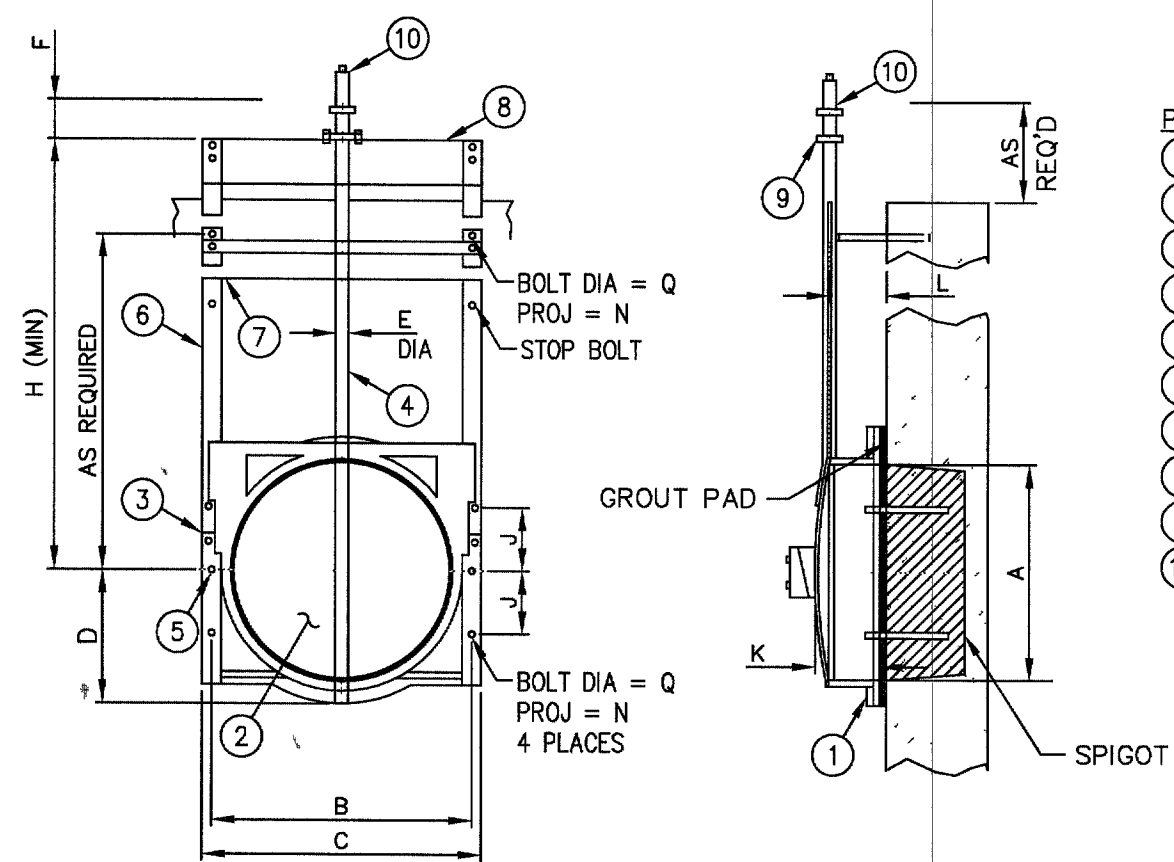
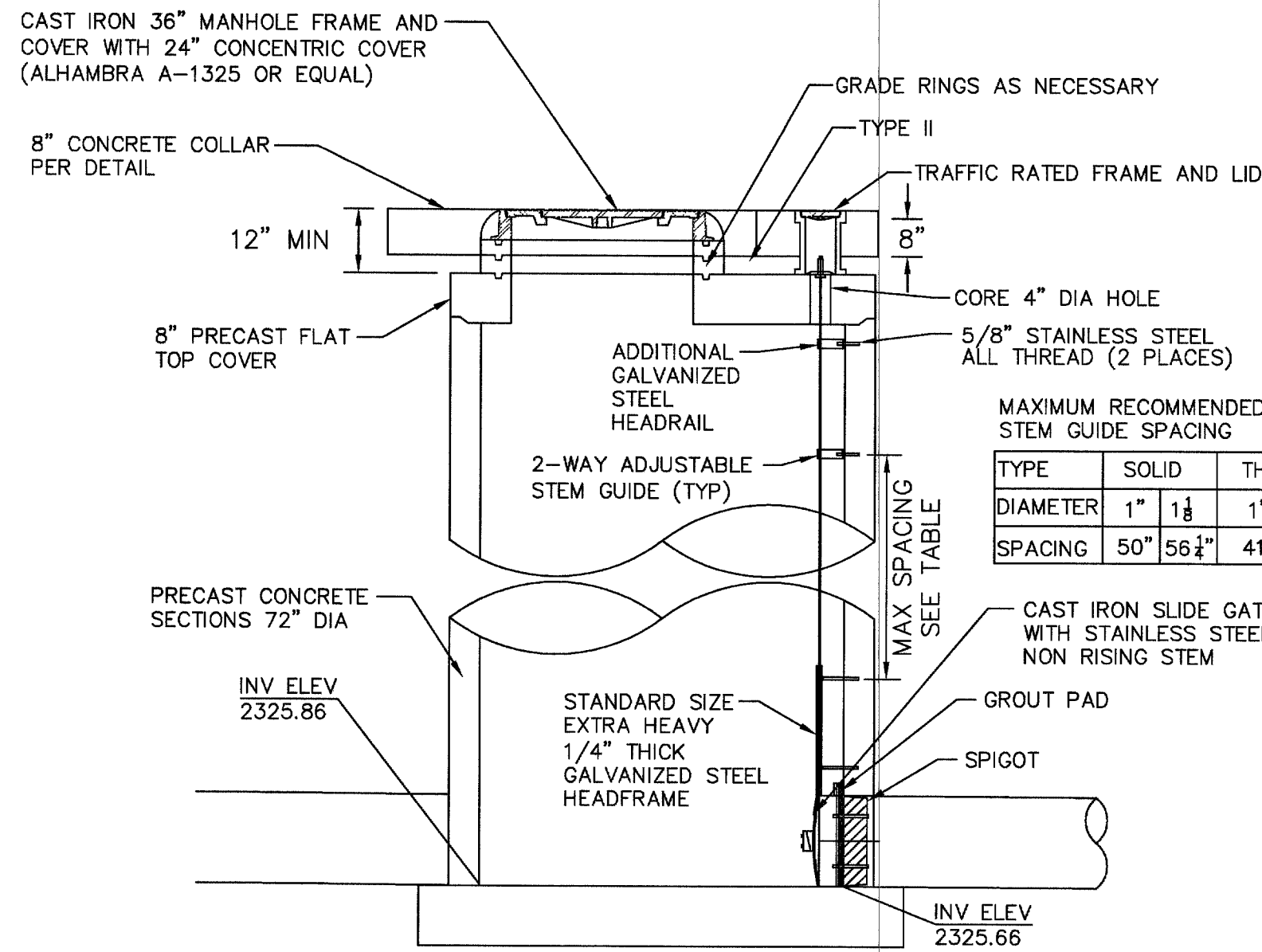


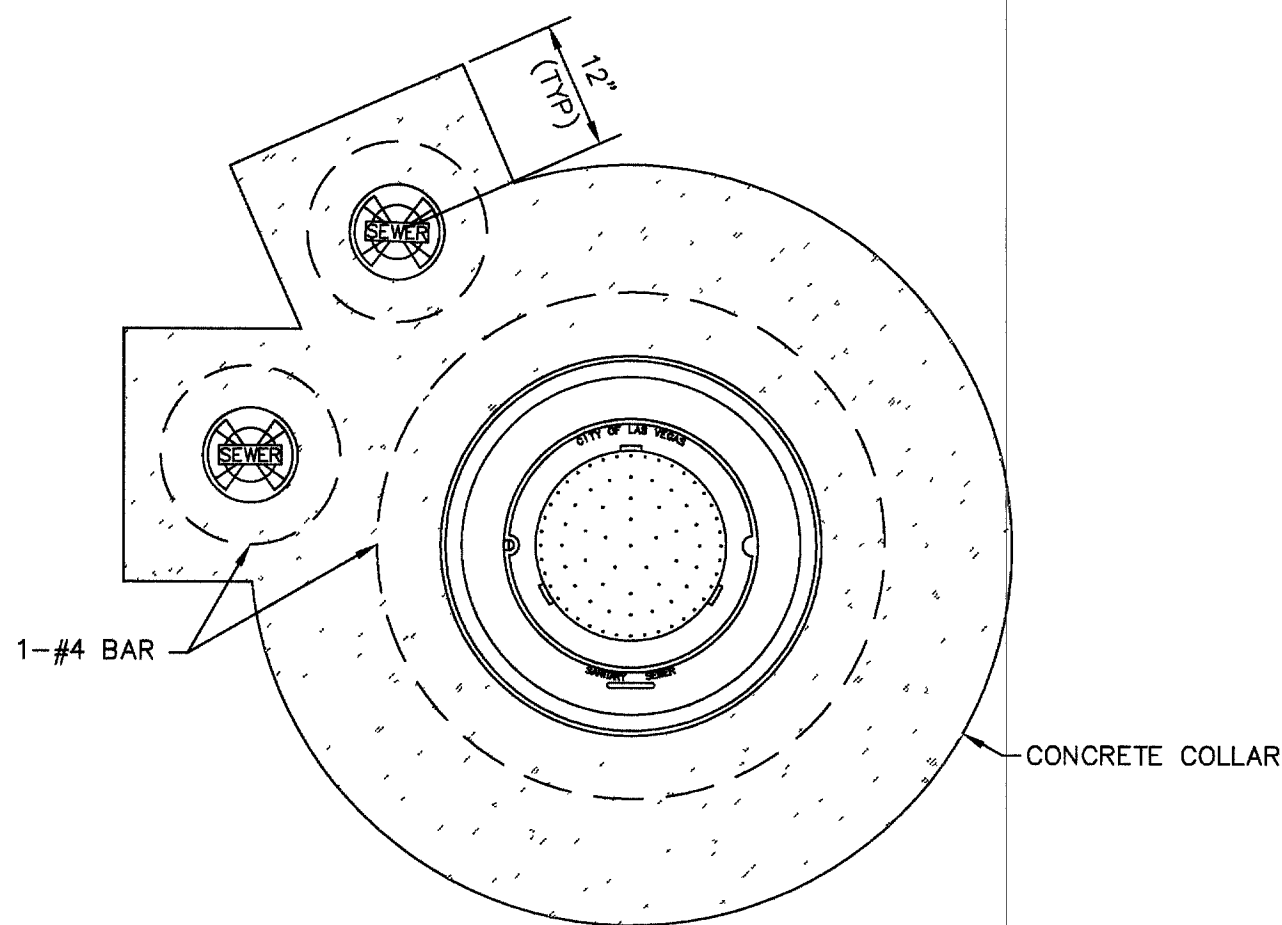


- PARTS LIST**
- 1 FRAME
 - 2 COVER (FLAT PLATE)
 - 3 WEDGE (R&L)
 - 4 STEM
 - 5 WEDGE BOLT
 - 6 GUIDE RAIL
 - 7 STEM SUPPORT
 - 8 HEAD RAIL
 - 9 LIFT COLLAR
 - 10 LIFT NUT

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q
18	21	22	10	2	1	3	8	12	34	6	4	2	4	2
24	27	29	13	6	1	3	8	12	44	8	5	4	8	2

DIMENSIONS IN INCHES

CL-10 CANAL GATE DETAIL
SCALE: NTS



CONCRETE COLLAR DETAIL
SCALE: NTS

BENCHMARK

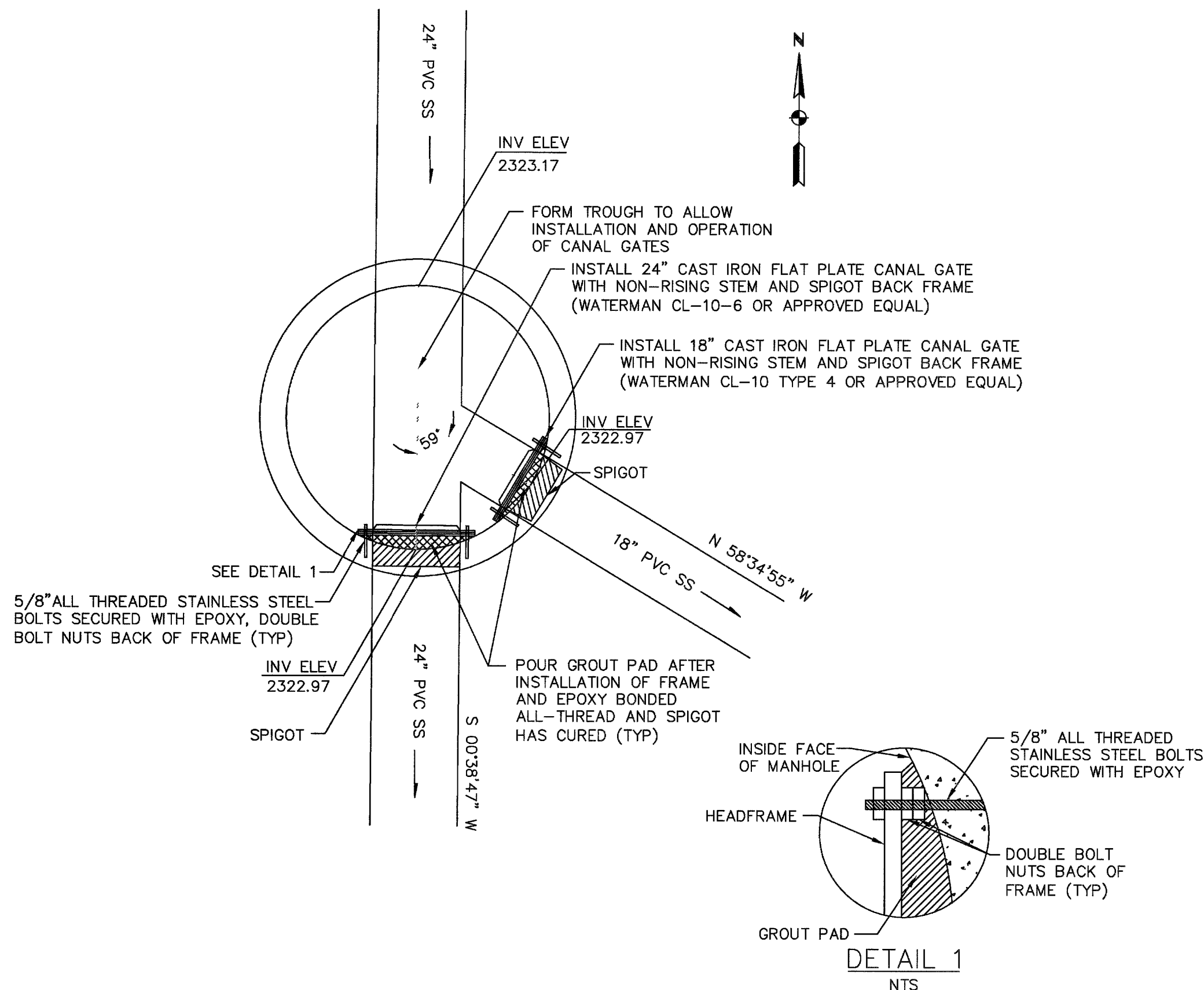
CITY OF LAS VEGAS BENCHMARK 9LV90 14C4
A RIVET AND PLATE IN A CONCRETE PAD (POWER) AT THE SOUTHWEST CORNER OF FARM ROAD AND TORREY PINES DRIVE.
ELEVATION=717.2224 METERS (NAVD'88)
ELEVATION=2353.09 U.S. SURVEY FEET (NAVD'88)

BASIS OF BEARING

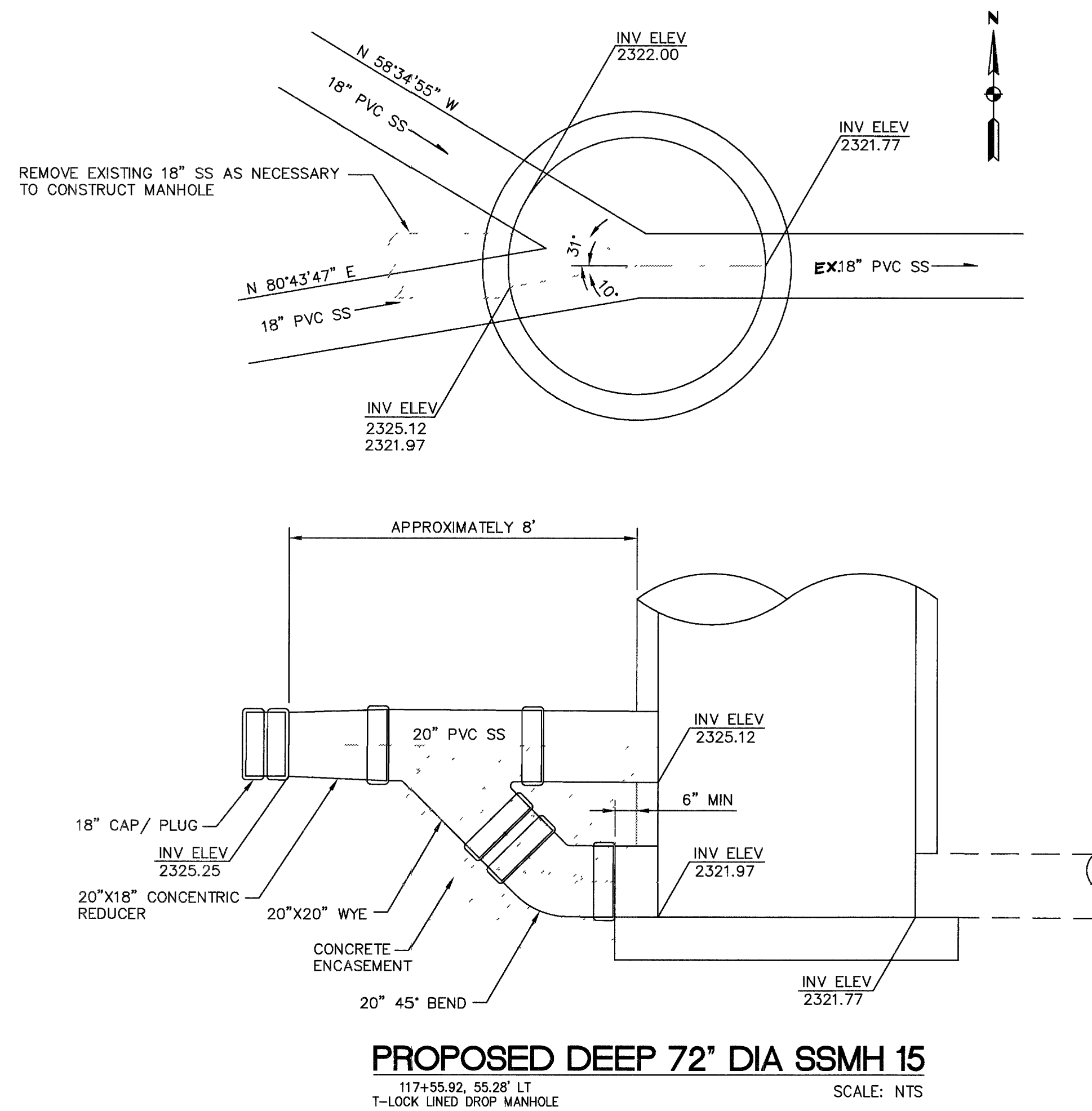
NORTH 89°38'01" WEST, BEING THE BEARING OF THE NORTH LINE OF THE SOUTHEAST QUARTER (NE 1/4) OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 14, TOWNSHIP 19 SOUTH, RANGE 60 EAST, MDM, CLARK COUNTY, NEVADA, AS SHOWN ON THAT CERTAIN MAP ON FILE IN THE CLARK COUNTY RECORDER'S OFFICE.

NOTES:

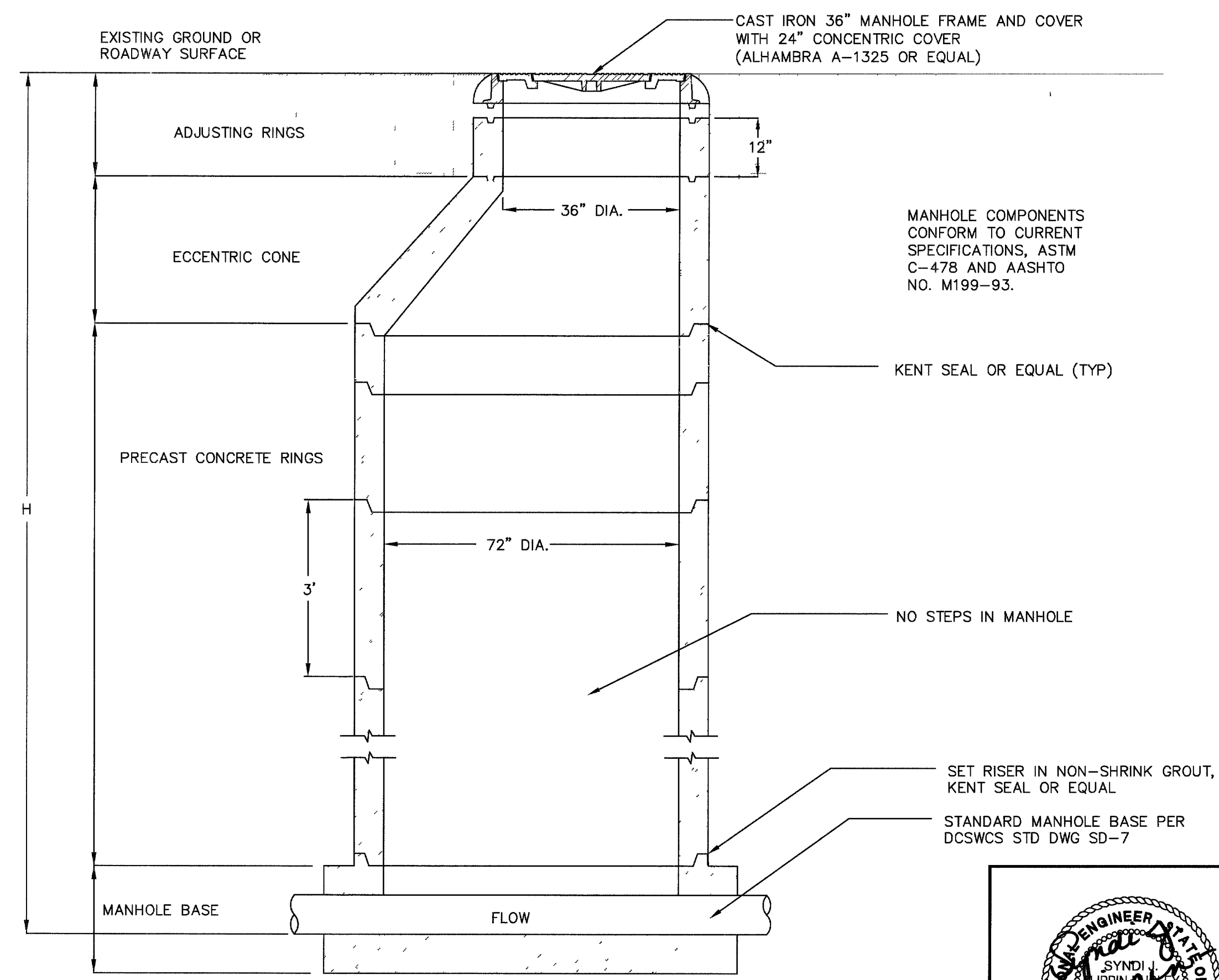
- COVERS SHALL BE HIGH STRENGTH DUCTILE IRON CASTINGS WITH MACHINED SEATING FACES.
- COVER SHALL BE OF A FLAT PLATE TYPE WITH A THREADED THRUST NUT FOR A NON-RISING STEM APPLICATION.
- COVERS SHALL BE DESIGNED FOR A MAXIMUM SEATING HEAD OF 23 FEET.
- SPIGOT BACK FRAME SHALL BE SUITABLE FOR EPOXY BONDING TO SOLID WALL PVC SEWER LINES.
- FRAME SHALL BE STANDARD SIZE WITH AN EXTRA HEAD RAIL MOUNTED NEAR THE TOP OF THE MANHOLE.
- WEDGES SHALL BE ADJUSTABLE, DOUBLE BOLTED TYPE ATTACHED TO THE RAIL ASSEMBLY.
- COVER WEDGE SHALL BE INTEGRALLY CAST WITH COVER.
- RAIL AND COVER WEDGES SHALL HAVE SMOOTH BEARING SURFACES.
- MANUAL THREADED LIFTING MECHANISM SHALL BE OPERATED BY A TEE TYPE WRENCH FROM THE SURFACE AS SHOWN ON THE CANAL GATE DETAIL.
- STEM SHALL BE STAINLESS STEEL.
- ASSEMBLY HARDWARE SHALL BE STAINLESS STEEL.
- STEM GUIDES SHALL BE FABRICATED STAINLESS STEEL WITH NON METALLIC BUSHINGS.
- STEM GUIDE MOUNTING BRACKETS SHALL BE ADJUSTABLE IN TWO DIRECTIONS.
- GATE ASSEMBLIES SHALL BE INSTALLED AS PER MANUFACTURERS SPECIFICATIONS AND RECOMMENDATIONS OR AS DIRECTED BY THE ENGINEER.



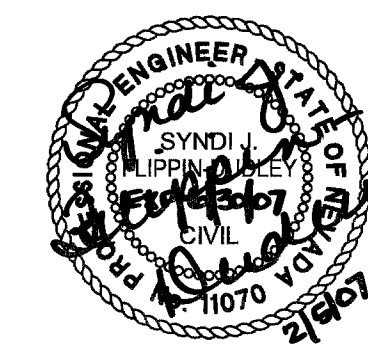
PROPOSED 72" DIA SSMH 16
117+13.24, 17.00' RT SCALE: NTS



PROPOSED DEEP 72" DIA SSMH 15
117+55.92, 55.28' LT
T-LOCK LINED DROP MANHOLE SCALE: NTS



DEEP MANHOLE DETAIL
FOR USE WHEN H > 18FT. SCALE: NTS



DATE: _____
HTE 06-27964
CLV 307V996

THE Louis Berger Group,
500 E. Arroyo Court, Suite 100
Las Vegas, Nevada 89119



IMPROVEMENT PLANS FOR
WHITEHORSE WEST
SANITARY SEWER
MANHOLE DETAILS

PROJECT NO.
1881.001
DRAWING
15

SHT 15 OF 15