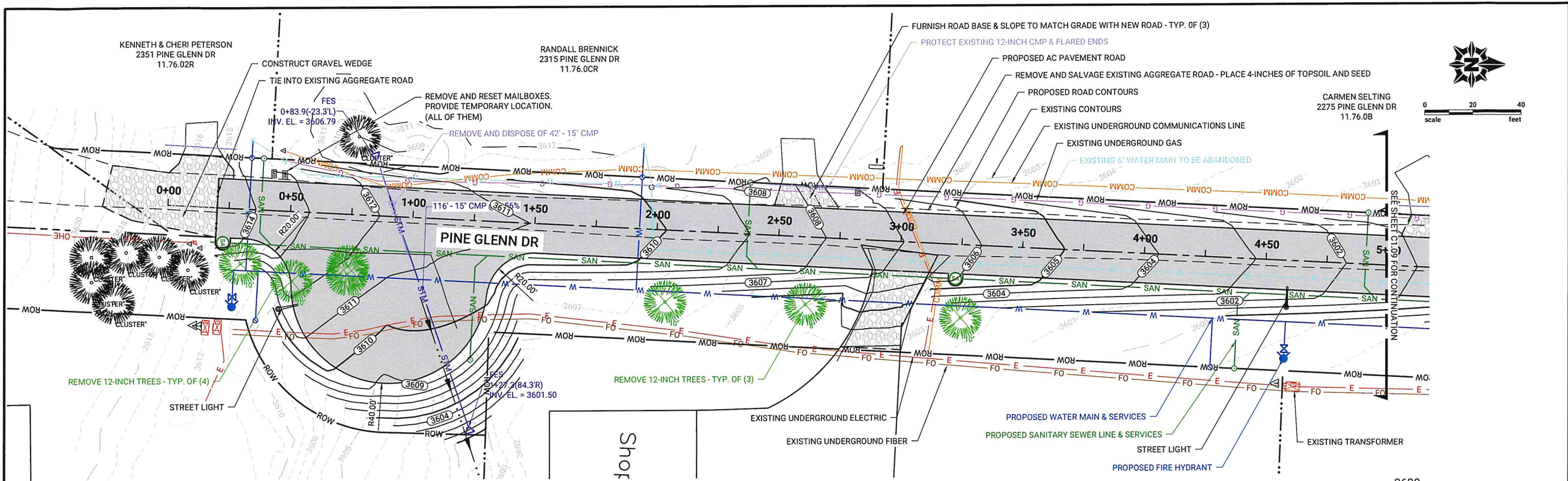
STURGIS, SOUTH DAKOTA

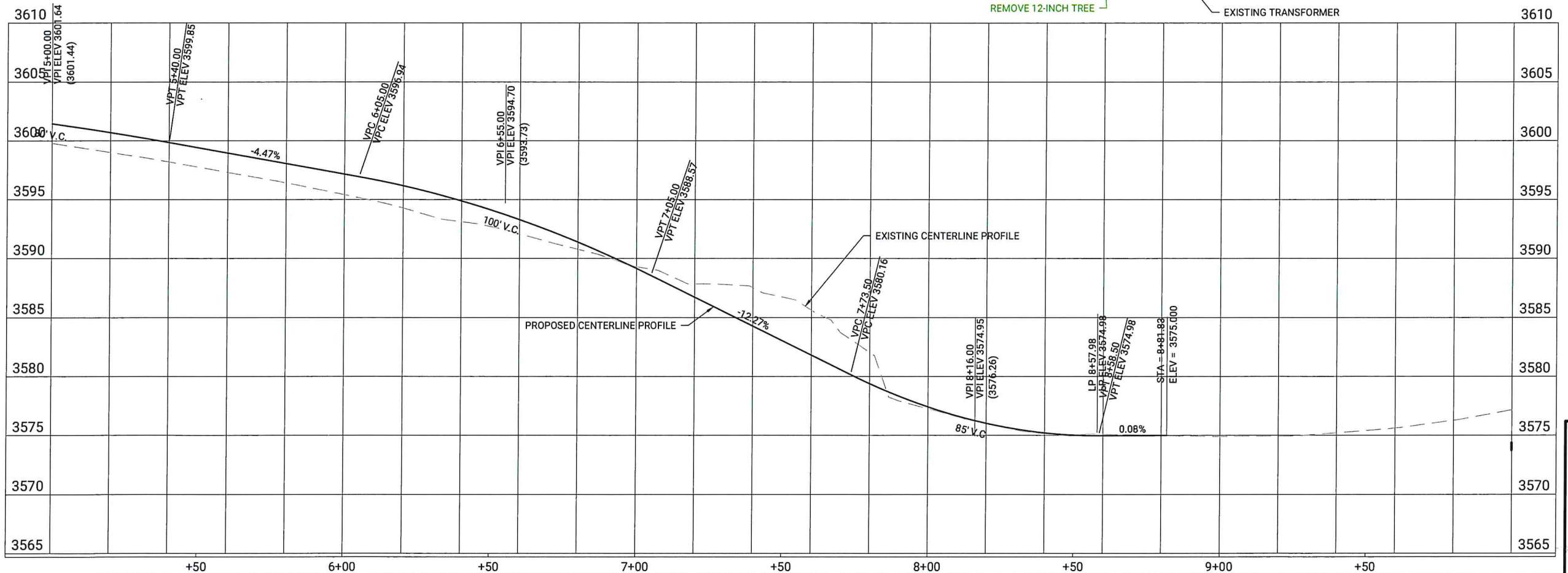
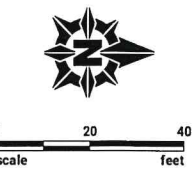
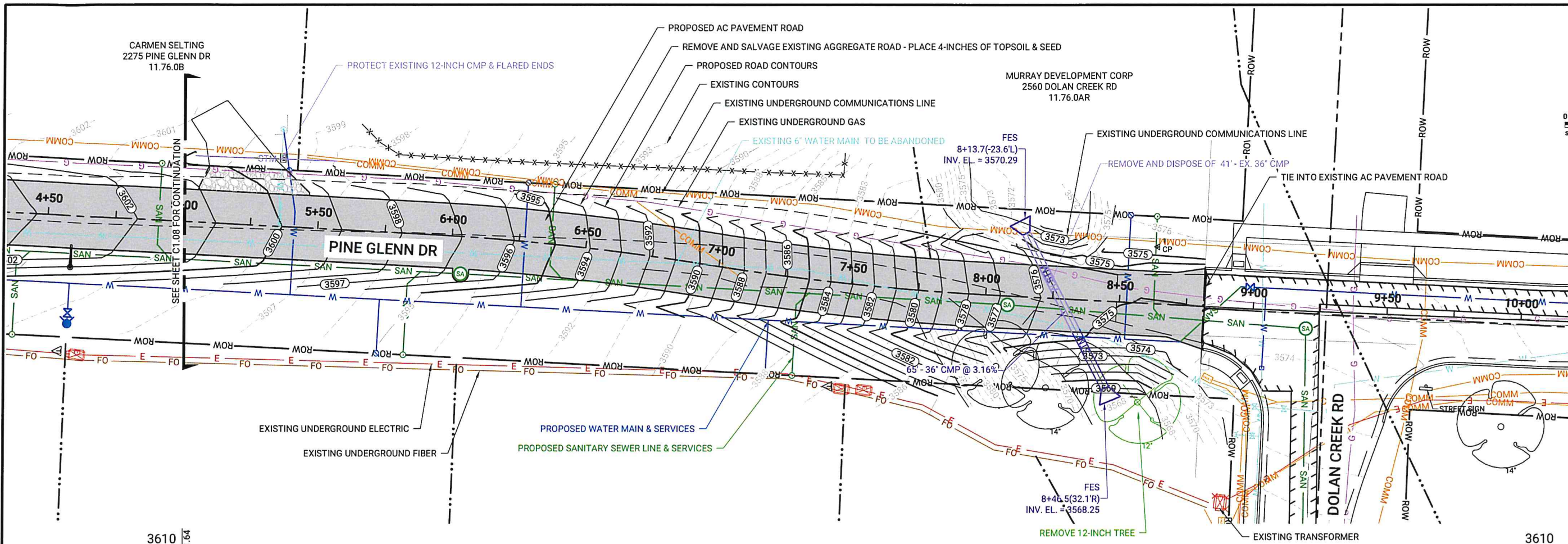
PINE GLENN DRIVE SANITARY SEWER PLAN PROFILE

SHEET NO.
C1.06



APPROVED BY: [Signature]
 I HEREBY CERTIFY THAT THE DESIGN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF SOUTH DAKOTA.
 REG. NO. 7113
 SIGNATURE: THEODORE F. SCHULTZ
 TYPED OR PRINTED NAME: THEODORE F. SCHULTZ
 DATE: 4/28/2021
 REG. NO. 7113





APPROVED BY:
 I HEREBY CERTIFY THAT THE DESIGN, SPECIFICATION, OR REPORT WAS REVIEWED AND APPROVED BY MY DIRECT SUPERVISOR OR THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF SOUTH DAKOTA.
 7113
 THEODORE F. SCHULTZ
 SIGNATURE
 THEODORE F. SCHULTZ
 TYPED OR PRINTED NAME
 DATE 4/28/2021 REG NO 7113

CLIENT PROJECT NO: PINE GLENN FOTH PROJECT NO: 21S100.00
 DESIGNED BY: KRM CHECKED BY: TFS DRAWN BY: MLH
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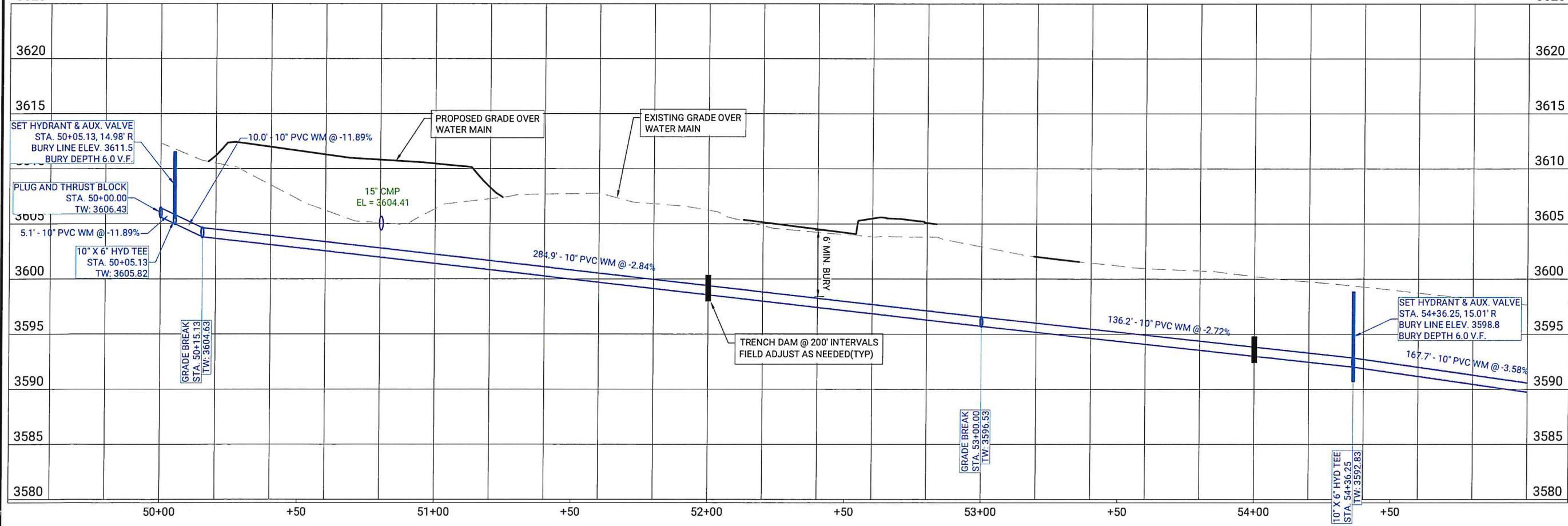
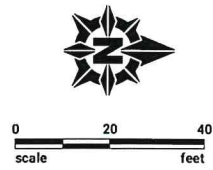
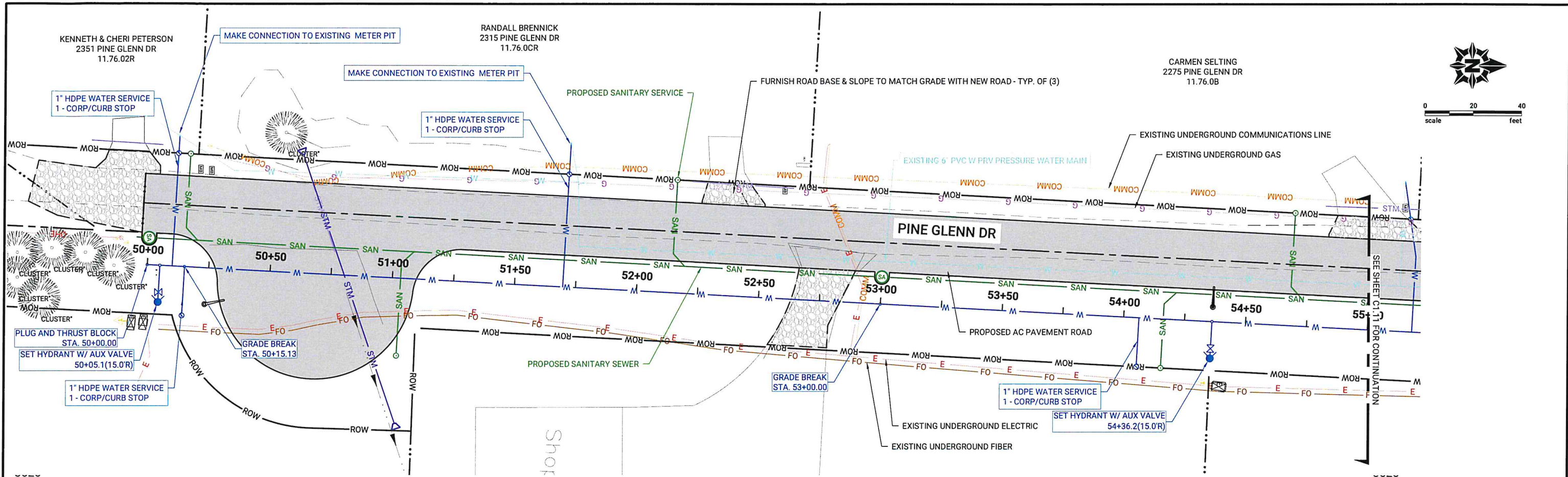
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PINE GLENN STREET AND UTILITY IMPROVEMENTS
 STURGIS, SOUTH DAKOTA

**PINE GLENN DRIVE
 ROADWAY PLAN PROFILE**

SHEET NO.
C1.09



APPROVED BY:
I HEREBY CERTIFY THAT THE PLAN SPECIFICATION OR
REPORT WAS PREPARED BY OR UNDER MY DIRECT
SUPERVISION AND THAT I AM A duly LICENSED
PROFESSIONAL ENGINEER UNDER THE SEALS OF THE
STATE OF SOUTHERN CALIFORNIA.

7113
THEODORE F. SCHULTZ

SIGNATURE
THEODORE F. SCHULTZ

TYPED OR PRINTED NAME
THEODORE F. SCHULTZ

DATE
4/28/2021

REG NO
7113

CLIENT PROJECT NO:	PINE GLENN	FOTH PROJECT NO:	21S100.00
DESIGNED BY:	KRM	CHECKED BY:	TFS
LETTING DATE:		CAD DATE:	12/10/2021
		DRAWN BY:	MLH
			9:18:31 AM

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PINE GLENN STREET AND UTILITY IMPROVEMENTS

STURGIS, SOUTH DAKOTA

**PINE GLENN DRIVE
WATER MAIN PLAN PROFILE**

SHEET NO.
C1.10

CARMEN SELTING
2275 PINE GLENN DR
11.76.0B

MAKE CONNECTION TO EXISTING METER PIT

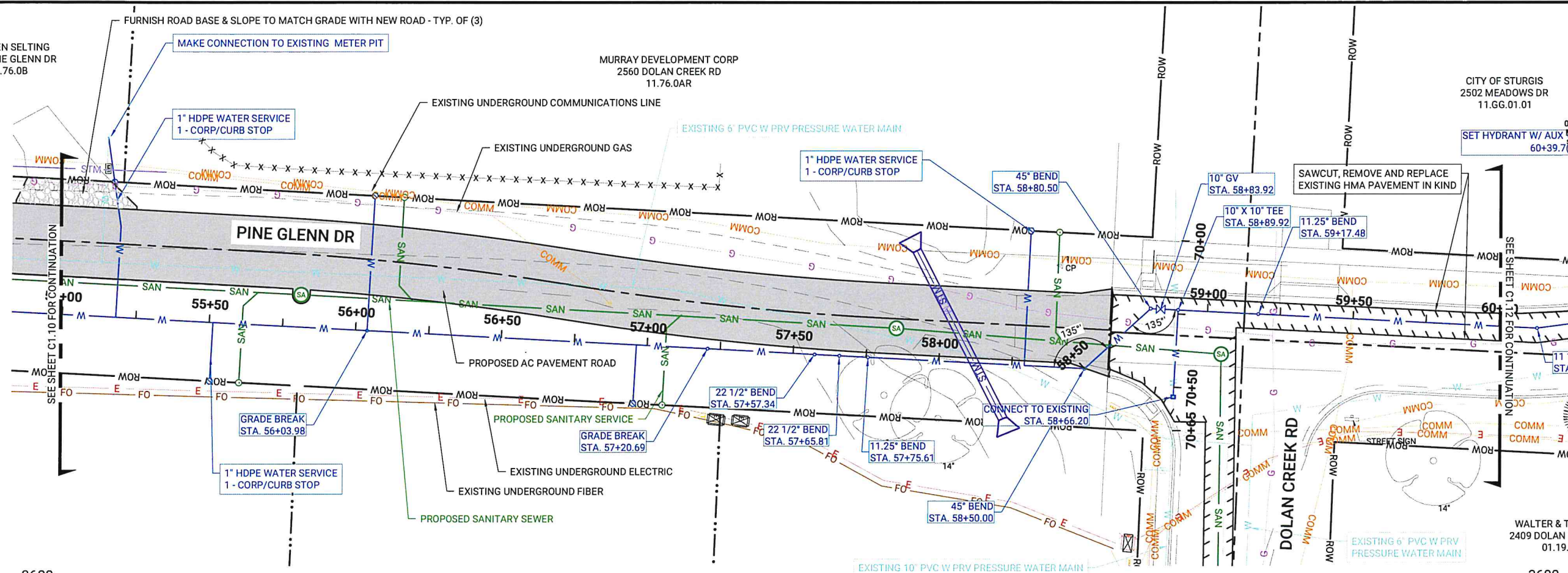
MURRAY DEVELOPMENT CORP
2560 DOLAN CREEK RD
11.76.0AR

CITY OF STURGIS
2502 MEADOWS DR
11.66.01.01

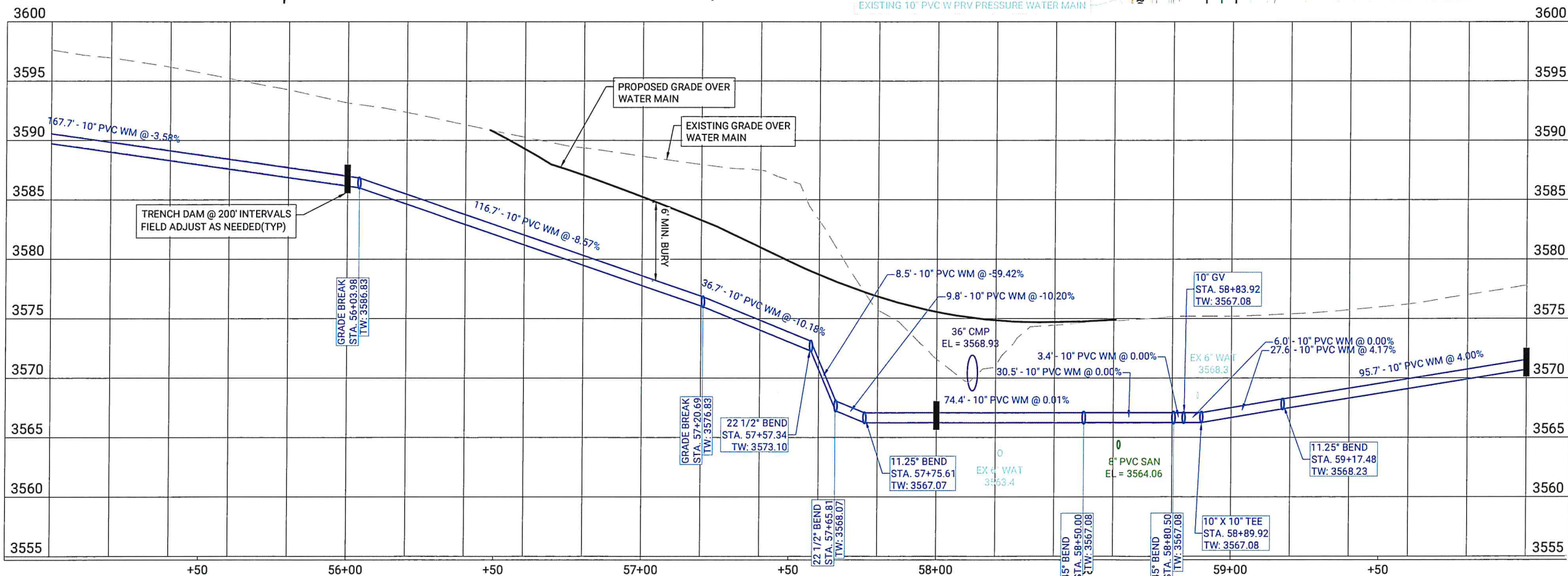


0 20 40
feet

SET HYDRANT W/ AUX
60+39.7



WALTER & TINA COX
2409 DOLAN CREEK RD
01.19.06



APPROVED BY:
I HEREBY CERTIFY THAT THE DESIGN, SPECIFICATION, OR
REPORT WAS PREPARED BY ME OR UNDER MY DIRECT
SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL
ENGINEER IN THE STATE OF MINNESOTA.
7113
THEODORE F. SCHULTZ
DATE 4/28/2022 REG NO 7113

CLIENT PROJECT NO: PINE GLENN FOTH PROJECT NO: 21S100.00
DESIGNED BY: KRM CHECKED BY: TFS DRAWN BY: MLH
LETTING DATE: CAD DATE: 12/10/2021 9:23:56 AM

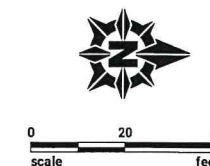
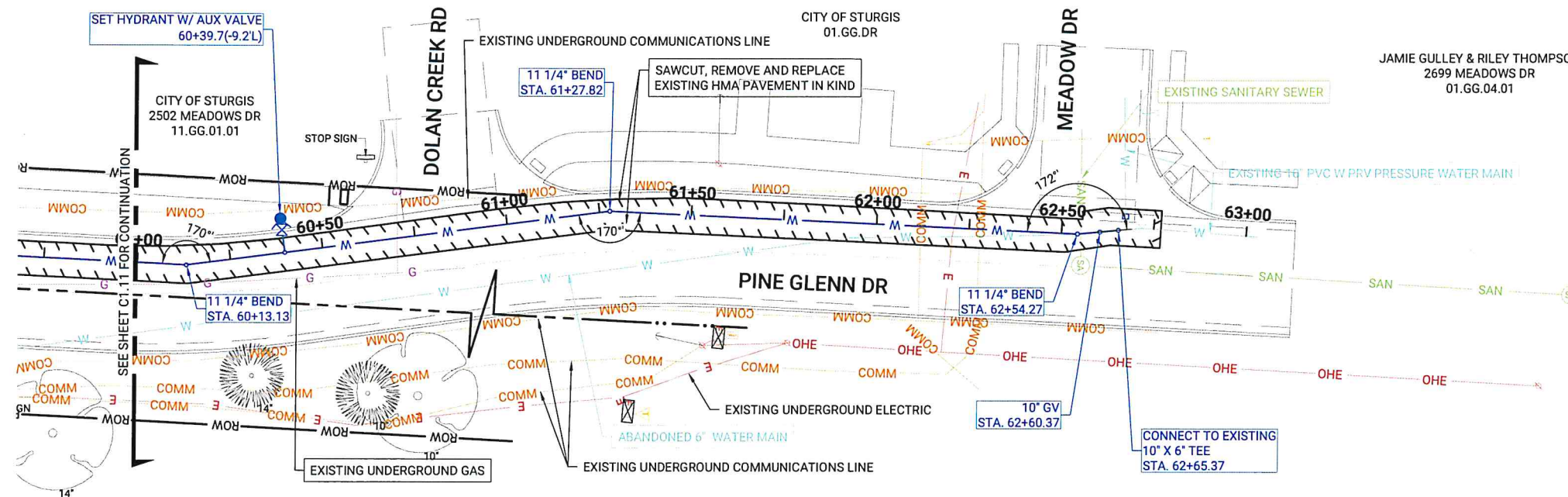
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PINE GLENN STREET AND UTILITY IMPROVEMENTS
STURGIS, SOUTH DAKOTA

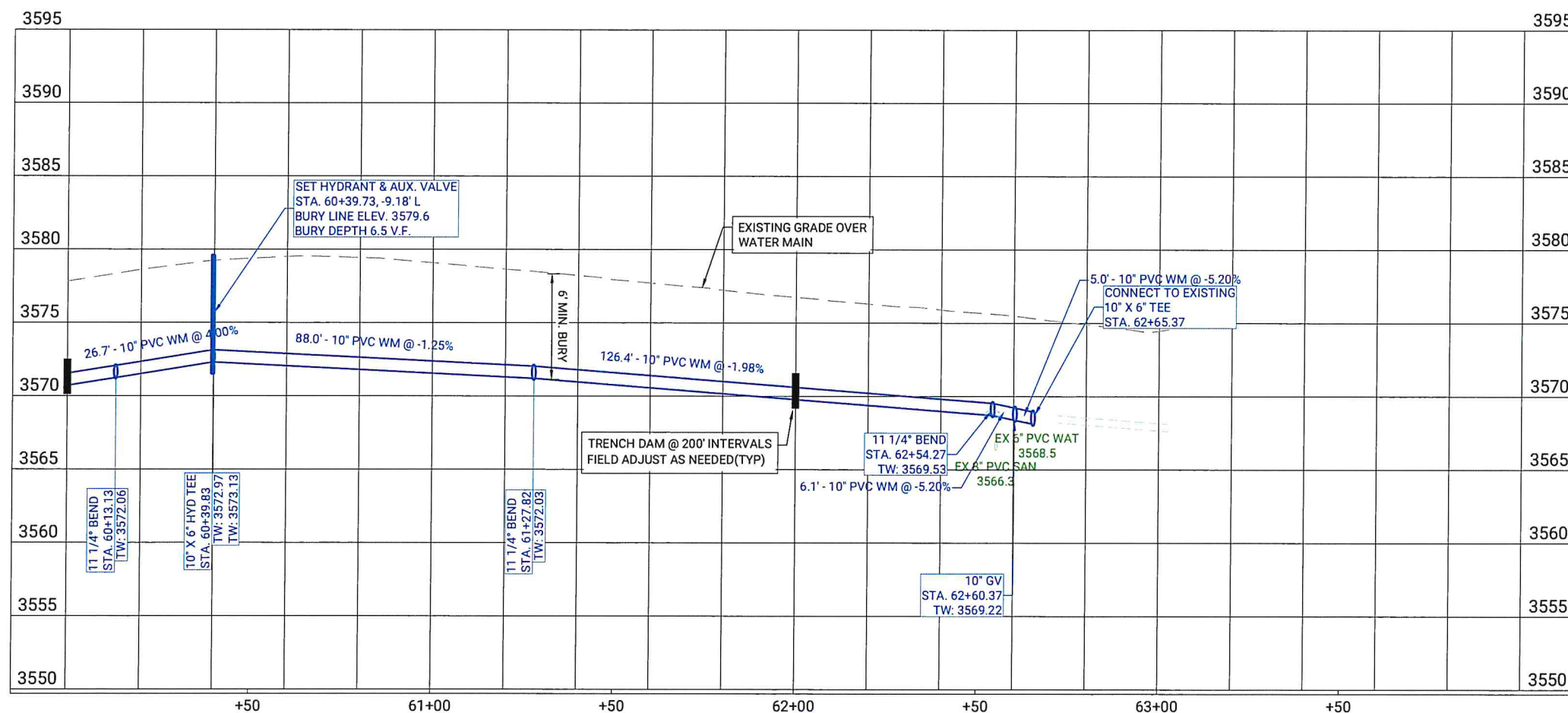
PINE GLENN DRIVE
WATER MAIN PLAN PROFILE

SHEET NO.
C1.11



DONALD DUBBE
2115 BUTTE VIEW DR
01.19.07

TAMERA IVERSON
2011 BUTTE VIEW DR
01.19.18



APPROVED BY: THEODORE F. SCHULTZ
 I HEREBY CERTIFY THAT THE DESIGN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF ILLINOIS.
 SIGNATURE: THEODORE F. SCHULTZ
 TYPED OR PRINTED NAME: THEODORE F. SCHULTZ
 DATE: 4/28/2022
 REG NO: 7113

CLIENT PROJECT NO: PINE GLENN FOTH PROJECT NO: 21S100.00
 DESIGNED BY: KRM CHECKED BY: TFS DRAWN BY: MLH
 LETTING DATE: CAD DATE: 12/10/2021 9:24:31 AM

NO	DATE	BY	REVISION DESCRIPTION
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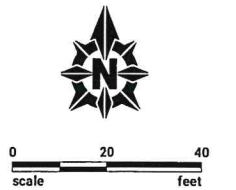
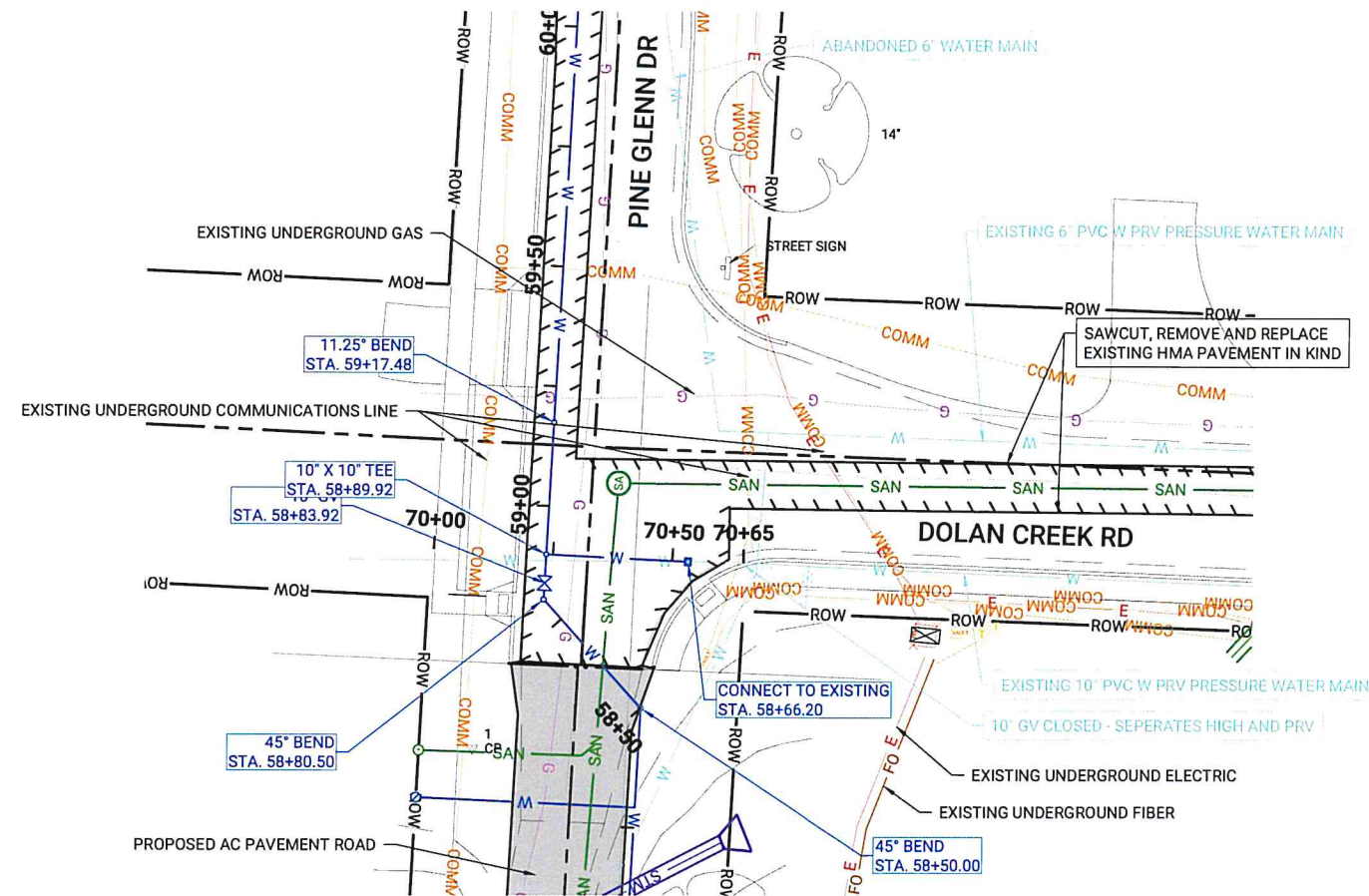


PINE GLENN STREET AND UTILITY IMPROVEMENTS

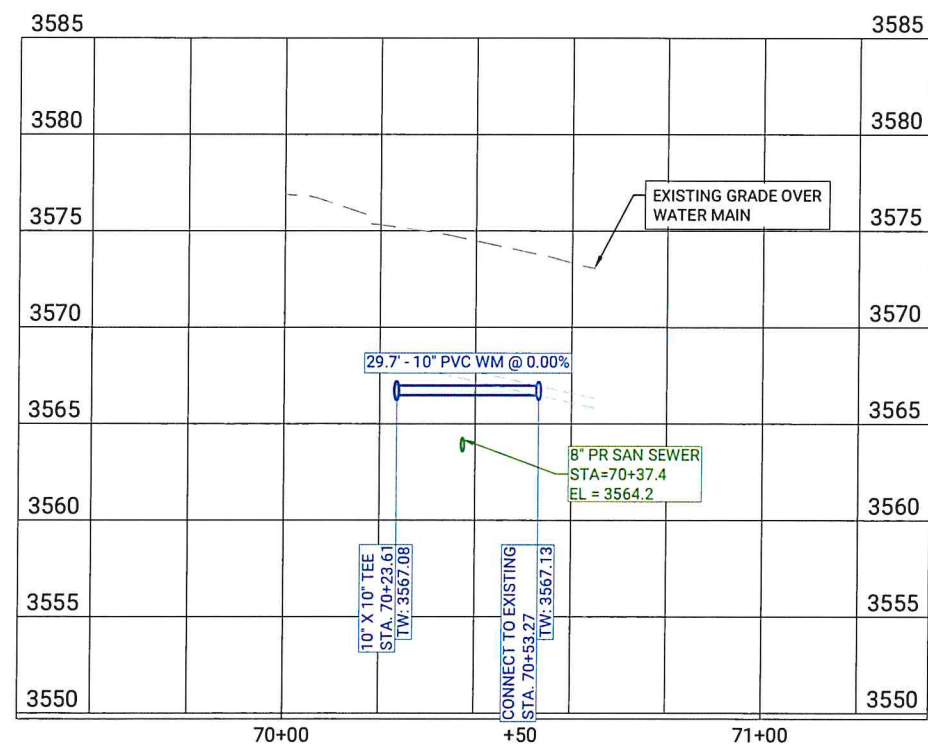
STURGIS, SOUTH DAKOTA

PINE GLENN DRIVE WATER MAIN PLAN PROFILE

SHEET NO.
C1.12



NOTE:
CUSTOMERS ON PINE GLENN WILL BE SWITCHED
FROM PRV PRESSURE TO HIGH PRESSURE. RAISING
PRESSURE BY 22 PSI APPROXIMATELY.



CLIENT PROJECT NO: PINE GLENN FOTH PROJECT NO: 21S100.00
DESIGNED BY: KRM CHECKED BY: TFS DRAWN BY: MLH
LETTING DATE: CAD DATE: 12/10/2021 9:28:01 AM

NO	DATE	BY	REVISION DESCRIPTION
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2			
3			
4			



PINE GLENN STREET AND UTILITY IMPROVEMENTS

STURGIS, SOUTH DAKOTA

MEADOW DR / DOLAN CREEK RD
WATER MAIN PLAN PROFILE

APPROVED BY:
I HEREBY CERTIFY THAT THE DESIGN, SPECIFICATION, OR
REPORT WAS PREPARED BY ME OR UNDER MY DIRECT
SUPERVISION AND THAT I AM A LICENSED
PROFESSIONAL ENGINEER UNDER THE LAWS OF THE
STATE OF SOUTHERN DAKOTA
7113
THEODORE F. SCHULTZ
DATE: 4/28/2022 REG NO: 7113

SHEET NO.
C1.13