

## **Addendum No. 2**

January 14, 2016

To: Bid Holders

This Addendum forms a part of the Request For Bid documents and modifies the original Request For Bids issued Dec. 17, 2015. Acknowledge receipt of this Addendum in the space provided on the Bid Form. All other provisions of the Request For Bid documents shall remain unchanged unless expressly noted in this Addendum.

### **General**

1. The following questions were received during bidding. Answers are provided as follows:
  - a. Keynote #1 on Sheet S-201 calls for the CMU reinforcing to be #5 @ 24". Detail A1 calls for the footing dowels to be #5 @ 16" to match wall reinforcing. Please clarify the CMU wall reinforcing.  
  
Response: The detail should read #5 @24". Please refer to revised sketch.
  - b. Keynote #1 on Sheet A-102 calls for sawcut control joints at 20' and expansion joints at 60'. Sheet C-104 shows doweled construction joints, sealed joints, construction joints or contraction joints. These joints are shown at 10' max. Sheet C- 501 has five different joint details. Please clarify what kind of joints are required in the slabs, and what spacing is required.  
  
Response: Joint spacing shall be in accordance w/ sheet C-501. All joints shall be sealed. Load transfer is required across construction joints.
  - c. On Sheet C-501, the three different doweled joint details have three different sized dowels, at three different spacings. Is this the intention?  
  
Response: Please refer to revised sketch.
  - d. Detail B2 on Sheet C-501 calls for fiber reinforcement of the slab. None of the other joint details call for fiber reinforcement. Detail D3 calls for #4 @ 12" each way. Please clarify the reinforcing requirements.  
  
Response: Please refer to revised sketch.
  - e. Detail B4 on Sheet C-501 calls for a thickened slab at the construction joint. The detail doesn't say how thick the slab should be at the joint. Please clarify when Detail B2 and Detail B4 should be used. They are both construction joints, but one has a thickened slab.  
  
Response: Please refer to revised sketch.
  - f. Is the thickness of the new concrete fueling pads 4" or 6"? Conflict on sheet C-501.  
  
Response: The concrete fueling pads shall be 8" thick. Please refer to revised sketch.

- g. What subgrade prep is required under the owner placed millings?

Response: 12” depth compacted to 95% ASTM D-1557. Extend 10-feet from pad.

- h. Are owner placed millings placed on compacted subgrade or base course?

Response: Subgrade

- i. DG-502 missing from plan set.

Response: Sheet reference DG-502 is not used. Please refer to revised sketch.

- j. Will contractors be required to use effluent water from the City wastewater treatment plant for construction operations?

Response: Yes – effluent water shall be used for dust control and earthwork compaction per City Ordinance. The water should be purchased from the City and a permit from Wastewater Division is also required.

2. The following Prior Approval Requests are accepted:

#### Light Fixtures

- Fixture A: HUBBELL INDUSTRIAL KH-D-H-15-0-B-3-GL-G (Wall Mount)
- Fixture B: SPAULDING LIGHTING ARS-36L4K-070-5M-U-GR (Canopy)
- Fixture C: HUBBELL INDUSTRIAL KH-D-H-15-0-X-3-GL-G (Ceiling Mount)
- Fixture SA: CREE LED LIGHTING SOLUTIONS ARE-EHO-3M-HV-24-E-UL-BZ-1000-40K EHO-UNV-BZ (Area Light – Single)
- Fixture SA: SPAULDING LIGHTING RTS-25-70-1-A1-OT-DB 25' (Round Tapered Steel Pole)
- Fixture SB: CREE LED LIGHTING SOLUTIONS (2) ARE-EHO-3M-HV-24-E-UL-BZ-1000-40K (2) EHO-UNV-BZ (Area Light – Double)
- Fixture SB: SPAULDING LIGHTING RTS--25-70-1-A2-OT-DB (25' Round Tapered Steel Pole)

#### **Specifications**

1. 43 01 05 CNG Fueling System

General note: Supply pressure conditions for utility MSA that are stated on drawing DG-601 are correct and shall supersede all other MSA supply pressure requirements in the specifications.

2. 43 01 05 CNG Fueling System

REPLACE sub-paragraph 2.01 E with the following text:

- E. Ball Valves. All ball valves larger than 1” shall use 3-piece construction, shall include bodies, balls and stems fabricated from 304 or 316 stainless steel, and shall have a listed MAWP of not less than the highest service pressure normally existing in the process segment where it will be located. Automatic ball valves shall use pneumatic operators powered by regulated gas.

3. 43 01 05 CNG Fueling System  
ADD sub-paragraph 2.01 F as follows:

F. Cold Weather Exposure. All equipment and materials provided by the contractor shall be listed or otherwise suitable for exposure to ambient temperatures as low as 10°F. Include options as appropriate, such as heat-trace tape, oil heaters with automatic oil-circulating systems and other appurtenances as needed for manufacturers of CNG compressors and gas dryer to warranty the operation of the equipment in the indicated temperature conditions. Heat-trace tape or other heating appurtenances shall be automatically regulating.

4. 43 01 05 CNG Fueling System  
ADD sentence to end of sub-paragraph 2.02 C as follows:

Alternately, a master remote PLC may control local micro processor controller/HMI's located on each compressor.

5. 43 01 05 CNG Fueling System  
REPLACE sub-paragraphs 2.18 A, B and C with new sub-paragraph 2.18 as follows:

Regulated Control Gas. Provide regulated natural gas within each piece of packaged CNG equipment, including compressor skids, priority-valve panel and fast-fill dispenser. Regulators shall be compatible with natural gas, have a primary rating of 5000 PSIG and an adjustable secondary allowing for a pressure range of 80-110 PSIG. Provide 5000 PSI manual ball valve immediately upstream of each regulator and 200 PSIG pressure gauge immediately downstream of each regulator.

6. 43 01 05 CNG Fueling System  
ADD sub-paragraph 2.19 D as follows:

Pre-Cast Tubing-Junction Vaults. Provide pre-cast concrete vaults to house tubing junctions per plan and per requirements on sheet DG-104. Vaults shall be 24" x 24" x 30" deep and shall be set so that their finished height is ½" to 1" above finished surrounding grade. Provide 24" cast iron for vault cover. Lids that could be exposed to vehicle traffic shall be rated for H20 traffic loads.

7. 43 01 05 CNG Fueling System  
ADD sub-paragraph 2.19 E as follows:

Gas Regulator. Provide adjustable 4" gas regulator to limit pressure of gas supply to existing 'Gemini' compressors. Regulator shall be rated for inlet pressure of at least 300 PSIG and shall be installed immediately downstream of new pipe-tee connection that will supply gas from the utility MSA to the existing CNG system. Provide with 4" schedule 40 CS piping, and a 4" manual ball valve with locking kit between the new piping tee and the regulator. Provide pressure gauge scaled to 300-500 PSIG immediately downstream of the new regulator. Regulator shall be Kimray 4" 'PR-NV' type with no pilot gas or venting required, or approved equal.

## **Drawings**

### **Architectural**

1. REVISE Cover Sheet to remove sheet DG-502 Equipment Schedule from Sheet Index as indicated on attached revised sketch AD2-COVER-1.
2. REVISE Sheet AS-101 drawing A1: Site Plan to revise location of public fast-fill island as indicated on attached revised sketch AD2-AS101-1.
3. REVISE Sheet A-903 drawing A1: Floor Plan to revise placement of Fuel Management Terminal and CNG dispenser as indicated on attached revised sketch AD2-A903-1.

### **Civil**

4. REVISE Sheet C-100 General Note 26 to revise R-value as indicated on attached revised sketch AD2-C100-1.
5. REVISE Sheet C-103 drawing A1: Utility Plan to add bypass line at oil water separator as indicated on attached revised sketch AD2-C103-1.
6. REVISE Sheet C-104 Sheet Keynotes to revise drawing reference as indicated on attached revised sketch AD2-C104-1.
7. REVISE Sheet C-501 drawing B2: Doweled Construction Joint Detail to revise reinforcing and other notes as indicated on attached revised sketch AD2-C501-1.
8. DELETE Sheet C-501 drawing B4: Thickened Edge Construction Joint Detail as indicated on attached revised sketch AD2-C501-2.
9. REVISE Sheet C-501 drawing C1: Trench Drain Detail to add dimensions and revise other notes as indicated on attached revised sketch AD2-C501-3.
10. REVISE Sheet C-501 drawing D1: Asphalt Pavement Section to revise asphalt section and other notes as indicated on attached revised sketch AD2-C501-4.
11. REVISE Sheet C-501 drawing D3: 8" Portland Cement Concrete Pavement Section to revise section depth as indicated on attached revised sketch AD2-C501-5.

### **Structural**

12. REVISE Sheet S-201 drawing A1: CMU Wall Foundation Detail to revise reinforcing spacing as indicated on attached revised sketch AD2-S201-1.

## **Process Gas**

13. REVISE Sheet DG-102 drawing: CNG Equipment Plan to revise location of public fast-fill island and placement of Fuel Management Terminal and CNG dispenser as indicated on attached revised sketch AD2-DG102-1.
14. REVISE Sheet DG-104 drawing: CNG Piping Plan 2 to add detail reference for de-fuel station as indicated on attached revised sketch AD2-DG104-1.
15. REVISE Sheet DG-514 to add drawing 12: Defueling Sta. Elevation as indicated on attached revised sketch AD2-DG514-1.
16. REVISE Sheet DG-514 to add drawing 13: Defueling Flow Schematic as indicated on attached revised sketch AD2-DG514-2.

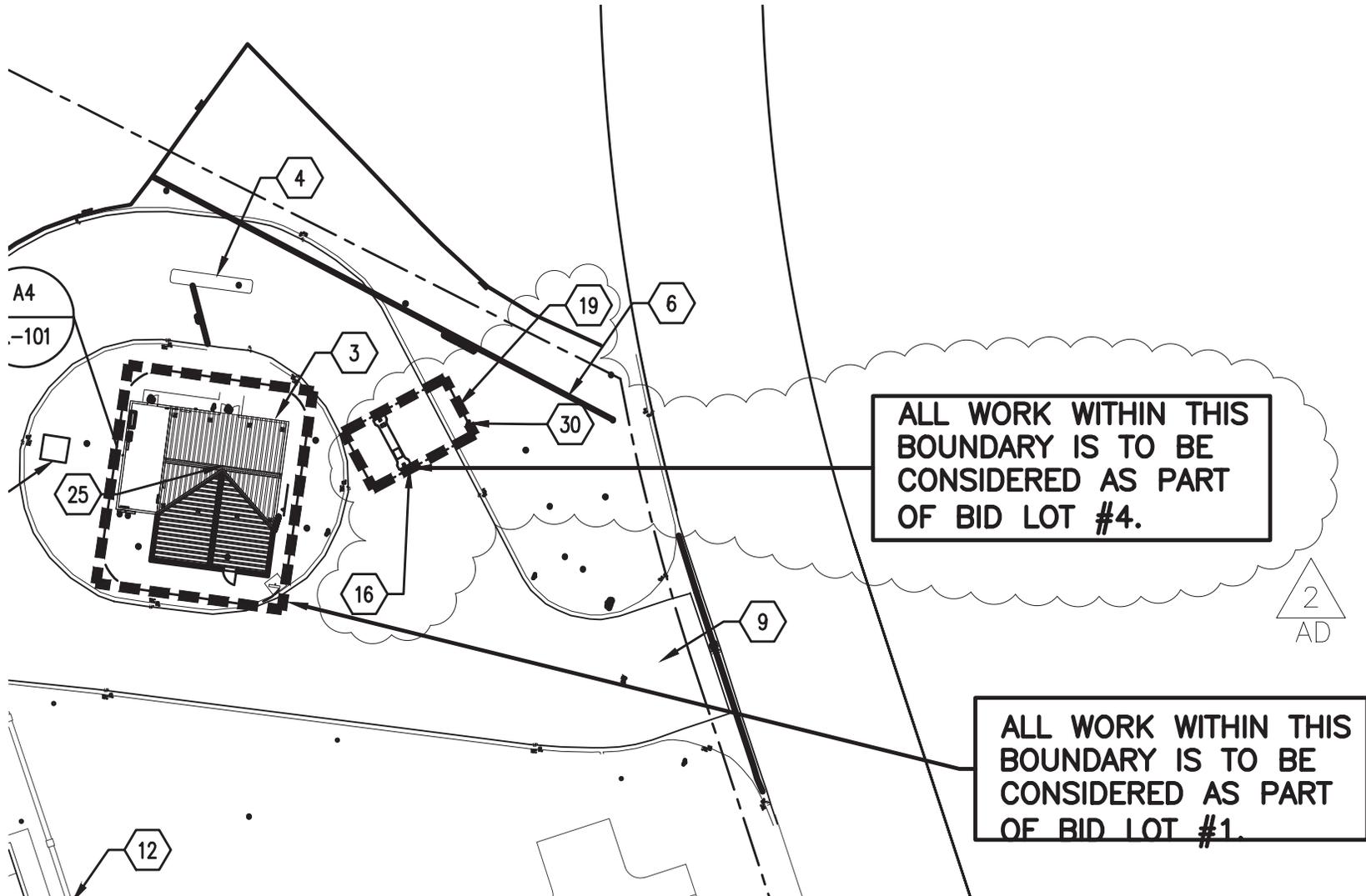
**End of Addendum No. 2 (pages follow)**

## PROCESS CNG

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DG-001	GENERAL NOTES
DG-101	SITE PLAN
DG-102	EQUIPMENT PLAN
DG-103	PIPING PLAN 1
DG-104	PIPING PLAN 2
DG-105	SAFETY SIGNAGE PLAN
DG-106	SAFETY SIGNAGE PLAN
<del>DG-501</del>	<del>EQUIPMENT SCHEDULE</del>
DG-502	NOT USED
DG-511	EQUIPMENT DETAIL 1
DG-512	EQUIPMENT DETAIL 2
DG-513	EQUIPMENT DETAIL 3
DG-514	K-RAIL/POST DETAIL
DG-515	SAFETY SIGNAGE DETAIL
DG-601	PROCESS FLOW DIAGRAM

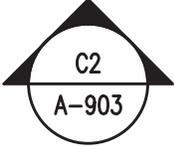
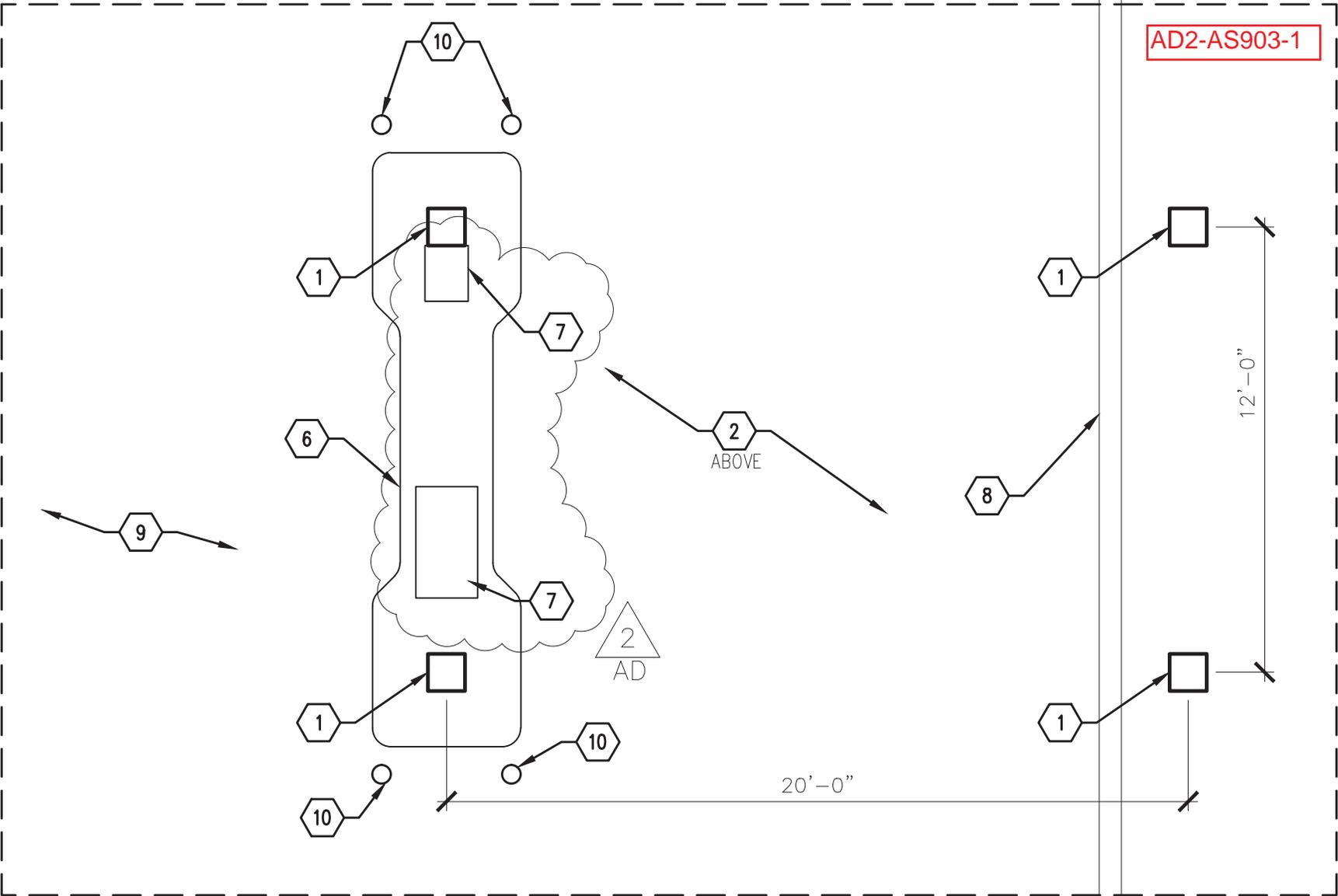
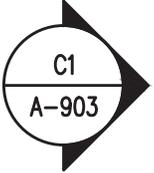




ALL WORK WITHIN THIS BOUNDARY IS TO BE CONSIDERED AS PART OF BID LOT #4.

ALL WORK WITHIN THIS BOUNDARY IS TO BE CONSIDERED AS PART OF BID LOT #1.

AD2-AS903-1



A1

# FLOOR PLAN

SCALE: 1/4" = 1'-0"



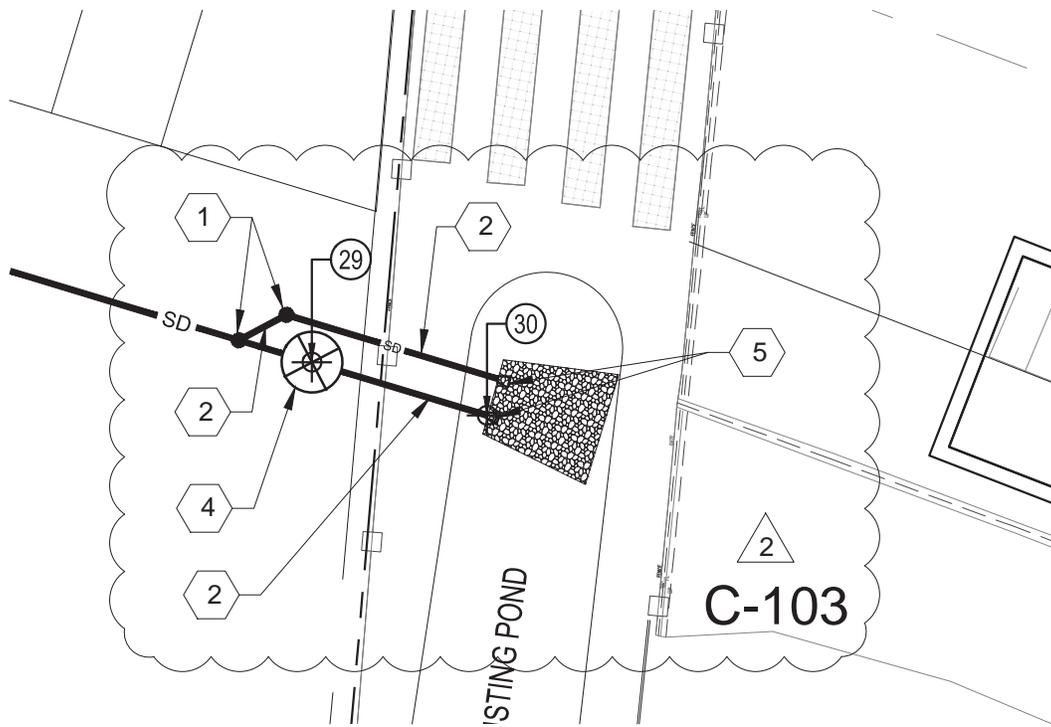
24. ANY WORK PERFORMED IN A DRAINAGE WAY, CHANNEL, ARROYO, OR FLOODPLAIN MUST BE PROTECTED BY THE MEANS IDENTIFIED IN THE TEMPORARY EROSION CONTROL AND SEDIMENT PLANS ACCEPTED BY THE COUNTY.

25. VIBRATION MONITORING WILL BE AT THE CONTRACTOR'S DISCRETION AND INCIDENTAL TO THE CONTRACT.

26. PAVEMENTS MUST MEET OR EXCEED R-VALUE OF ~~55~~<sup>50</sup>. IN AREAS LOWER R-VALVE MATERIAL, THE UPPER 2 FEET OF SUBGRADE SHOULD BE REMOVED AND REPLACED WITH R-VALUE ~~55~~<sup>50</sup> OR GREATER MATERIAL.



C-100





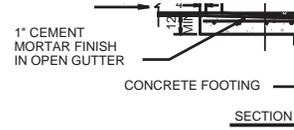
# SHEET KEYNOTES

1. CONCRETE PAVEMENT SECTION PER D3 SHEET C-501.
2. TURNDOWN EDGE PER <sup>C1</sup>~~D1~~ SHEET C-501.
3. ASPHALT PAVEMENT SECTION.

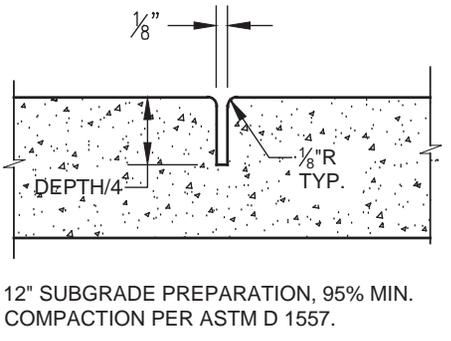
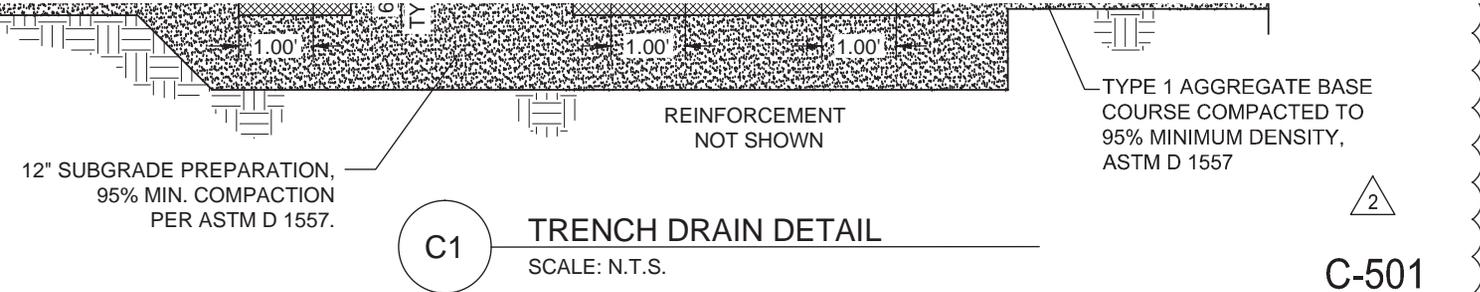


**C-104**

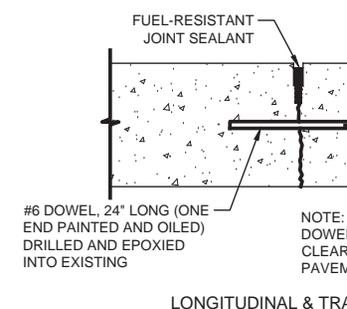
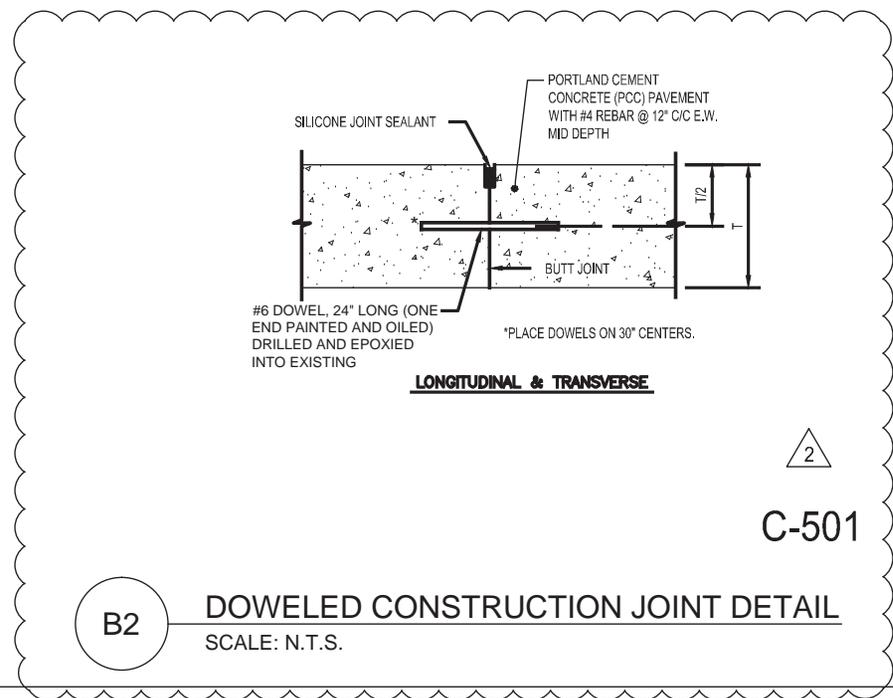
AD2-C501-1



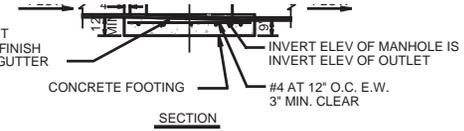
C3 **MANHOLE DETAIL**  
SCALE: 1"=2'-0"



**JOINT DETAIL**  
SCALE: N.T.S.

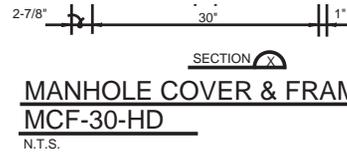


B3 **SAW CUT CONSTRUCTION JOINT DETAIL**  
SCALE: N.T.S.



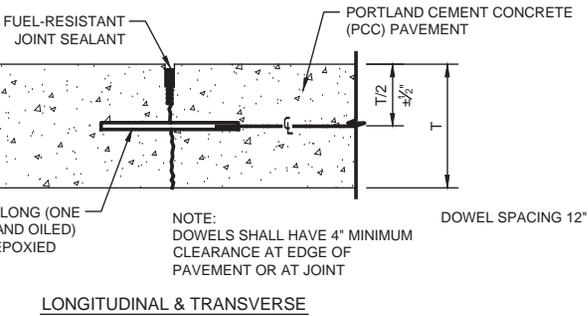
MANHOLE DETAIL

SCALE: 1"=2'-0"



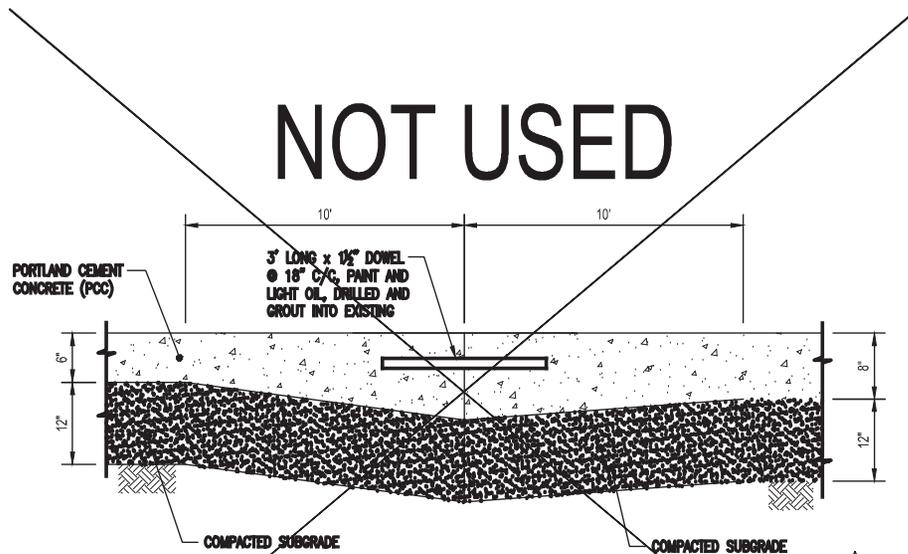
C4 MANHOLE RING DETAIL

SCALE: 1"=2'-0"



PAVEMENT CONTRACTION JOINTS DETAIL

SCALE: N.T.S.



B4 THICKENED EDGE CONSTRUCTION JOINT DETAIL

SCALE: N.T.S.

AD2-C501-3



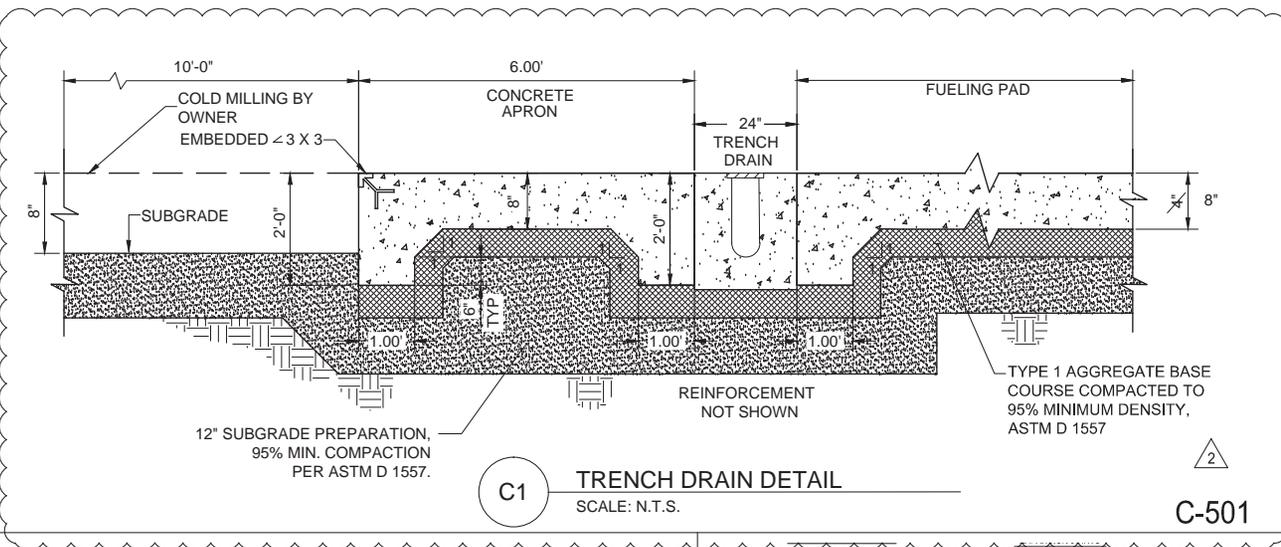
- (E) TYPE II BASE COURSE
- (F) TACK COAT

△  
C-501

D1 ASPHALT PAVEMENT SECTION  
SCALE: N.T.S.

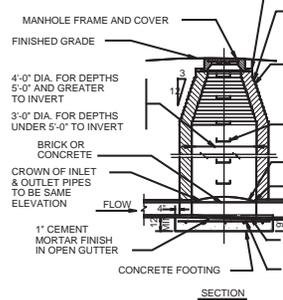
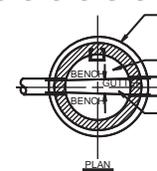


D3 8" PORTLAND CEMENT CONCRETE PAVEMENT  
SCALE: 1"=1'-0"

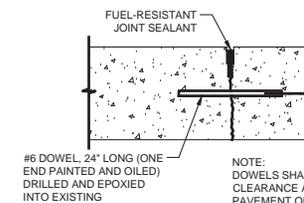
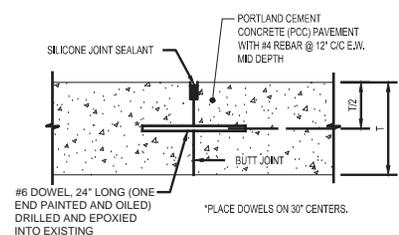
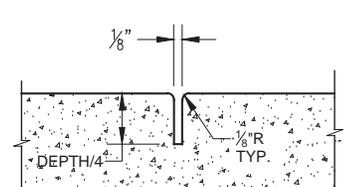


C1 TRENCH DRAIN DETAIL  
SCALE: N.T.S.

△  
C-501



C3 MANHOLE DETAIL  
SCALE: 1"=2'-0"



1

2

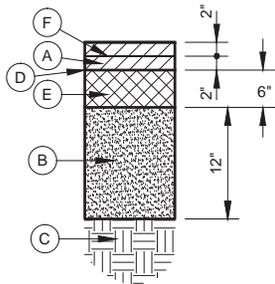
3

**GENERAL NOTES:**

1. ANY DEVIATIONS FROM THESE STANDARDS SHALL BE SUBMITTED TO THE CIVIL ENGINEER FOR PRIOR APPROVAL.
2. ANY WORK IN PUBLIC RIGHT-OF-WAY SHALL BE CONSTRUCTED BY A CONTRACTOR AND REQUIRES APPROVAL BY THE CITY OF SANTA FE.
3. FOR SUBGRADE R VALUE LESS THAN 50 A PROJECT/SITE SPECIFIC PAVEMENT DESIGN APPROVED BY THE CIVIL ENGINEER AS REQUIRED. DESIGNS SUBMITTED MUST CONFORM TO THE AASHTO GUIDE FOR DESIGN OF PAVEMENT STRUCTURES PROCEDURE, 1993. NOMOGRAPHS MAY NOT BE USED.

**KEYED NOTES:**

- (A) ASPHALT CONCRETE TYPE SP-IV, PER NMDOT SPEC. PLACED IN (2) - 2" LIFTS.
- (B) SUBGRADE PREPARATION, 95% MIN. COMPACTION PER ASTM D 1557.
- (C) COMPACTED FILL OR UNDISTURBED EARTH, 95% MIN. COMPACTION PER ASTM D 1557.
- (D) PRIME COAT, PER NMDOT SPEC. OR SUBGRADE SHALL BE MOISTURE CONTROLLED AT COMPACTION MOISTURE RANGE.
- (E) TYPE II BASE COURSE
- (F) TACK COAT



D1

**ASPHALT PAVEMENT SECTION**

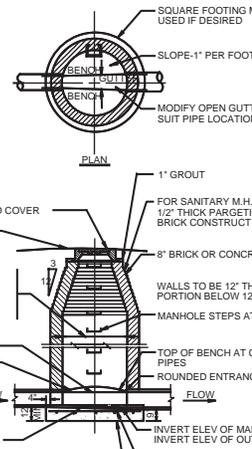
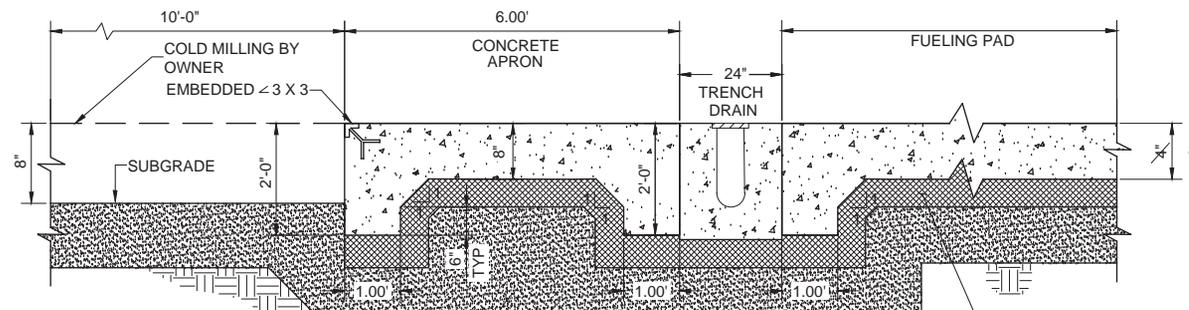
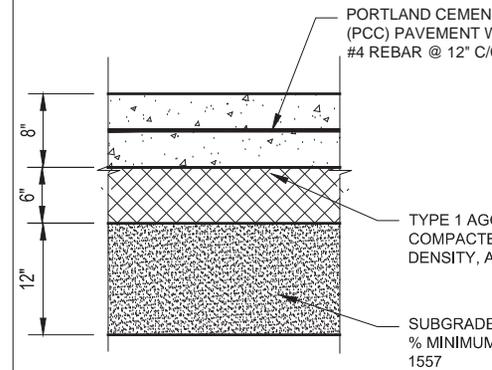
SCALE: N.T.S.

C-501

D3

**8" PORTLAND CEMENT CONCRETE PAVEMENT SECTION**

SCALE: 1"=1'-0"



2

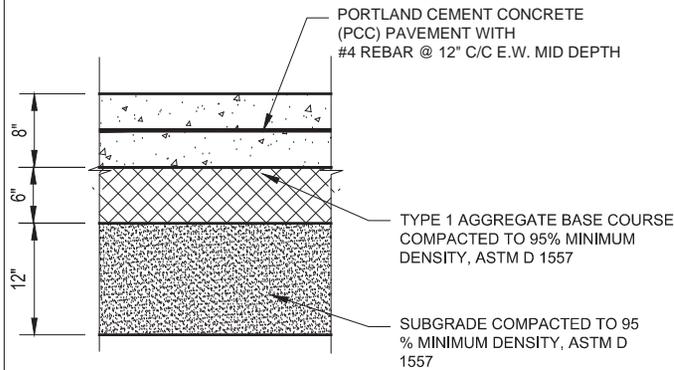
**KEYED NOTES:**

- (A) ASPHALT CONCRETE TYPE SP-IV, PER NMDOT SPEC. PLACED IN (2) - 2" LIFTS.
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- (D) PRIME COAT, PER NMDOT SPEC. OR SUBGRADE SHALL BE MOISTURE CONTROLLED AT COMPACTION MOISTURE RANGE.
- (E) TYPE II BASE COURSE
- (F) TACK COAT

2

C-501

3



D3

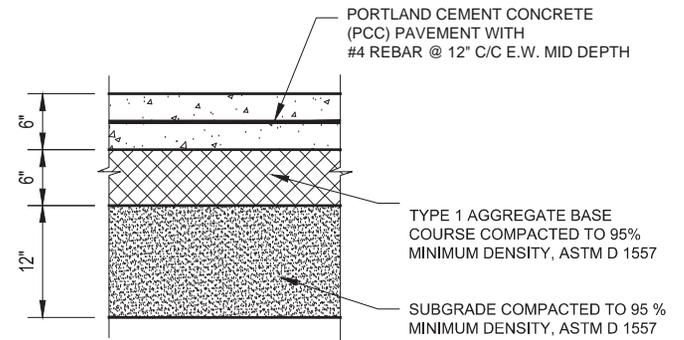
**8" PORTLAND CEMENT CONCRETE PAVEMENT SECTION**

SCALE: 1"=1'-0"

C-501

2

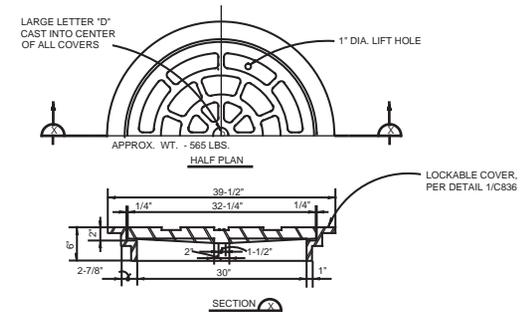
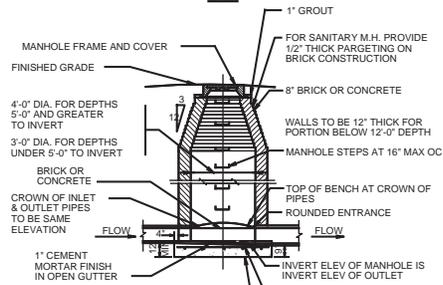
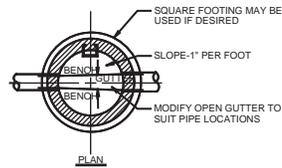
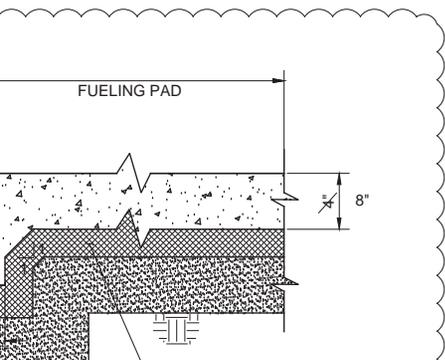
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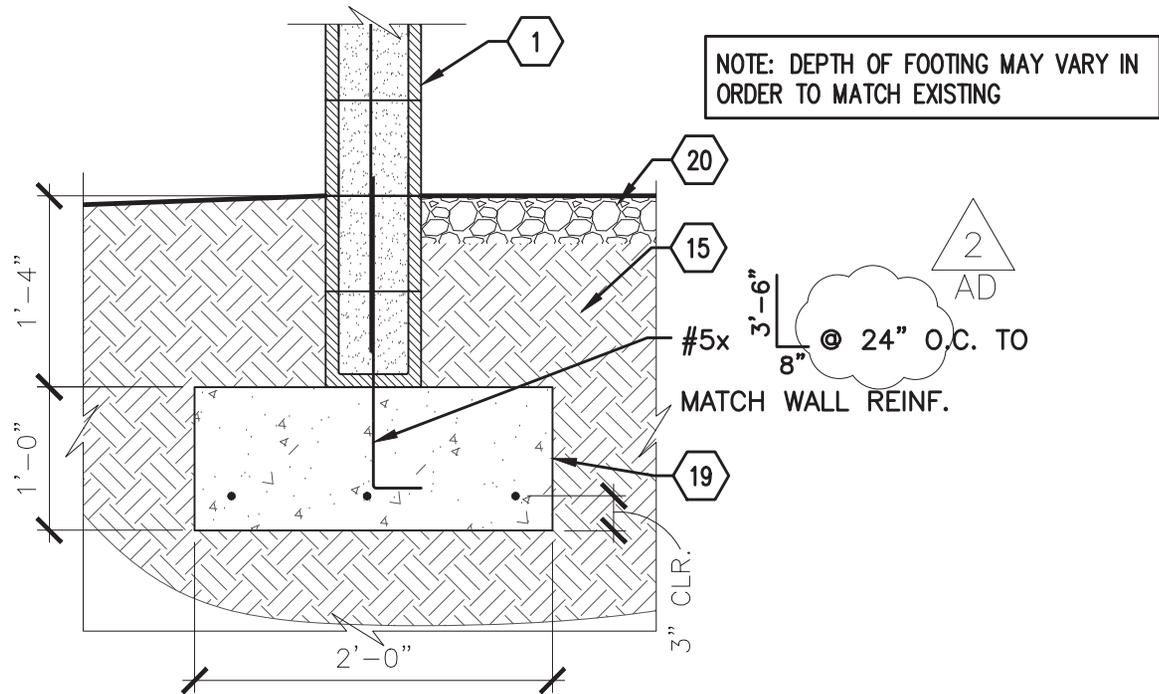


D4

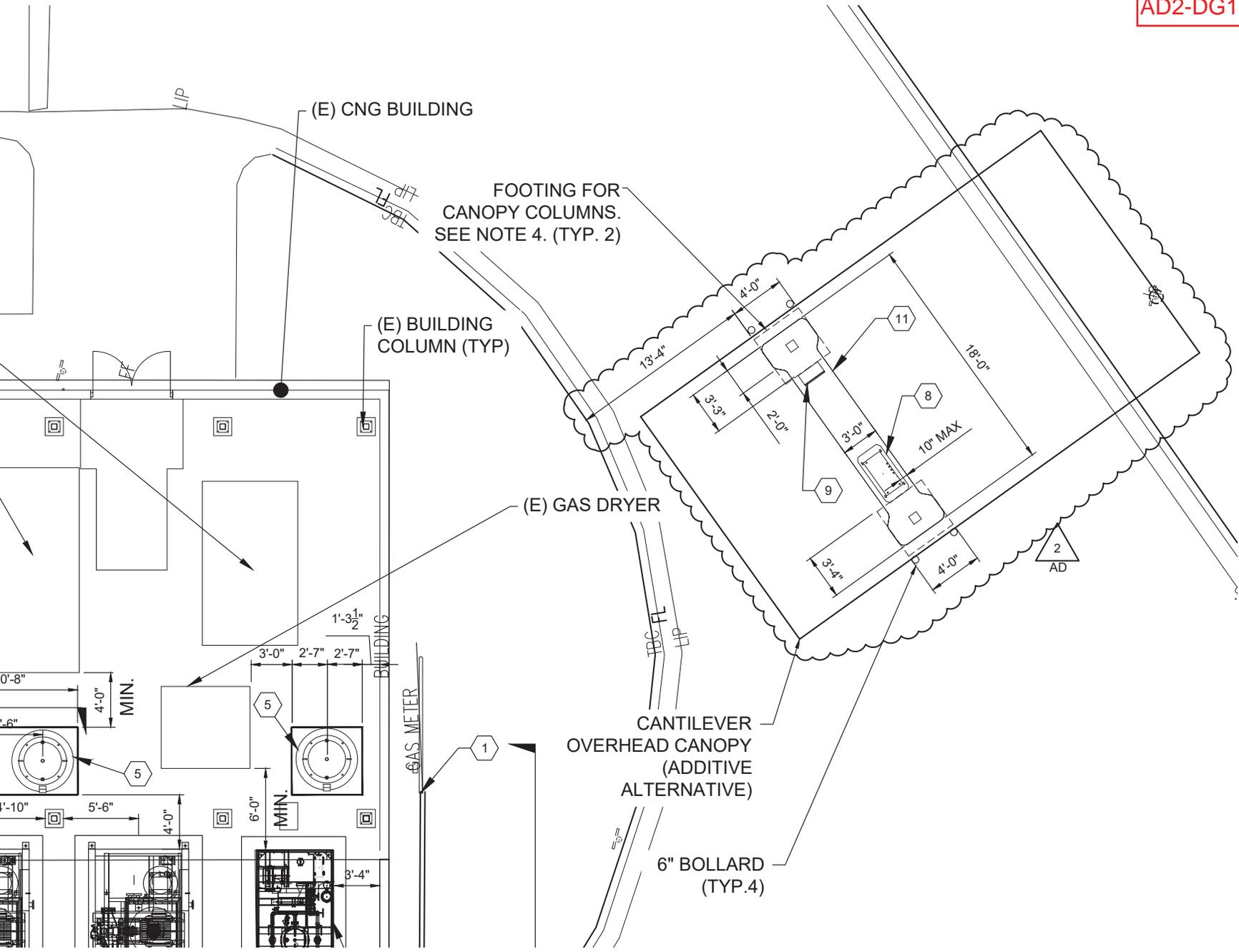
**6" PORTLAND CEMENT CONCRETE PAVEMENT SECTION**

SCALE: 1"=1'-0"





**A1** **CMU WALL FOUNDATION DETAIL** **A**  
SCALE: 3/4" = 1' - 0"



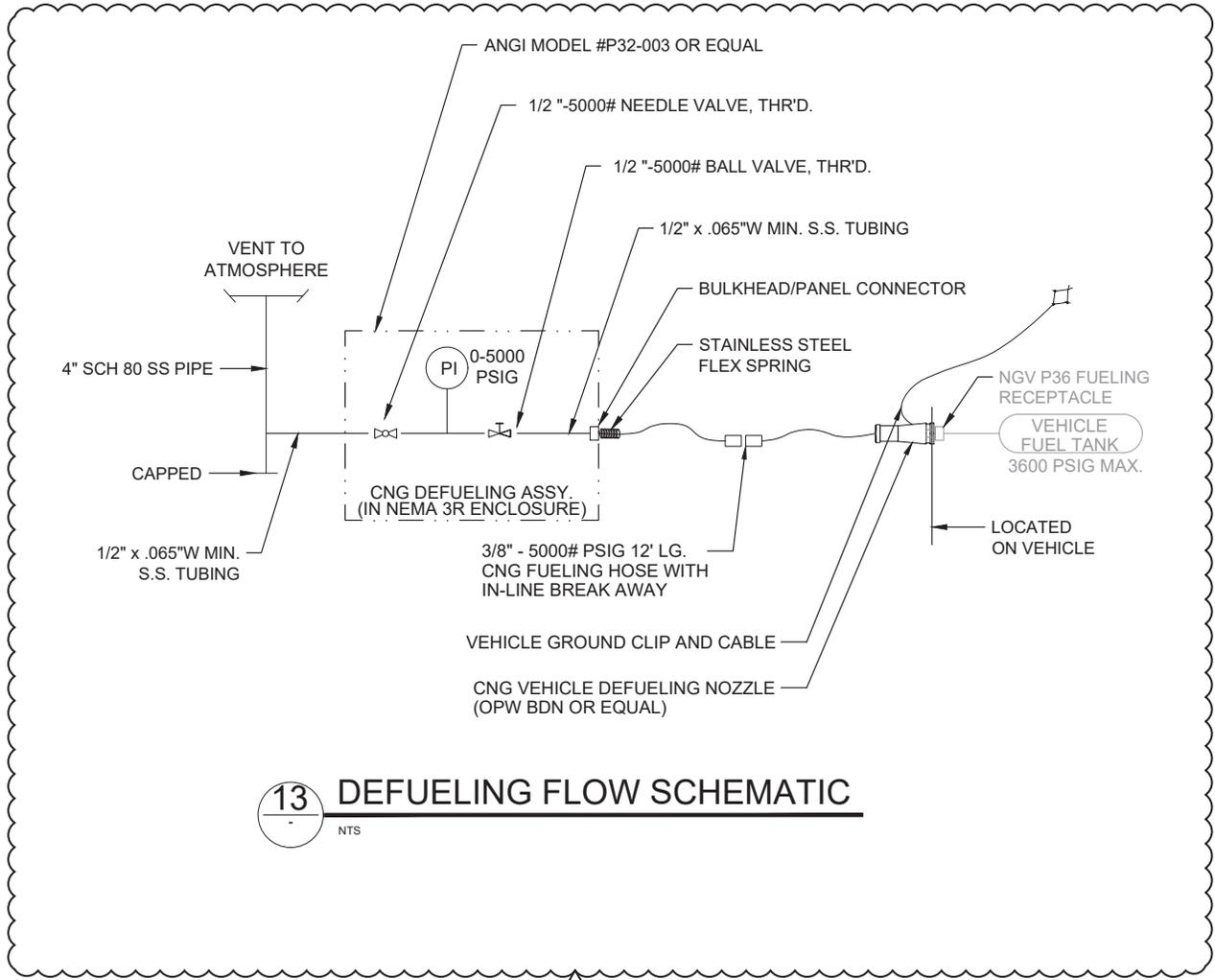
CNG Fuel Facility  
Upgrades  
CIP Project#  
657A

ADDRESS:  
2931 Rufina St.  
Santa Fe, New Mexico  
87507

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**13** DEFUELING FLOW SCHEMATIC  
NTS

2  
AD

CNG Fuel Facility  
Upgrades  
CIP Project#  
657A

ADDRESS:  
2931 Rufina St.  
Santa Fe, New Mexico  
87507

4	11/18/2015	BID/PERMIT
3	7/10/2015	100% CD REVIEW
2	5/8/2015	50% CD SET
1	2/26/2015	100% DD SET
MK	DATE	DESCRIPTION

ISSUE:  
PROJECT NO.: R303397.01  
CAD DWG FILE:  
DRAWN BY:  
CHECKED BY:  
COPYRIGHT:  
HUITT-ZOLLARS INC. 2014  
SHEET TITLE:

CNG  
K-RAIL/POST  
DETAIL

DG-514

SHEET OF