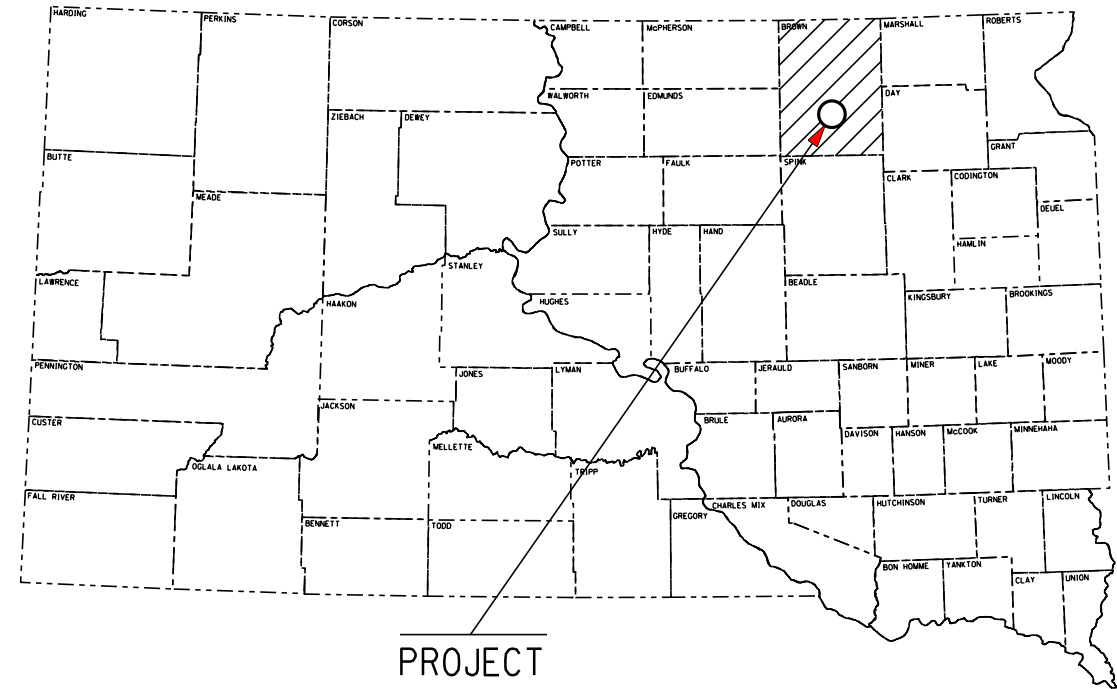


PLOT SCALE - 1:15000

PLOTTED FROM - TRAB17882



STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED

PROJECT NH 0012(00)293
U.S. HIGHWAY 12
BROWN COUNTY

FURNISH TRAFFIC SIGNAL EQUIPMENT
PCN 06K9

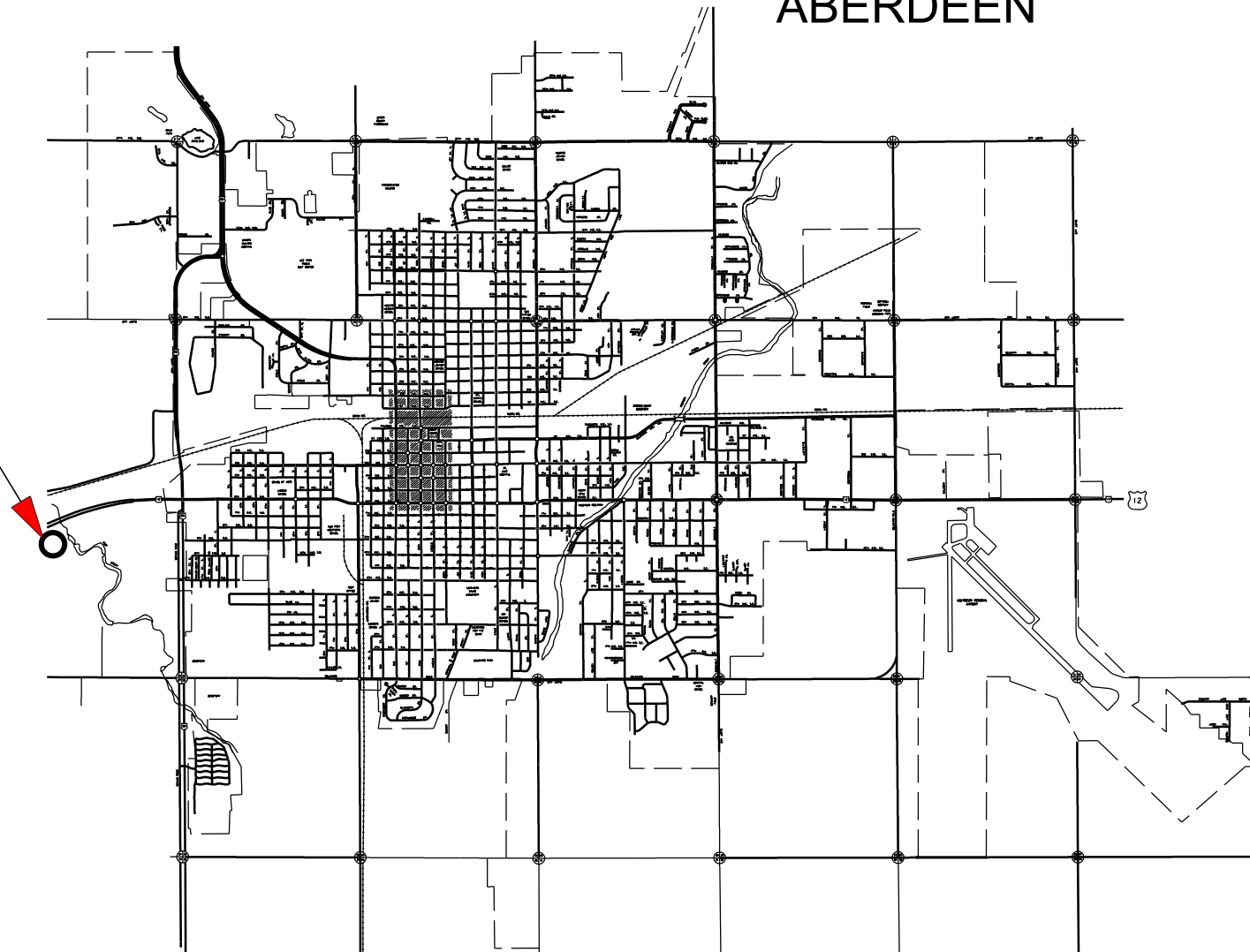
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH 0012(00)293	1	3
Plotting Date: 01/29/2018			

INDEX OF SHEETS

Sheet 1	Title Sheet and Layout Map
Sheet 2	Estimate of Quantities and Plan Notes
Sheet 3	Standard Plates

ABERDEEN

DELIVERY SITE
SDDOT ABERDEEN
MAINTENANCE YARD
2735 West US Hwy 12, Aberdeen, SD



STORM WATER PERMIT
NONE REQUIRED

FILE - ... \BRWN06K9\06K9 TITLE SHEET.DGN

PLOT NAME - 1

ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
635E2125	Signal Pole with 25' Mast Arm and Luminaire Arm	1	Each
635E2140	Signal Pole with 40' Mast Arm and Luminaire Arm	1	Each
635E2150	Signal Pole with 50' Mast Arm and Luminaire Arm	2	Each
635E4030	3 Section Vehicle Signal Head	10	Each
635E4040	4 Section Vehicle Signal Head	4	Each
635E5430	Traffic Signal Controller	1	Each
635E5515	Battery Backup System for Traffic Signal	1	Each
635E5550	Detector Unit	13	Each
635E5560	Emergency Vehicle Preemption Unit	1	Each
635E5570	Optical Detector	4	Each

SPECIFICATIONS

Standard Specifications for Roads and Bridges, 2015 Edition and Required Provisions, Supplemental Specifications and Special Provisions as included in the Proposal.

GENERAL NOTES

The Contractor shall furnish and deliver Signal Poles with Mast Arms, Battery Backup System, Vehicle Signal Heads, Traffic Signal Controller, Detector Units, Emergency Vehicle Preemption Unit and Optical Detector to the South Dakota Department of Transportation (SDDOT), Aberdeen Area Maintenance Yard located on west Hwy 12, Aberdeen SD. SDDOT Maintenance staff at the Aberdeen Maintenance Yard will assist in unloading of the poles. Contact Aberdeen Area Engineer Phil Dwight, Phone No. (605) 626-7885 a minimum of 5 business days in advance of pole delivery to make arrangements for assistance in unloading of poles.

All costs to furnish and deliver the furnished equipment shall be incidental to the various contract items.

All contract items shall be delivered to the South Dakota Department of Transportation by July 6, 2018.

SHOP DRAWING AND CATALOG CUTS SUBMITTALS

The Contractor shall submit shop drawings and catalog cuts in accordance with Section 985 of the Specifications.

Adobe PDF submittals shall be sent to the following email addresses:

Dan.Martell@state.sd.us
Norris.Leone@state.sd.us

POLES

Cantilever traffic signal supports B1 & B3, including anchor bolts, shall be designed for fatigue in accordance with Fatigue Importance Category II without galloping and truck induced gusts.

Cantilever traffic signal supports B2 & B4, including anchor bolts, shall be designed for fatigue in accordance with Fatigue Importance Category III without galloping and truck induced gusts

Signal poles shall have rotatable mast arms.

Luminaire extension(s) shall have a 40 Ft. mounting height with 8 Ft. arm.

ANCHOR BOLTS

Anchor bolts for the poles shall be designed for a minimum footing diameter of 3 ft.

Anchor bolts for Signal Poles with Mast Arms shall be furnished by the Contractor. Costs to furnish and deliver the anchor bolts shall be incidental to the contract unit price for the various signal poles.

TRAFFIC SIGNAL CONTROLLER

The traffic signal controllers shall be compatible with existing equipment in Aberdeen SD,

The Contractor shall supply 12 load switches with the controller.

The controller should be a complete controller assembly with a necessary hardware to mount the controller to a concrete footing,

The provision of a USB port on the traffic signal controller is optional.

All costs for furnishing the mounting hardware for the traffic signal controller shall be incidental to the contract unit price per each for "Traffic Signal Controller".

SIGNAL BACKPLATES

All new signal heads shall have backplates with retroreflective border.

Signal backplates shall extend not less than 5 inches from the edge of the signal head at the top, bottom, and sides. Vehicle signal heads shall have factory applied yellow retroreflective borders, 2-inches wide. Sheeting for the borders shall be ASTM D4956 Type XI.

All costs for furnishing backplates with retroreflective border shall be incidental to the contract price each for "3 Section Vehicle Signal Heads" and "4 Section Vehicle Signal Heads".

BATTERY BACKUP CABINET

The Contractor shall supply a cabinet for housing the battery backup at the traffic signal controller. The cabinet shall be an aluminum NEMA 3R type enclosure and shall have a thermostatically controlled exhaust fan. All mounting hardware to securely attach the cabinet with steel anchors to a concrete pad and to the side wall of the controller cabinet using chase nipples shall be supplied with the cabinet.

All costs for furnishing the battery backup cabinet and mounting hardware shall be incidental to the contract price per each for "Battery Backup System for Traffic Signal".

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
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