

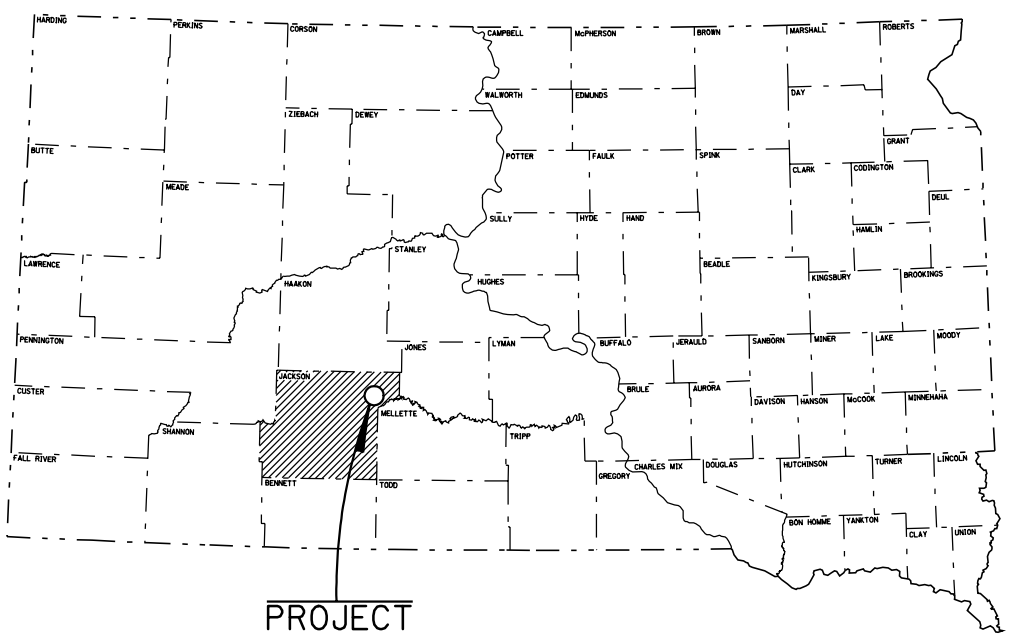
STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	090E-391 & 090W-391	1	9

STATE OF SOUTH DAKOTA
 DEPARTMENT OF TRANSPORTATION
 PLANS FOR PROPOSED
PROJECTS 090E-391 & 090W-391
JACKSON COUNTY

ADA UPGRADE ON TWO PICNIC TABLES

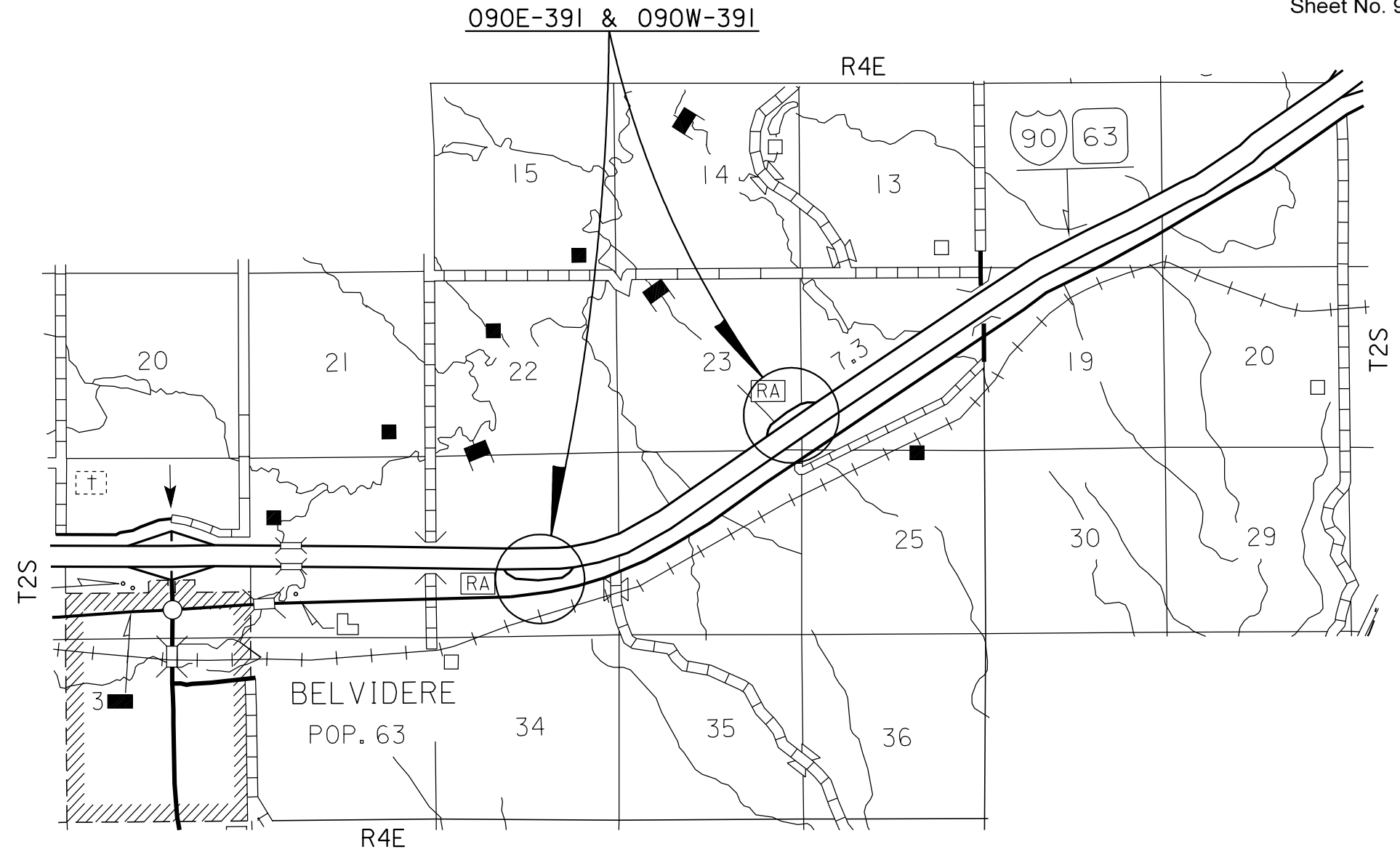
PCN 119f & 119e

AUGUST 2008



INDEX OF SHEETS

- | | |
|-------------|--------------------------------|
| Sheet No. 1 | Title Sheet |
| Sheet No. 2 | Estimate of Quantities & Notes |
| Sheet No. 3 | Eastbound Rest Area Layout |
| Sheet No. 4 | Westbound Rest Area Layout |
| Sheet No. 5 | Eastbound Rest Area Pictures |
| Sheet No. 6 | Westbound Rest Area Pictures |
| Sheet No. 7 | Removal Details |
| Sheet No. 8 | Preconstruction Details |
| Sheet No. 9 | Reconstruction Details |



STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	090E-391 & 090W-391	2	9

ESTIMATE OF QUANTITIES

090E-391 PCN i19f

Bid Item Number	Item	Quantity	Unit
900E2022	Miscellaneous Construction, Masonry	Lump Sum	LS

090W-391 PCN i19e

Bid Item Number	Item	Quantity	Unit
900E2022	Miscellaneous Construction, Masonry	Lump Sum	LS

SPECIFICATIONS

Construction Specifications: South Dakota Standard Specifications for Roads and Bridges, 2004 Edition and Required Provisions, Supplemental Specifications and/or Special Provisions as included in the Proposal.

NOTICE – ASBESTOS

Be advised that the columns in the picnic tables may have been formed using a Transite asbestos-cement pipe. The Contractor should plan his/her operations accordingly, and inform his/her employees of the hazards of asbestos exposure. Care shall be taken when breaking out concrete around columns so that no asbestos is exposed. The columns shall be handled and disposed of as a hazardous waste.

SCOPE OF WORK

The work required for this project includes, but is not limited to, the following items, not listed in order of execution.

- 1) Removal of Existing Table Top
- 2) Removal of Existing Bench Seat and Columns
- 3) Repair Breakout Areas in slab.
- 4) Construct New Table Top
- 5) Properly dispose of all broken out material

Before preparing his/her bid, the Contractor shall make a visual inspection of the project to verify the extent of the work and materials involved.

GENERAL CONSTRUCTION NOTES

All reinforcing steel shall conform to ASTM A615, Grade 60. The reinforcing steel shall be supported with chairs.

Forms shall not be removed until concrete has received sufficient strength to support its own weight.

An application of curing compound will not be allowed. The Contractor shall protect the concrete according to Section 460.3.N.2.

The Contractor will be required to have a minimum clearance under the table of at least 27 inches.

The Contractor shall protect the work area as approved by the Engineer.

All exposed edges shall be chamfered ½ inch and all table corners shall have a ½ inch radius.

INSTALLING DOWELS IN CONCRETE

Holes drilled in the existing concrete shall be true and normal. The Contractor may shift the dowels if he/she encounters reinforcing steel.

The epoxy resin mixture shall be of a type for bonding steel to hardened concrete and shall conform to AASHTO M235 Type IV (Equivalent to ASTM C881, Type IV).

The diameter of the drilled holes shall not be less than 1/8 inch greater, nor more than 3/8 inch greater than the diameter of the dowels or as per the Manufacturer's recommendations. Use compressed air or other techniques to ensure that the hole is free of any loose material before epoxy resin is applied.

Mix epoxy resin as recommended by the Manufacturer and apply by an injection method as approved by the Engineer. Beginning at the bottom of the drilled holes, fill the holes 1/3 to ½ full of epoxy, or as recommended by the Manufacturer, prior to insertion of the dowel bar. Rotate the dowel bar during installation to eliminate voids and ensure complete bonding of the bar. Insertion of the bars by the dipping method will NOT be allowed.

All equipment, labor and material required to install the dowels and any other incidentals to satisfactorily complete the work shall be incidental to the contract lump sum price for "Miscellaneous Construction, Masonry".

INCIDENTAL WORK

The existing bench seat and columns shall be removed on one side of the picnic table. See sheets 5 & 6 to determine which bench is to be removed. The concrete around the columns shall be broken out to the limits as shown in the plans. Breakout limits shall be defined with a 3/4 inch deep sawcut.

The existing table top shall be removed to the limits shown in the plans.

Extreme care shall be used not to nick, gouge, or cut any columns so if in the instance they contain asbestos, that it will not be exposed.

All broken out concrete and discarded reinforcing bars shall become the property of the Contractor. Any disposal of discarded material shall be on a site obtained by the Contractor and approved by the Engineer.

All equipment and labor to remove and dispose of the components shown in the plans and any other incidentals to satisfactorily complete the project work shall be paid for at the contract lump sum price for "Miscellaneous Construction, Masonry".

NEW TABLE TOP AND SLAB REPAIR

The concrete material shall be a packaged, dry combined material for concrete. The materials shall conform to the requirements of ASTM C387 for high-early strength concrete. The coarse aggregate shall be size 7. The packaged material shall be used for the table top and the slab repair in areas where the columns were broken out.

Provide a smooth steel trowel finish on table top surface.

NEW TABLE TOP AND SLAB REPAIR, Continued

Concrete for table top and the slab repair shall be maintained above 32° F (0° C) until it has attained 1500 psi (11 MPa) compressive strength. The compressive strength will be checked according to SD 409 (SD 409M).

All equipment, labor, reinforcing steel and material required to repair the slab and to form and pour the table top and any other incidentals to satisfactorily complete the work shall be paid for at the contract lump sum price for "Miscellaneous Construction, Masonry".

WASTE DISPOSAL SITE

The Contractor will be required to furnish a site(s) for the disposal of construction/demolition debris generated by this project.

The waste disposal site(s) shall be managed and reclaimed in accordance with the following from the General Permit for Highway, Road, and Railway Construction/Demolition Debris Disposal under the South Dakota Waste Management Program issued by the Department of Environment and Natural Resources.

The waste disposal site(s) shall not be located in a wetland, within 200 feet of surface water, or in an area that adversely affects wildlife, recreation, aesthetic value of an area, or any threatened or endangered species, as approved by the Engineer.

If the waste disposal site(s) is located such that it is within view of any ROW, the following additional requirements shall apply:

1. Construction/demolition debris consisting of concrete, asphalt concrete, or other similar materials shall be buried in a trench completely separate from wood debris. The final cover over the construction/demolition debris shall consist of a minimum of 1 foot of soil capable of supporting vegetation. Waste disposal sites provided outside of the State ROW shall be seeded in accordance with Natural Resources Conservation Service recommendations. The seeding recommendations may be obtained through the appropriate County NRCS Office. The Contractor shall control the access to waste disposal sites not within the State ROW through the use of fences, gates, and placement of a sign or signs at the entrance to the site stating "No Dumping Allowed".
2. Concrete and asphalt concrete debris may be stockpiled within view of the ROW for a period of time not to exceed the duration of the project. Prior to project completion, the waste shall be removed from view of the ROW or buried and the waste disposal site reclaimed as noted above.

The above requirements will not apply to waste disposal sites that are covered by an individual solid waste permit as specified in SDCL 34A-6-58, SDCL 34A-6-1.13, and ARSD 74:27:10:06.

Failure to comply with the requirements stated above may result in civil penalties in accordance with South Dakota Solid Waste Law, SDCL 34A-6-1.31.

All costs associated with furnishing waste disposal site(s), disposing of waste, maintaining control of access (fence, gates, and signs), and reclamation of the waste disposal site(s) shall be incidental to the various contract items.

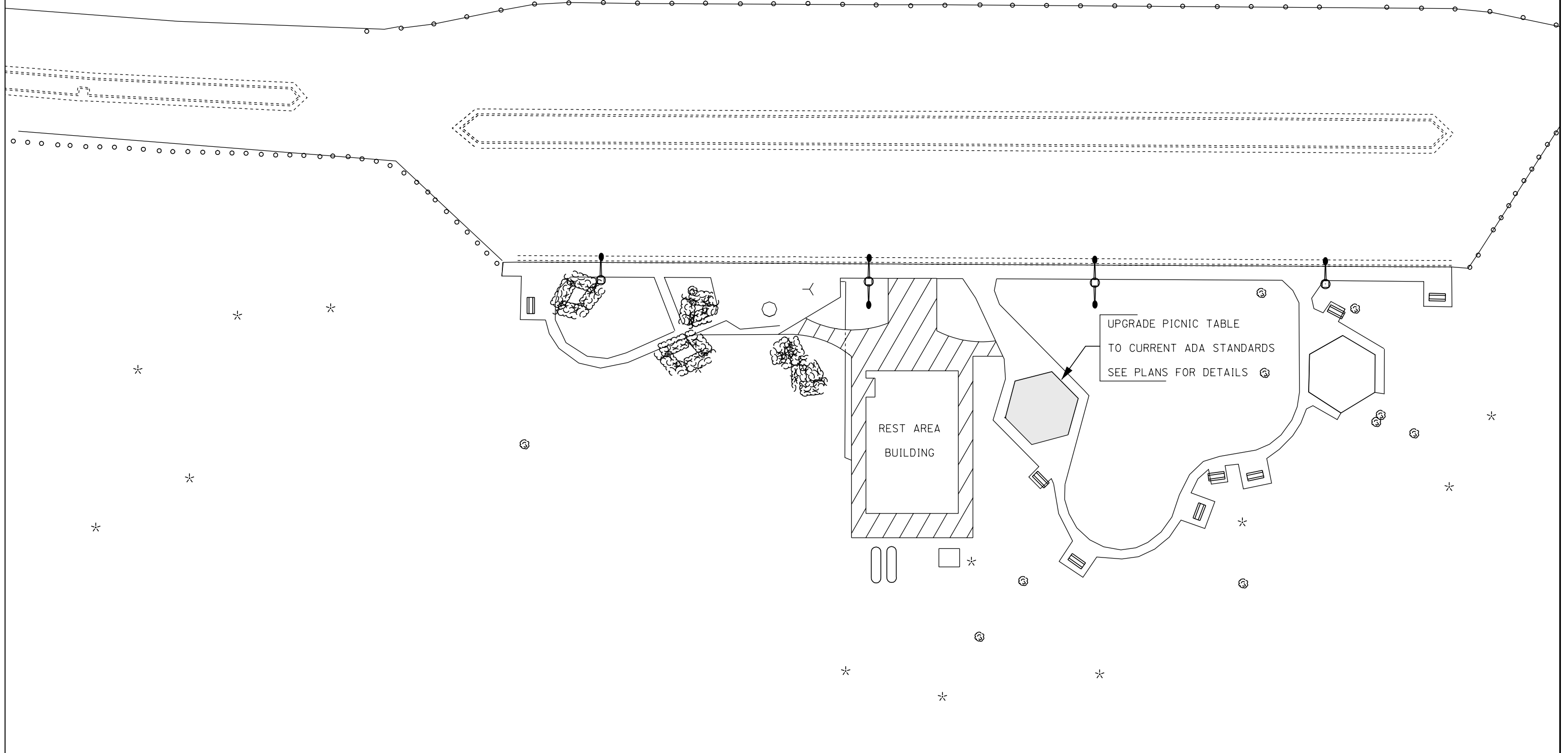
REST AREA LAYOUT

EASTBOUND

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	090E-391 & 090W-391	3	9



 WORK AREA



REST AREA LAYOUT

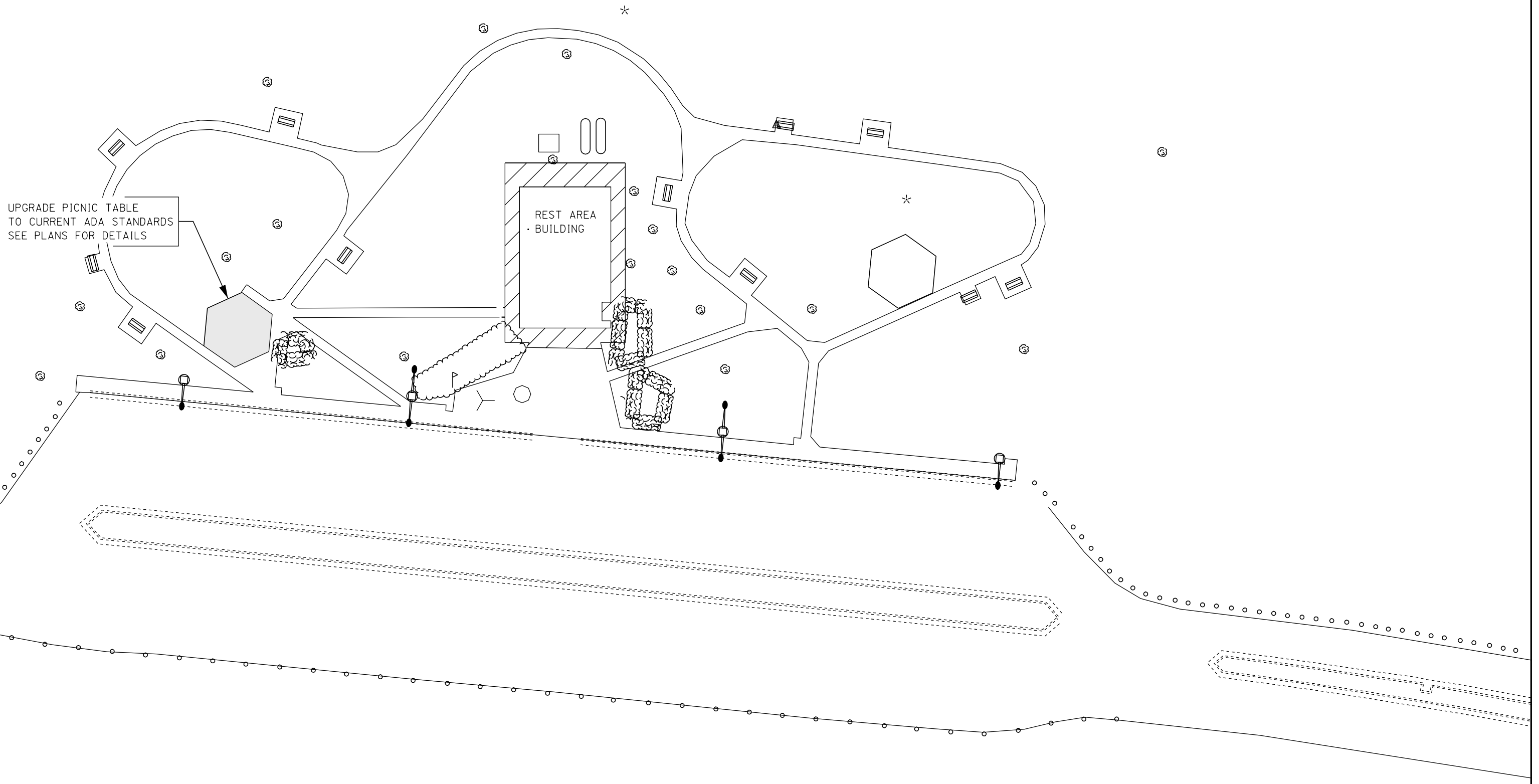
WESTBOUND

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	090E-391 & 090W-391	4	9



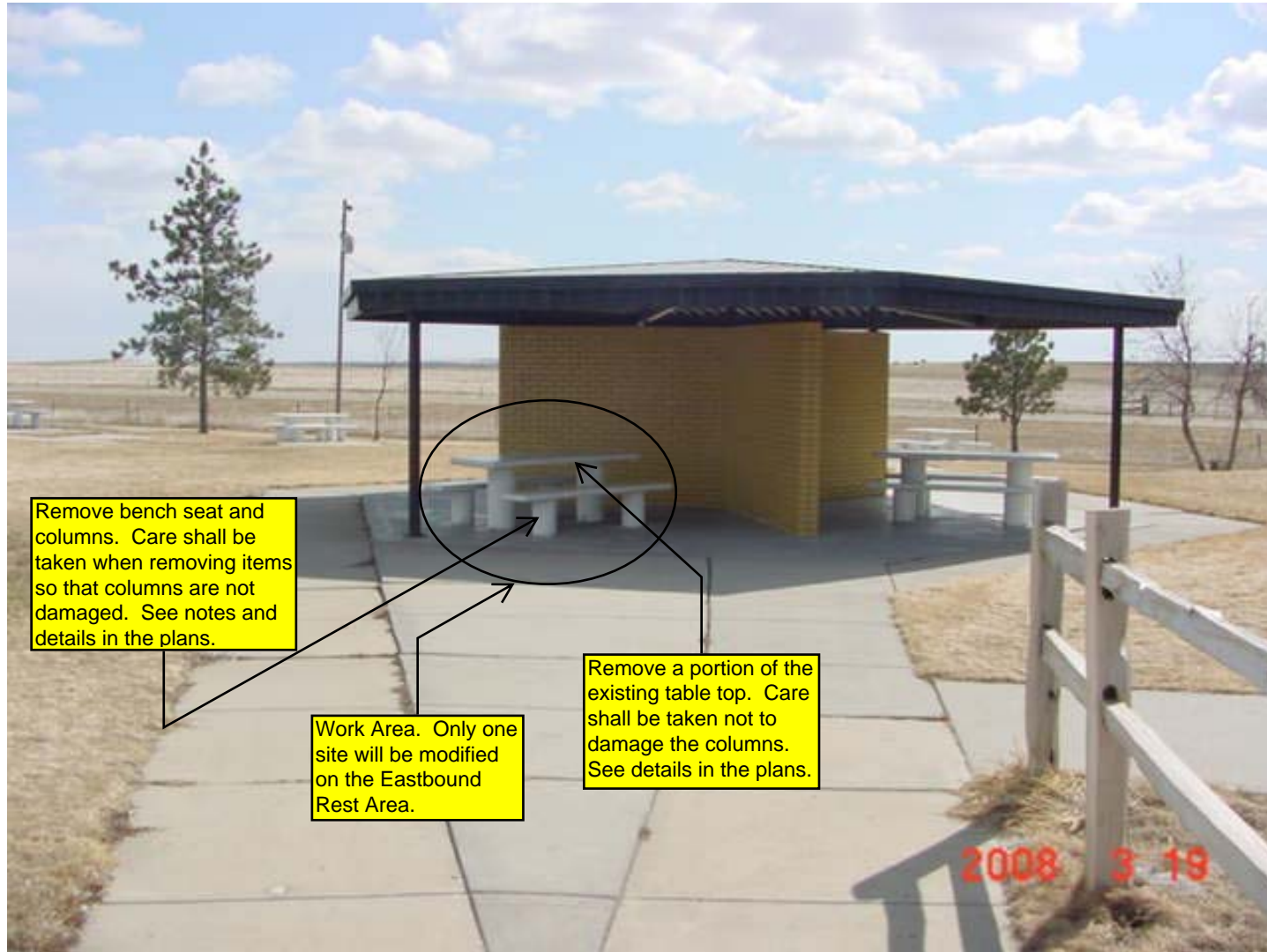
SCALE: 1"=40'

WORK AREA



STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	090E-391 & 090W-391	5	9

EASTBOUND REST AREA PICTURES

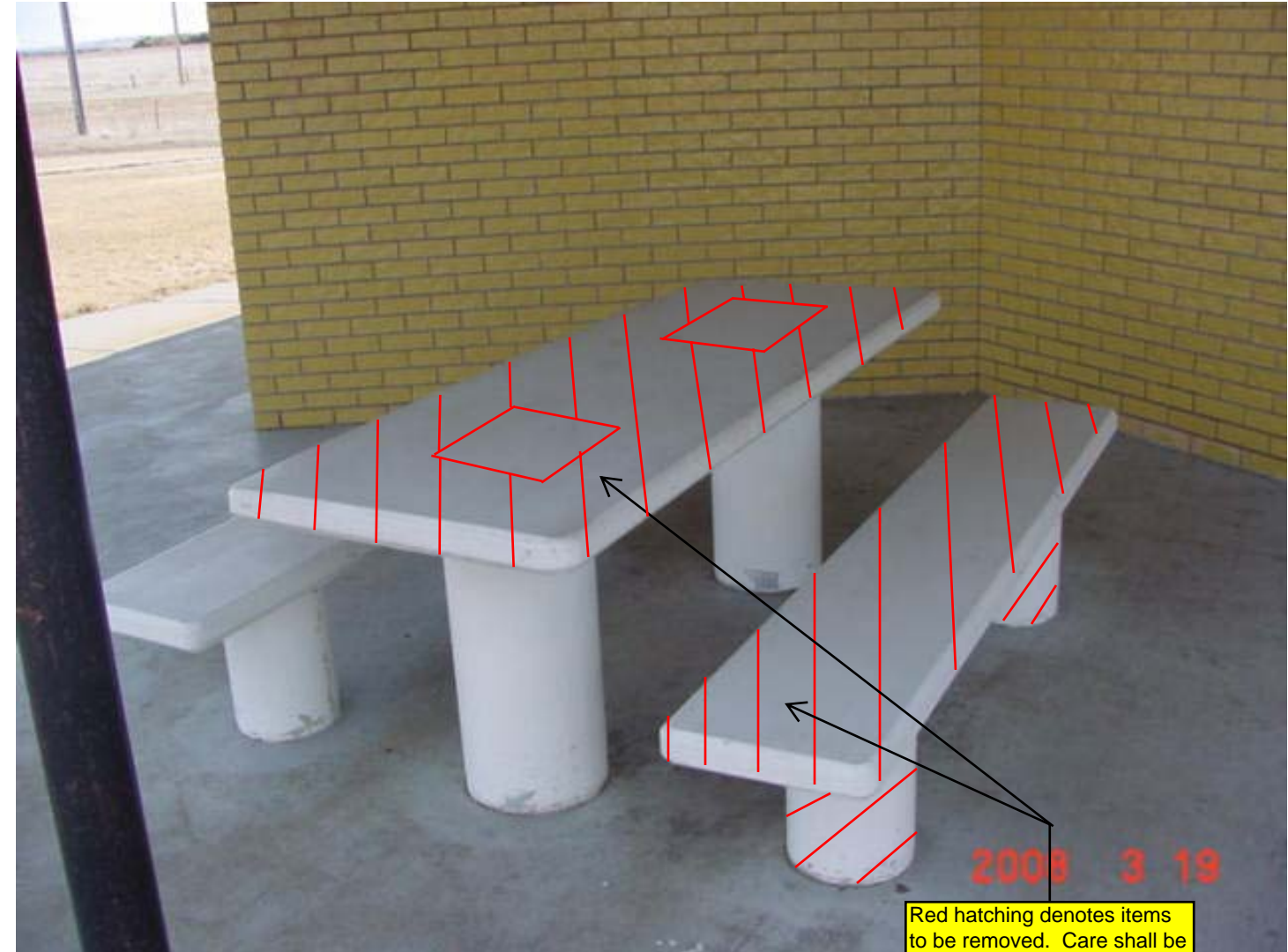


Remove bench seat and columns. Care shall be taken when removing items so that columns are not damaged. See notes and details in the plans.

Work Area. Only one site will be modified on the Eastbound Rest Area.

Remove a portion of the existing table top. Care shall be taken not to damage the columns. See details in the plans.

EASTBOUND SITE

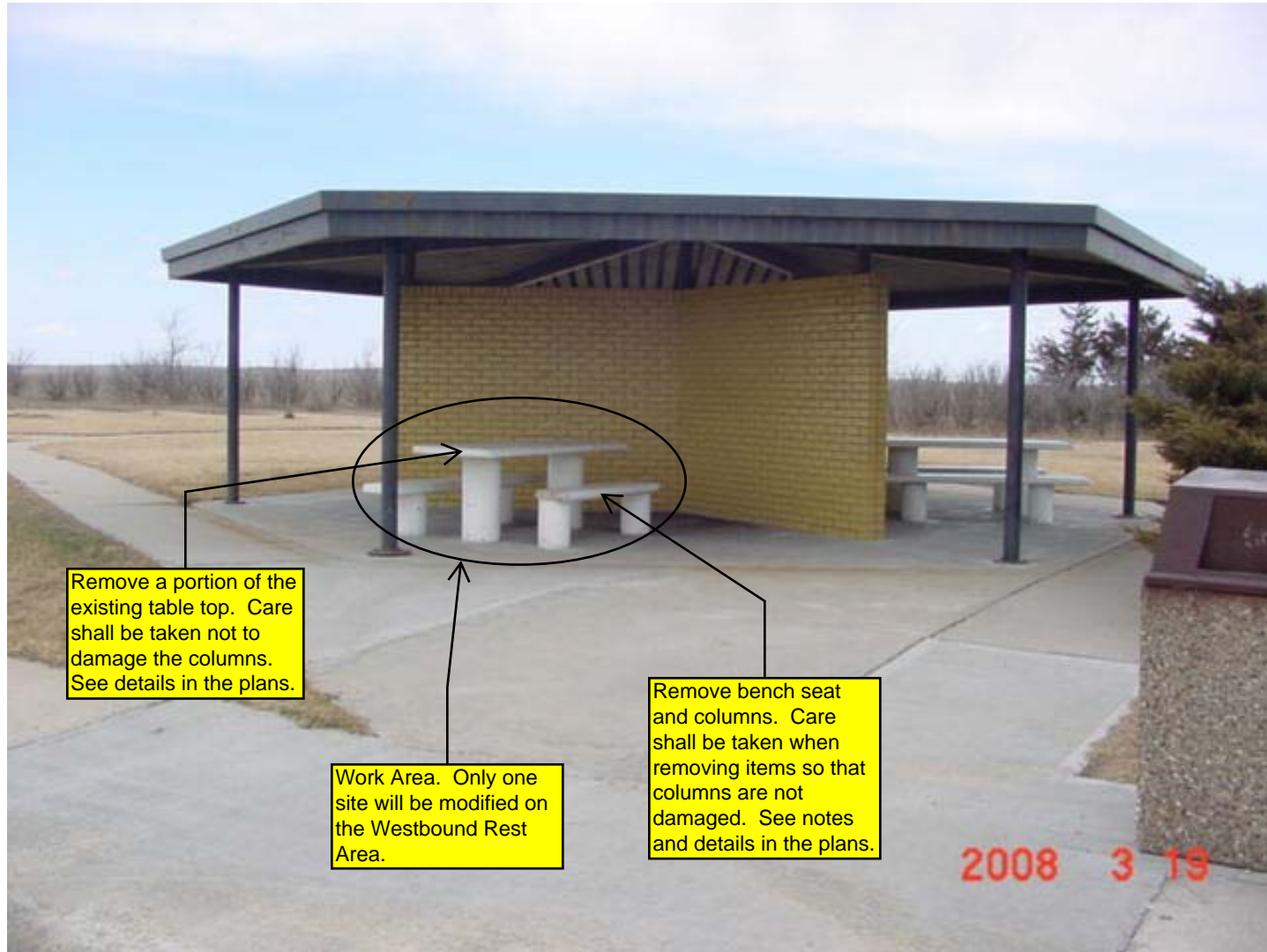


Red hatching denotes items to be removed. Care shall be taken when breaking out around the columns so if in the instance they contain asbestos, that it will not be exposed.

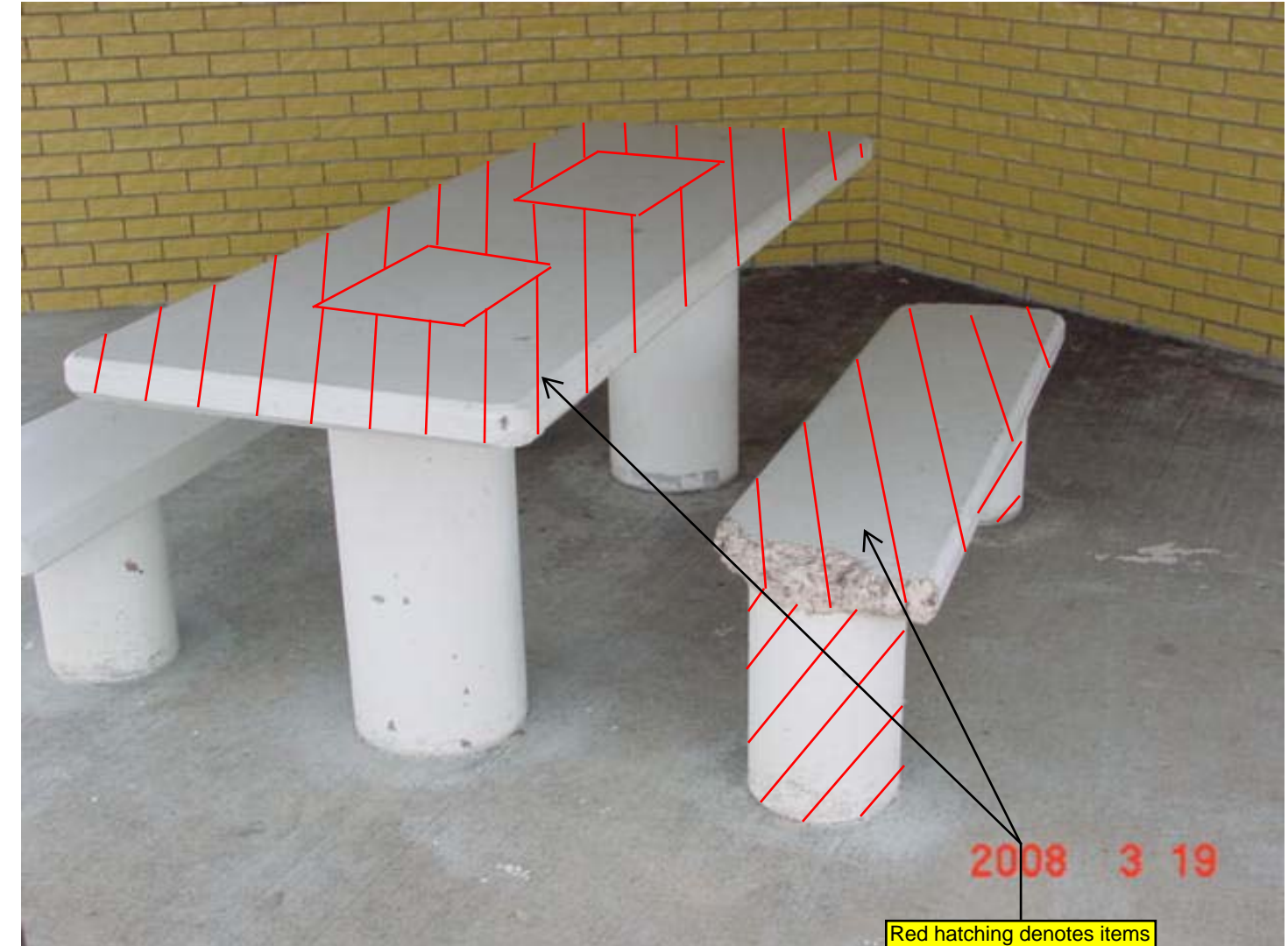
EASTBOUND SITE

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	090E-391 & 090W-391	6	9

WESTBOUND REST AREA PICTURES



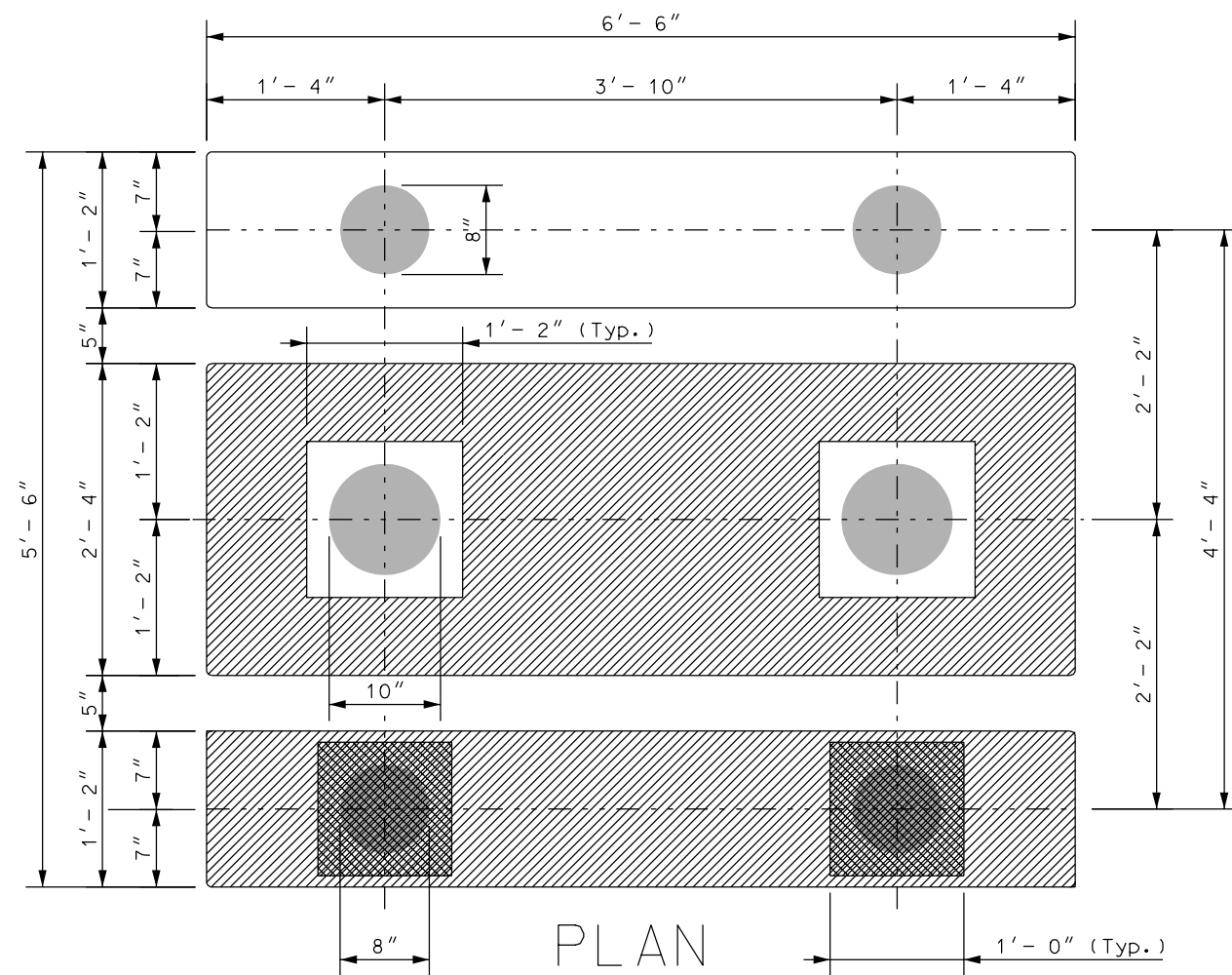
WESTBOUND SITE



WESTBOUND SITE

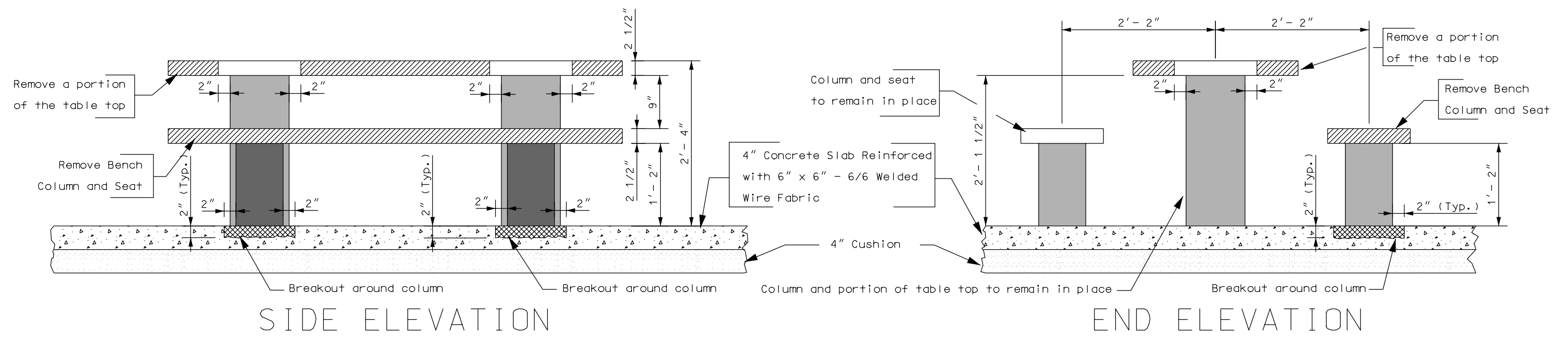
Red hatching denotes items to be removed. Care shall be taken when breaking out around the columns so if in the instance they contain asbestos, that it will not be exposed.

REMOVAL DETAILS

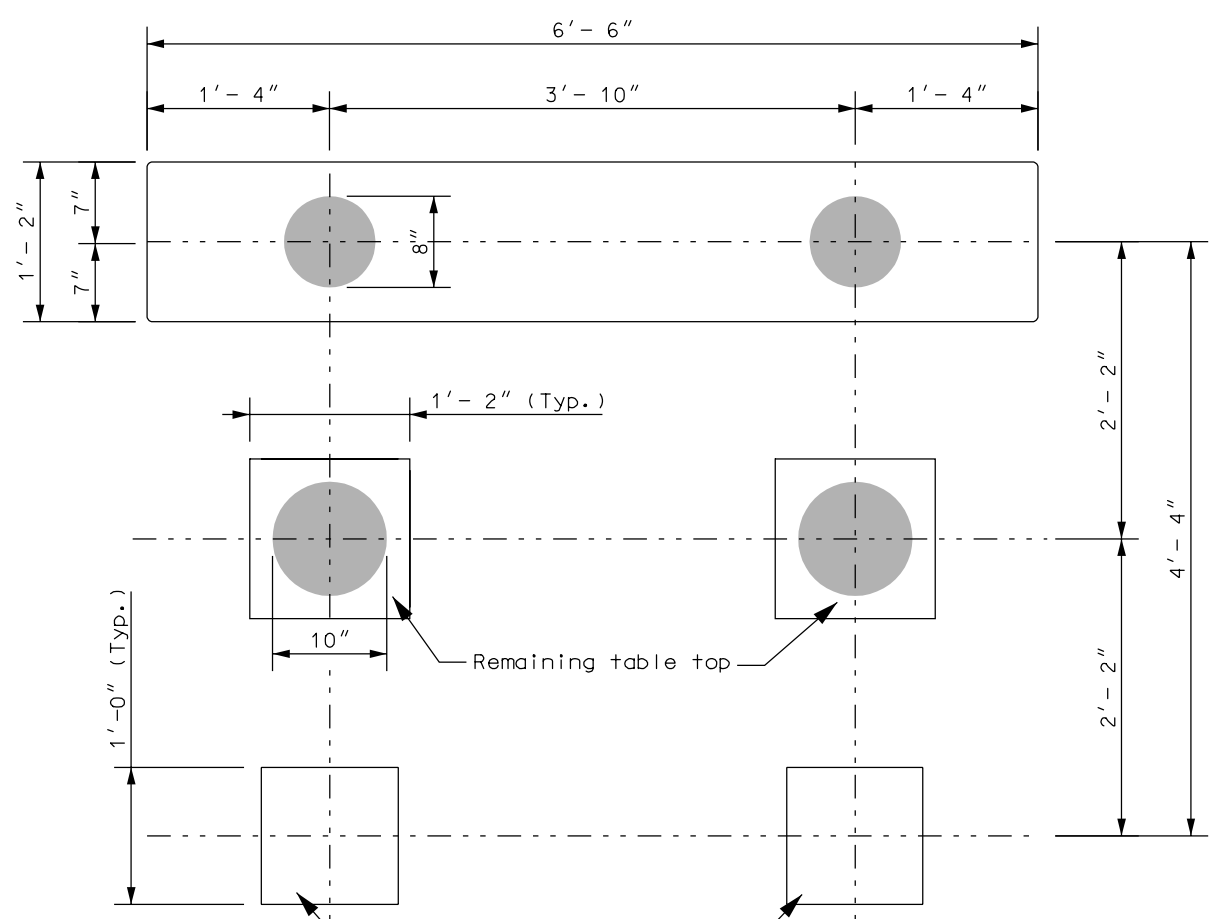


- The Contractor is advised that the columns in the bench seats and table top could have been formed using Transite asbestos-cement pipe. The Contractor shall saw cut around columns to be removed so that the columns remain untouched. The columns being removed shall be disposed of as a hazardous material.
- Areas to be removed by Contractor.
- Areas to be removed by Contractor. Care shall be taken to not disturb the column.


NOTE:
The existing table top is reinforced with 4" x 4" - 10/10 Welded Wire Fabric.

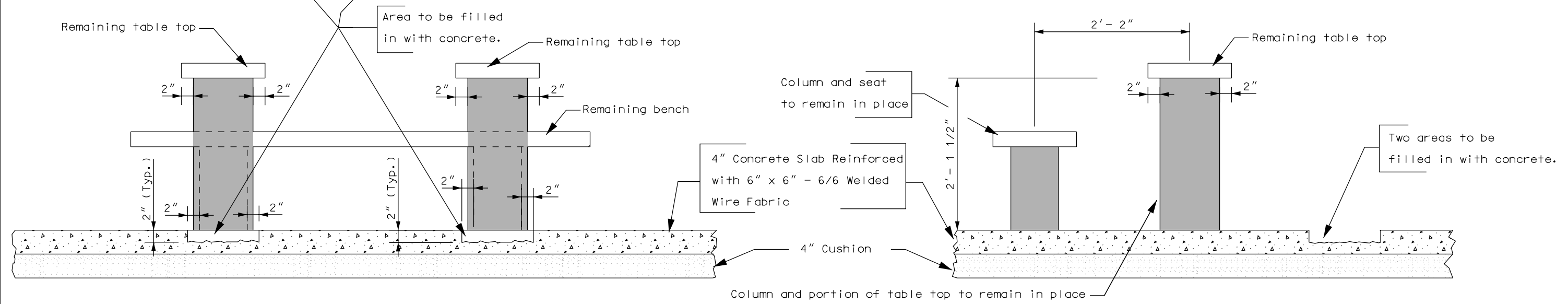


PRECONSTRUCTION DETAILS



PLAN

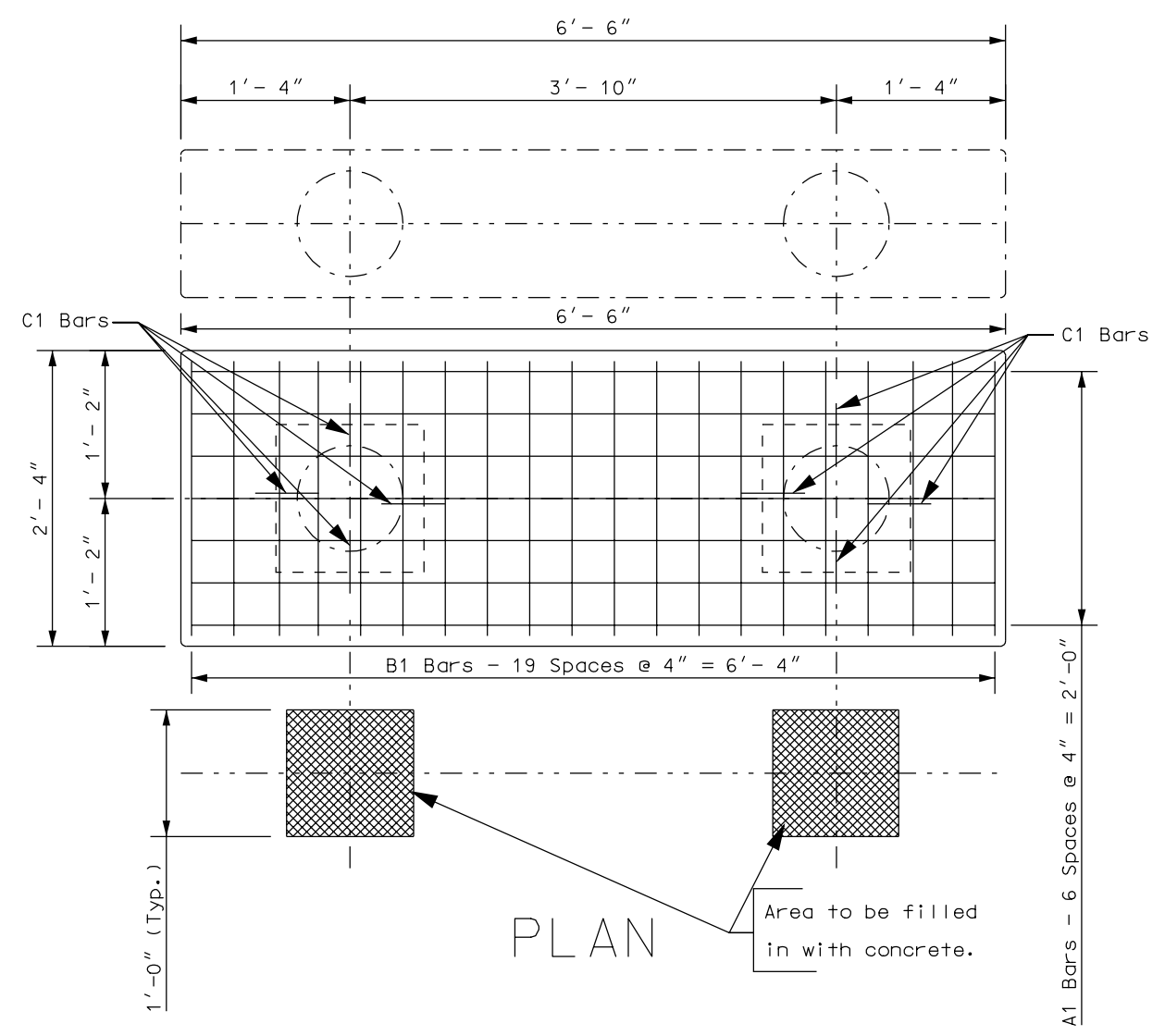
 The Contractor is advised that the columns in the bench seats and table top could have been formed using Transite asbestos-cement pipe.



SIDE ELEVATION

END ELEVATION

RECONSTRUCTION DETAILS



■ The Contractor is advised that the columns in the bench seats and table top could have been formed using Transite asbestos-cement pipe.

▨ Areas that will need to be patched with concrete.

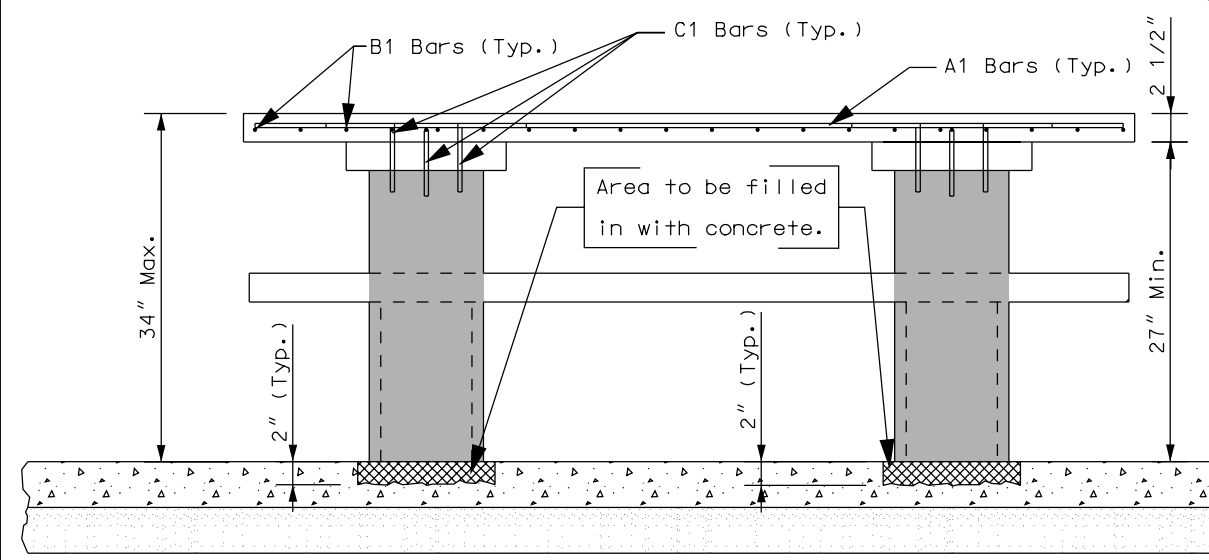
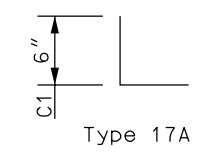
REINFORCING SCHEDULE				
(For One Table Top)				
Mk.	No.	Size	Length	Type
A1	7	3	6'-4"	Str.
B1	20	3	2'-2"	Str.
C1	8	3	1'-0"	17A



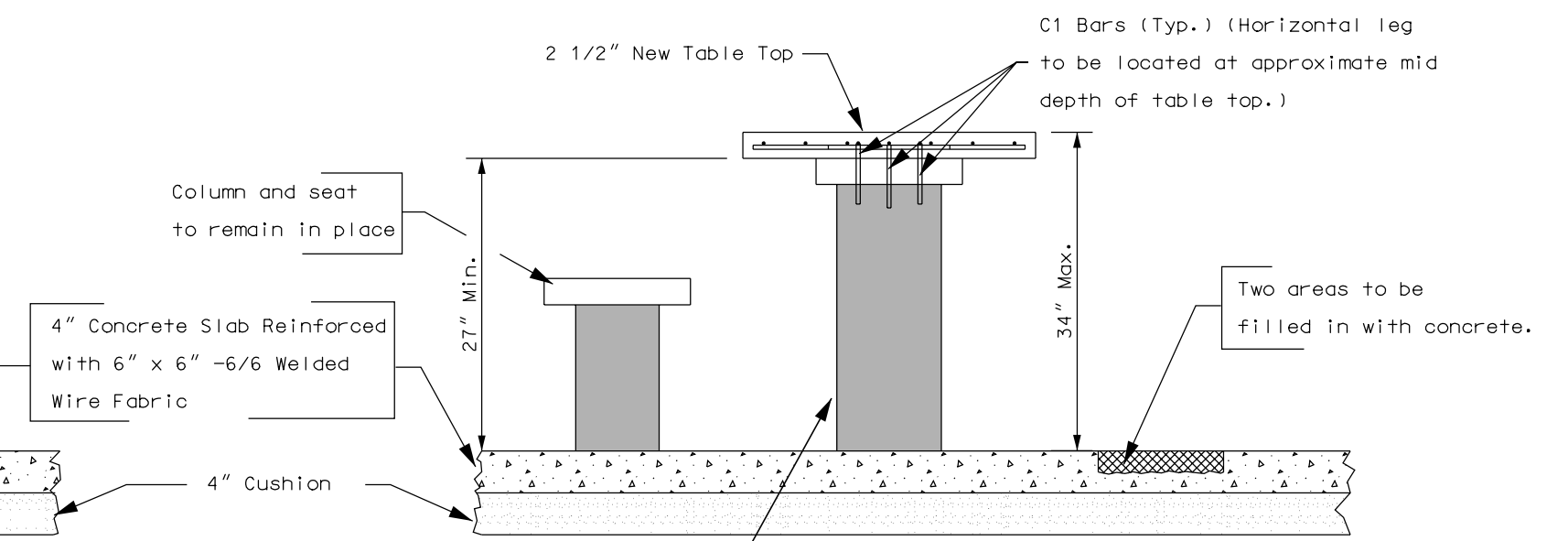
* Dowel Bars

The reinforcing steel and concrete quantity is incidental to the bid item for Miscellaneous Construction, Masonry and are for informational purposes only.
 Reinforcing Steel 36 lbs for one table top.
 Concrete 0.2 CuYds for one table top.

Bending Details



SIDE ELEVATION



END ELEVATION