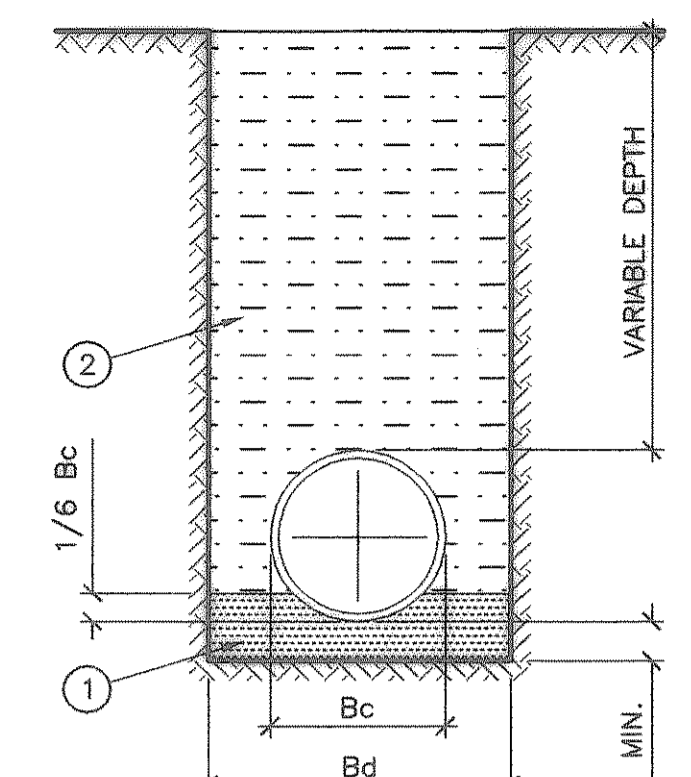
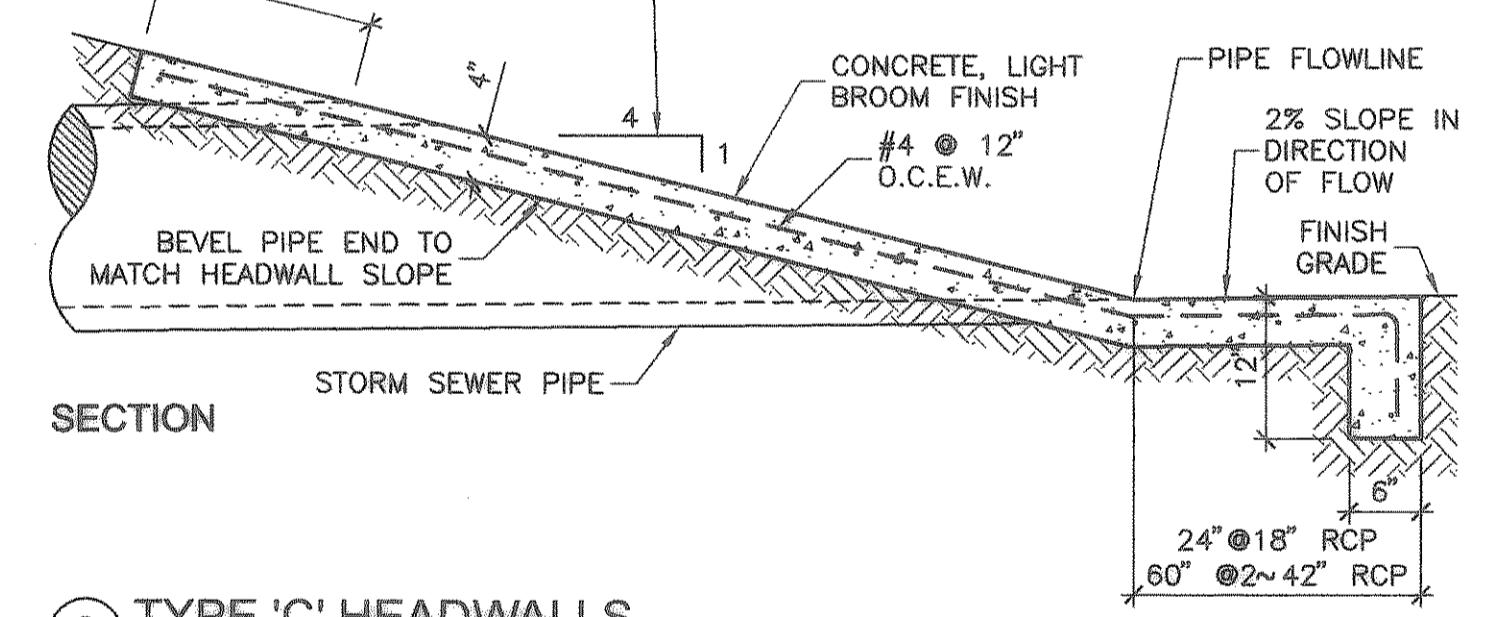
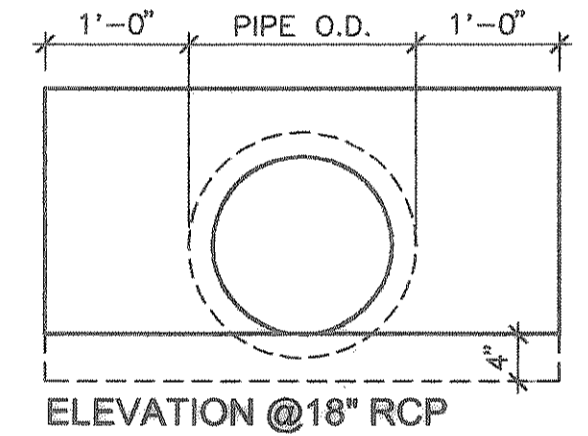
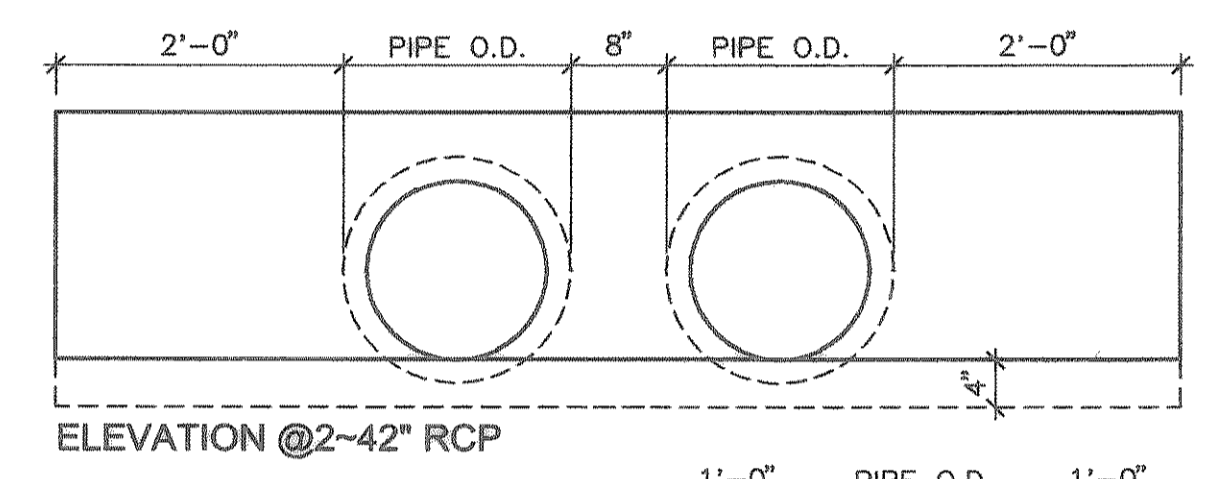


TRENCH WIDTH FOR REINFORCED CONCRETE PIPE WALL 'B'

NOMINAL PIPE DIAMETER (INCHES)	Bc OUTSIDE DIAMETER (INCHES)	Bd TRENCH WIDTH (INCHES)	Bd TRENCH WIDTH (FEET)
15	19.0	36	3.00
18	23.0	39	3.25
21	26.5	42	3.50
24	30.0	48	4.00
27	33.5	51	4.25
30	37.0	54	4.50
33	40.5	57	4.75
36	44.0	63	5.25
39	47.5	66	5.50
42	51.0	69	5.75
45	54.5	72	6.00
48	58.0	78	6.50
51	61.5	81	6.75
54	65.0	84	7.00
60	72.0	93	7.75
66	79.0	99	8.25
72	86.0	108	9.00



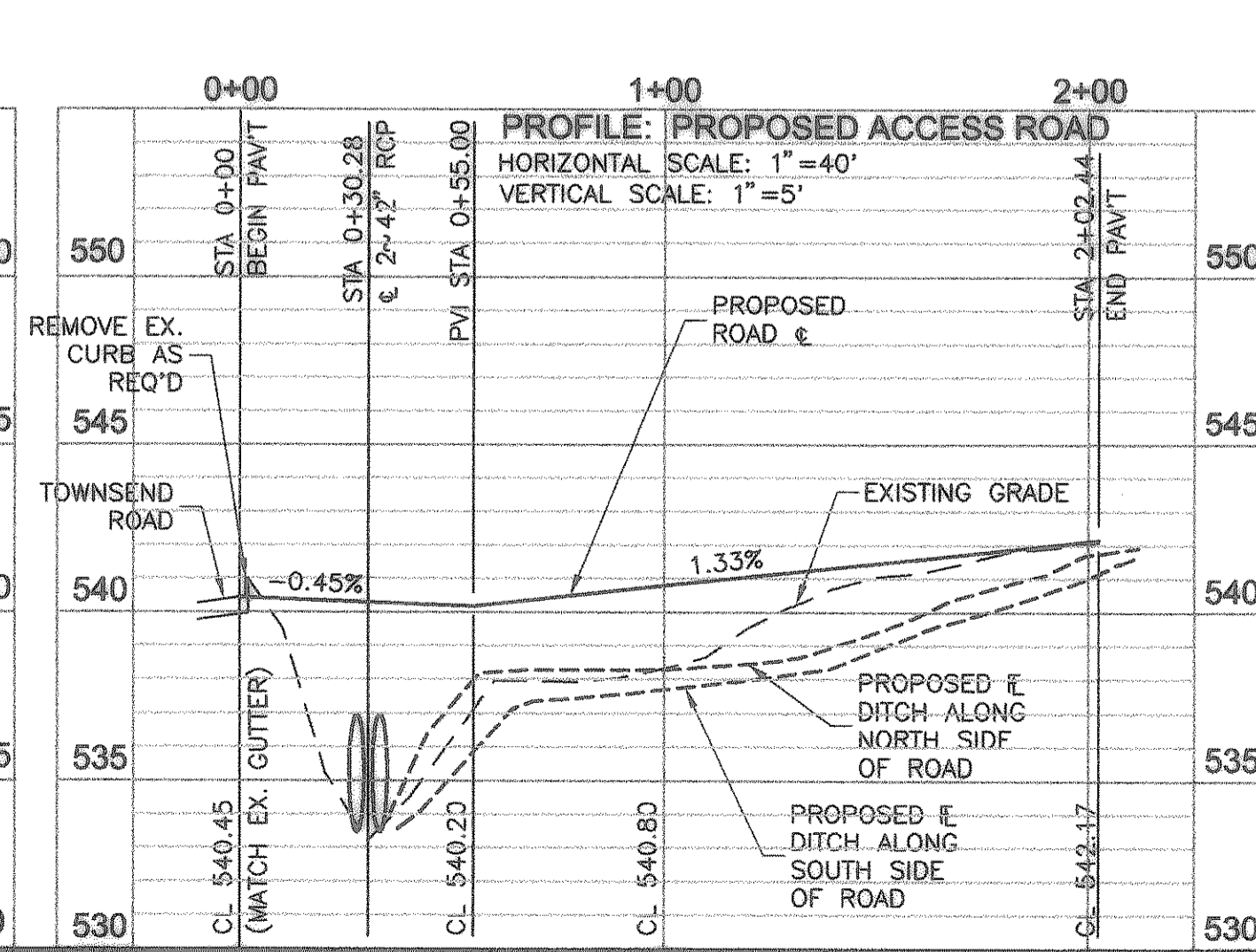
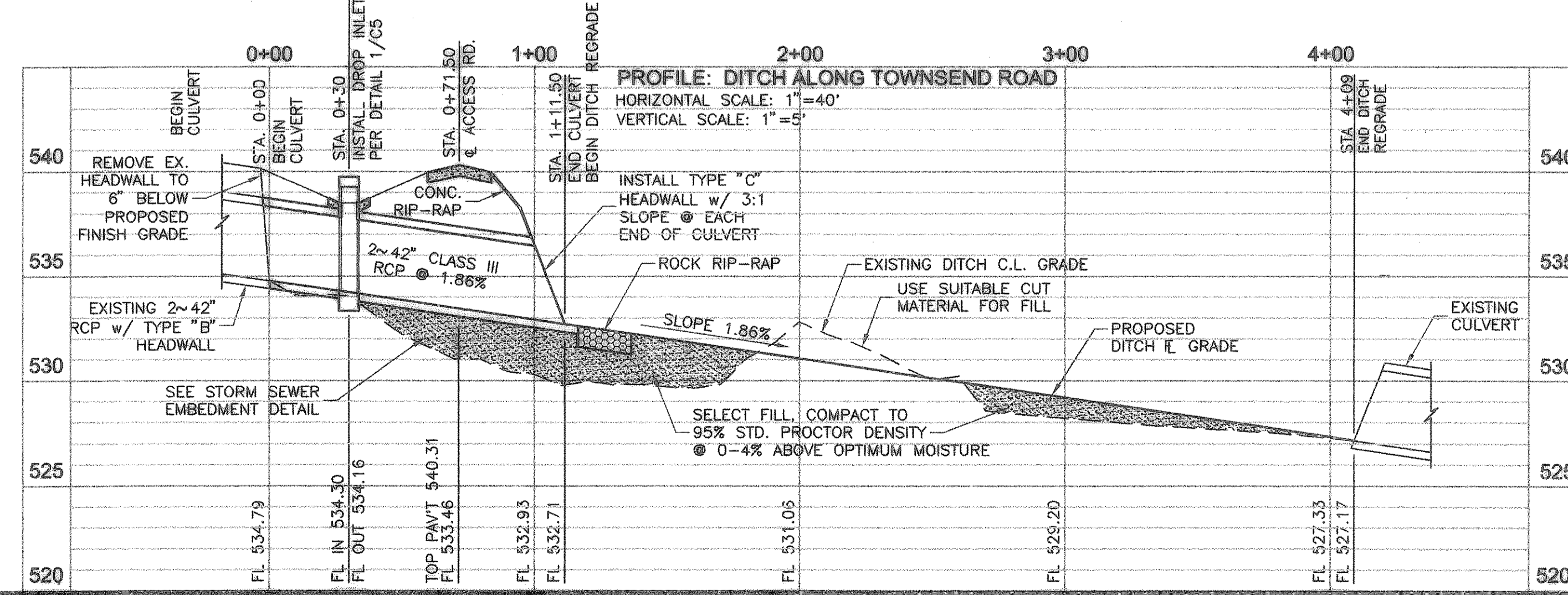
- STANDARD GRADATION CRUSHED STONE - PLACE TOP LAYER AT SLOPE OF PIPE TO PROVIDE UNIFORM SUPPORT OF PIPE BARREL. EXCAVATE BELL HOLES.
- SELECT MATERIAL FREE OF ROCKS, CLUMPS OR DEBRIS LARGER THAN 6" IN GREATEST DIMENSION. COMPACT TO 95% STANDARD PROCTOR DENSITY UNDER STRUCTURES, ROADWAYS, AND PAVEMENT. COMPACT TO 90% STANDARD PROCTOR DENSITY AT ALL OTHER LOCATIONS. MOISTURE CONTENT SHALL BE 0-4% ABOVE OPTIMUM IN EACH CASE.
- STORM SEWER EMBEDMENT
NO SCALE



GRADING NOTES

- STRIP GRASS AND VEGETATION FROM AREAS TO BE EXCAVATED, FILLED OR COVERED BY STRUCTURES OR PAVEMENT. STRIP AND REMOVE ALL TOPSOIL (6" MIN. DEPTH) FROM THESE AREAS AND STOCKPILE AT AN ON-SITE LOCATION SELECTED BY THE OWNER.
- SCARIFY SUBGRADE AT EXCAVATED AREAS AND AREAS TO RECEIVE FILL TO A DEPTH OF SIX INCHES AND RECOMPACT TO 95% STANDARD PROCTOR DENSITY AT 0-4% ABOVE OPTIMUM MOISTURE
- FILL MATERIAL:
 - ALL FILL MATERIAL UNDER NEW BUILDING AND PUMP SLABS, AND FOR FIVE FEET OUTSIDE THESE SLABS, SHALL BE COMPACTABLE SAND, PER SPECIFICATIONS, COMPACTED IN SIX-INCH LIFTS TO 95% STANDARD PROCTOR DENSITY AT 0-4% ABOVE OPTIMUM MOISTURE.
 - FILL UNDER ROADWAYS AND PARKING AREAS SHALL BE SELECT MATERIAL COMPACTED IN SIX-INCH LIFTS TO 95% STANDARD PROCTOR DENSITY AT 0-4% ABOVE OPTIMUM MOISTURE.
 - ALL OTHER FILL MATERIAL SHALL BE SELECT MATERIAL COMPACTED IN EIGHT-INCH LIFTS TO 90% STANDARD PROCTOR DENSITY.
- PLACE SIX INCHES OF TOPSOIL ON ALL EXCAVATED OR FILLED AREAS WHICH ARE NOT SHOWN TO BE COVERED BY STRUCTURES OR PAVEMENT. AFTER FINISH GRADING OF TOPSOIL, COVER SLOPES OF 4:1 OR GREATER WITH BERMUDA GRASS SOD. HYDROMULCH ALL OTHER DISTURBED AREAS USING BERMUDA GRASS SEED. SEE SPECIFICATIONS FOR PLANTING SEASON AND TEMPORARY STABILIZATION.
- PROOF ROLL ALL AREAS TO RECEIVE CONCRETE PAVEMENT WITH A 25-TON PNEUMATIC ROLLER. CUT OUT AND REPLACE ALL AREAS THAT SHOW RUTS AFTER ROLLING.
- COMPACT ALL TRENCHES UNDER AND WITHIN FIVE FEET OF STRUCTURES OR PAVEMENT IN SIX-INCH LIFTS TO 95% STANDARD PROCTOR DENSITY AT 0-4% ABOVE OPTIMUM MOISTURE. USE COMPACTABLE SAND BACKFILL FOR ELECTRICAL TRENCHES IN THESE AREAS. TRENCHES IN ALL OTHER AREAS MAY BE BACKFILLED WITH SELECT MATERIAL COMPACTED IN EIGHT-INCH LIFTS TO 90% STANDARD PROCTOR DENSITY. BACKFILL WATER LINE TRENCHES PER EMBEDMENT DETAILS.
- EXCESS EXCAVATED MATERIALS, IF ANY, SHALL BE REMOVED FROM THE SITE.

3 TYPE 'C' HEADWALLS
3/4"=1'-0"



CITY OF HEATH
PUMP STATION NO. 1

RECORD DRAWING
(ALL REVISIONS ARE BASED UPON CITY AND CONTRACTOR NOTES AND COMMENTS)

GRADING & DRAINAGE PLAN, DETAILS

NO. DATE REVISION

PROJECT No.: 02150
DATE: JAN. 2005
DESIGNED: FMI
DRAWN: FMI
CHECKED: JTM

SHEET
C4

TOTAL SHEETS: 35

REGISTERED ARCHITECT
JOHN D. GATTIS, A.L.A.
ON 01.15.2005

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY JOHN D. GATTIS, A.L.A. ON 01.15.2005.

SCALE: AS NOTED

IF SHEET IS IN 11"x17" FORMAT, DRAWINGS ARE AT 1/2 OF NOTED SCALE.

FREEMAN-MULLICAN, INC.
ENGINEERS - ARCHITECTS - PLANNERS
9600 FOREST LN., DALLAS, TX. 75243-5055