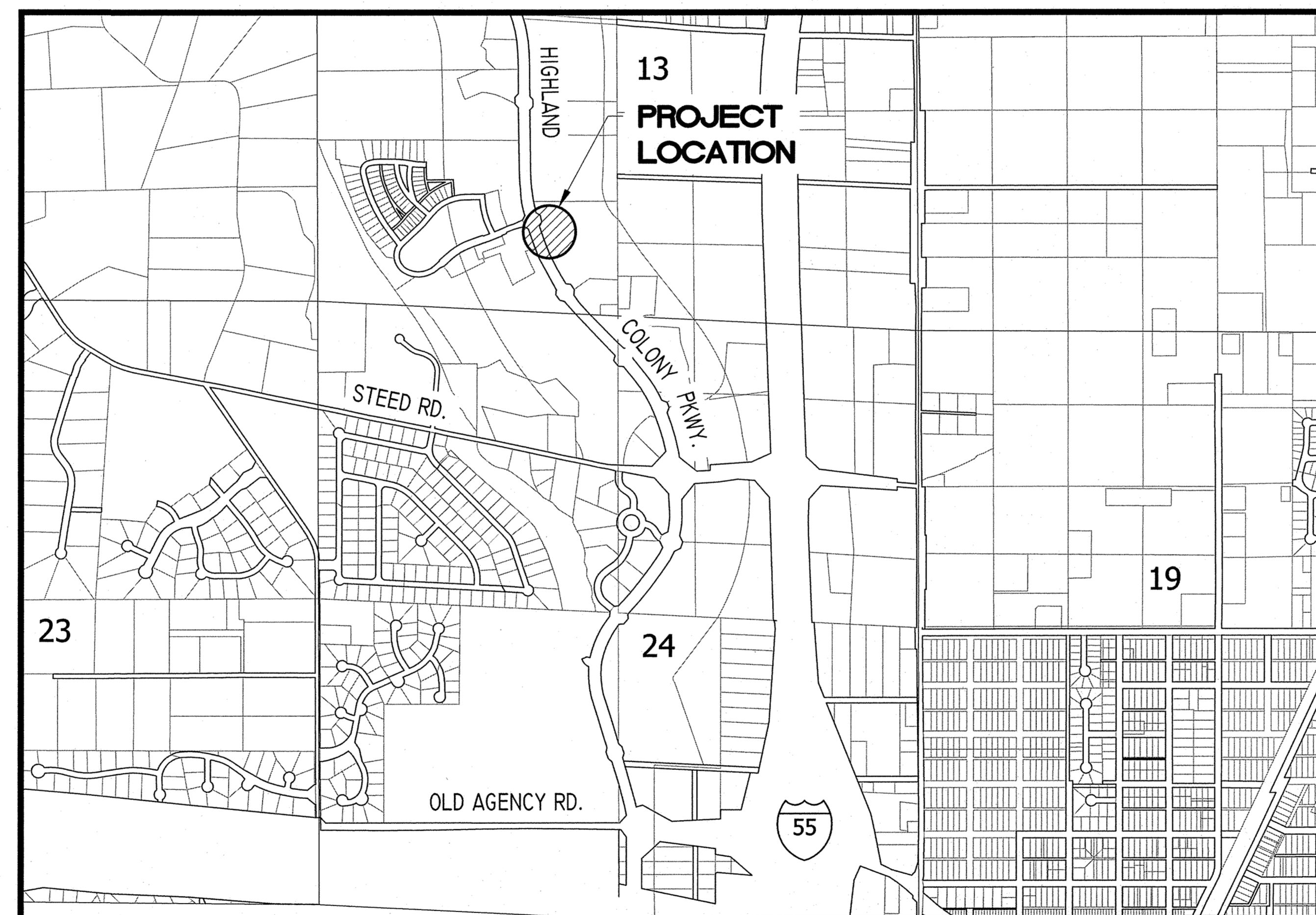


HIGHLAND COLONY & CONCOURSE

WATER SYSTEM RELOCATION

HIGHLAND COLONY LAND COMPANY, LLC.



SHEET INDEX

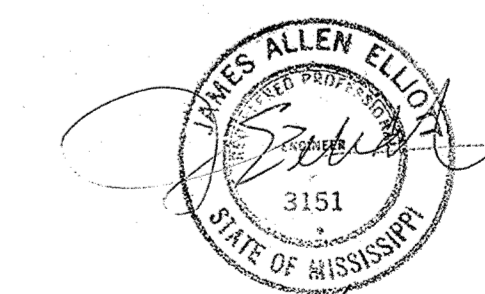
<u>TITLE</u>	<u>SHEET NO.</u>
COVER SHEET	1
OVERALL WATERWORKS LAYOUT	2
STANDARD WATERWORKS DETAILS	3
EROSION CONTROL STANDARD DETAILS	4

JANUARY 2013

DCI DIVERSIFIED
CONSULTANTS, INC.

CONSULTING ENGINEERS ... CITY, COUNTY, AND REGIONAL PLANNERS

395 EDGEWOOD TERRACE
JACKSON, MS 39206



4/18/13
JAMES A. ELLIOTT, PE

RECORD DRAWINGS - APRIL 2013

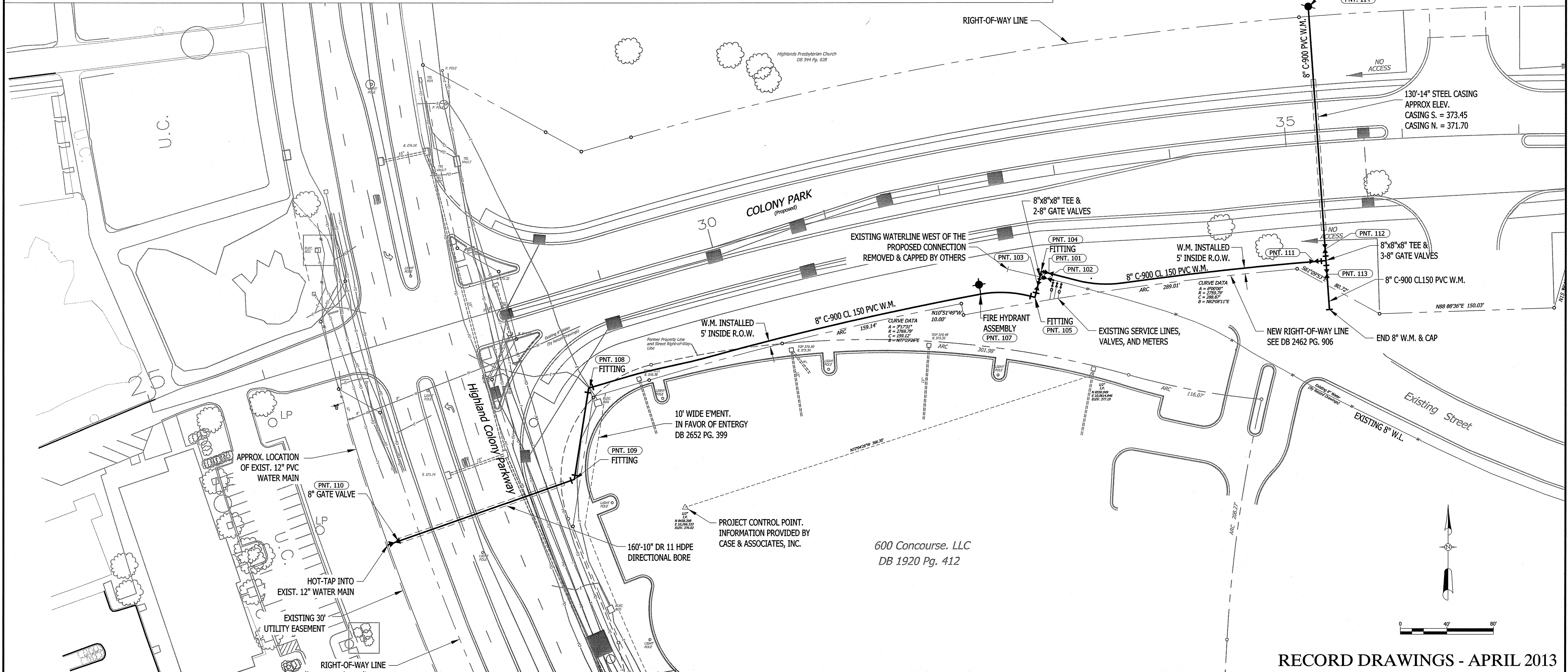
GENERAL NOTES:

- ALL WATER PIPELINE ROAD CROSSINGS, MAIN LINE AND SERVICE LINES ARE TO BE ENCASED UNLESS NOTED OTHERWISE ON THE PLANS.
- ALL NEW WATER MAIN FITTINGS (TEES, ELBOWS, VALVES, ETC.) SHALL BE CEMENT LINED, CLASS 51 MECHANICAL JOINT, DUCTILE IRON AND SHALL BE INSTALLED USING MEGA-LUG RESTRAINT GLANDS.
- ALL NEW WATER LINES TO BE INSTALLED 5' INSIDE R.O.W. OR AS DIRECTED BY ENGINEER.
- CONTRACTOR SHALL MAINTAIN A 10' HORIZONTAL AND 18" VERTICAL SEPARATION BETWEEN WATER, STORM AND SANITARY SEWER.
- THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING AND PROPOSED STREET GRADES AND UTILITY LOCATIONS AND MAKING ADJUSTMENTS AS NECESSARY WITH THE APPROVAL OF THE PROJECT ENGINEER.
- COMPACTION SHALL BE PERFORMED PER PROJECT SPECIFICATIONS UNLESS DIRECTED OTHERWISE BY PROJECT ENGINEER. ADDITIONAL DENSITY TESTING MAY BE REQUIRED TO SATISFY MDT REQUIREMENTS.
- WATER PIPE SHALL BE C900 P.V.C. CL 150 PRESSURE PIPE.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT EXISTING STRUCTURES SUCH AS PIPES, INLETS, APRONS, ETC. FROM DAMAGE WHICH MIGHT OCCUR DURING CONSTRUCTION. THE CONTRACTOR SHALL REPLACE OR REPAIR, AS DIRECTED BY THE ENGINEER, ANY STRUCTURES DAMAGED DURING THE LIFE OF THE CONTRACT. NO PAYMENT WILL BE MADE FOR REPLACEMENT OR REPAIR OF DAMAGED ITEMS.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING BRACING, SHORING, OR ANY GROUND SUPPORT SYSTEM REQUIRED TO PREVENT A FAILURE FROM OCCURRING DURING EXCAVATION AND PROTECT THE PERSONS WORKING NEAR THE EXCAVATION, THE PUBLIC THAT MAY BE NEAR THE EXCAVATION, OR ANY STRUCTURE ADJACENT TO THE EXCAVATION. ALL COST FOR ANY PROTECTIVE MEASURES, INCLUDING THE MATERIALS AND LABOR FOR DESIGNING AND CONSTRUCTING THE FACILITY, SHALL BE INCLUDED IN THE PRICE BID FOR CONTRACT ITEMS.
- EXISTING UNDERGROUND UTILITY LINES ARE SHOWN ON THE DRAWINGS BASED UPON THE BEST INFORMATION AVAILABLE TO THE ENGINEER. THE ENGINEER CANNOT AND DOES NOT WARRANT THAT THIS INFORMATION IS COMPLETE OR ACCURATE. THE CONTRACTOR MUST COORDINATE DIRECTLY WITH THE INVOLVED UTILITY OWNERS TO HAVE THE UNDERGROUND UTILITY LINES FIELD VERIFIED PRIOR TO CONSTRUCTION.
- NO WORK WILL BE PERFORMED ON THE WEEKENDS WITHOUT PRIOR APPROVAL FROM THE PROJECT ENGINEER.
- CONTRACTOR SHALL EXTEND CASING AS NECESSARY TO EXTEND 3' MINIMUM BEYOND OUTSIDE EDGE OF PROPOSED STORM SEWER PIPE ALONG EAST OF HIGHLAND COLONY PARKWAY. CONTRACTOR SHALL COORDINATE INVERT ELEVATION OF PROPOSED 24" RCP STORM SEWER PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES.
- WATERLINE CROSSING AT HIGHLAND COLONY PARKWAY WAS REVISED FROM 14" STEEL CASING TO 10" DR11 HDPE DIRECTIONAL BORE AND APPROVED BY MDT PER EMAIL FROM MDT DATED JANUARY 4, 2013, AND EMAIL FROM CITY OF RIDGELAND DATE DECEMBER 28, 2012.
- DURING THE PROGRESS OF THE WORK, THE CONTRACTOR SHALL KEEP THE SITE AND OTHER AREAS FREE FROM ACCUMULATIONS OF WASTE MATERIALS, RUBBISH, AND OTHER DEBRIS. REMOVAL AND DISPOSAL OF SUCH WASTE MATERIALS, RUBBISH, AND OTHER DEBRIS SHALL CONFORM TO APPLICABLE LAWS AND REGULATIONS. ALL DISPOSAL MATERIAL REMOVED FROM THE BORING PROCESS SHALL BE DISPOSED OF DAILY.

Project No.: MSP.0053 & MSP.0055
 Highland Colony and Concourse - Water System Relocation
 Water G.P.S. Points
 (NAD 83 Mississippi State Plane, West Zone, US Feet)

GPS FILE PNT. NO.	NORTH	EAST	ELEV.	DESC.	REMARKS
101	1071645.339	2353118.127	380.80	WV	N. of Exist. 8" W.M.
102	1071639.029	2353116.869	380.61	WV	Tie-In at Exist. 8" W.M.
103	1071636.040	2353114.622	380.94	WV	S. of Exist. 8" W.M.
104	1071645.313	2353113.220	379.96	WF	N. of Exist. 8" W.M.
105	1071628.505	2353114.377	380.19	WF	S. of Exist. 8" W.M.
106	1071628.579	2353061.170	380.75	FHV	S. of Hydrant
107	1071629.283	2353060.386	380.43	FH	N. of 8" W.M.
108	1071534.771	2352724.331	377.80	WF	N. of Exist. Transformer
109	1071510.410	2352717.703	377.63	WF	W. of B.O.C. of Exist. Parking Lot
110	1071446.618	2352553.376	378.20	WV	E. of Tie-In at Exist. 12" W.M.
111	1071660.147	2353361.671	381.87	WV	W. Valve in 3-Valve Cluster
112	1071663.163	2353363.716	381.29	WV	S. Valve in 3-Valve Cluster
113	1071657.764	2353364.808	381.76	WV	N. Valve in 3-Valve Cluster
114	1071664.696	2353347.792	383.71	BOV	N. of Proposed Roadway

G.P.S. export file: Y:\Bailey\MDOT Line Relocation\Record points.csv
 Excel filename: Y:\Bailey\MDOT Line Relocation\Record Water GPS.xls



RECORD DRAWINGS - APRIL 2013

DCI **DIVERSIFIED CONSULTANTS, INC.**
 CONSULTING ENGINEERS ... CITY, COUNTY, AND REGIONAL PLANNERS
 395 EDGEWOOD TERRACE
 JACKSON, MS 39206

This document, and the ideas and designs incorporated herein, as an instrument of professional services, is the property of DIVERSIFIED CONSULTANTS, INC. and is not to be used, in whole or part, for any other project without the written authority of DIVERSIFIED CONSULTANTS, INC.

HIGHLAND COLONY & CONCOURSE

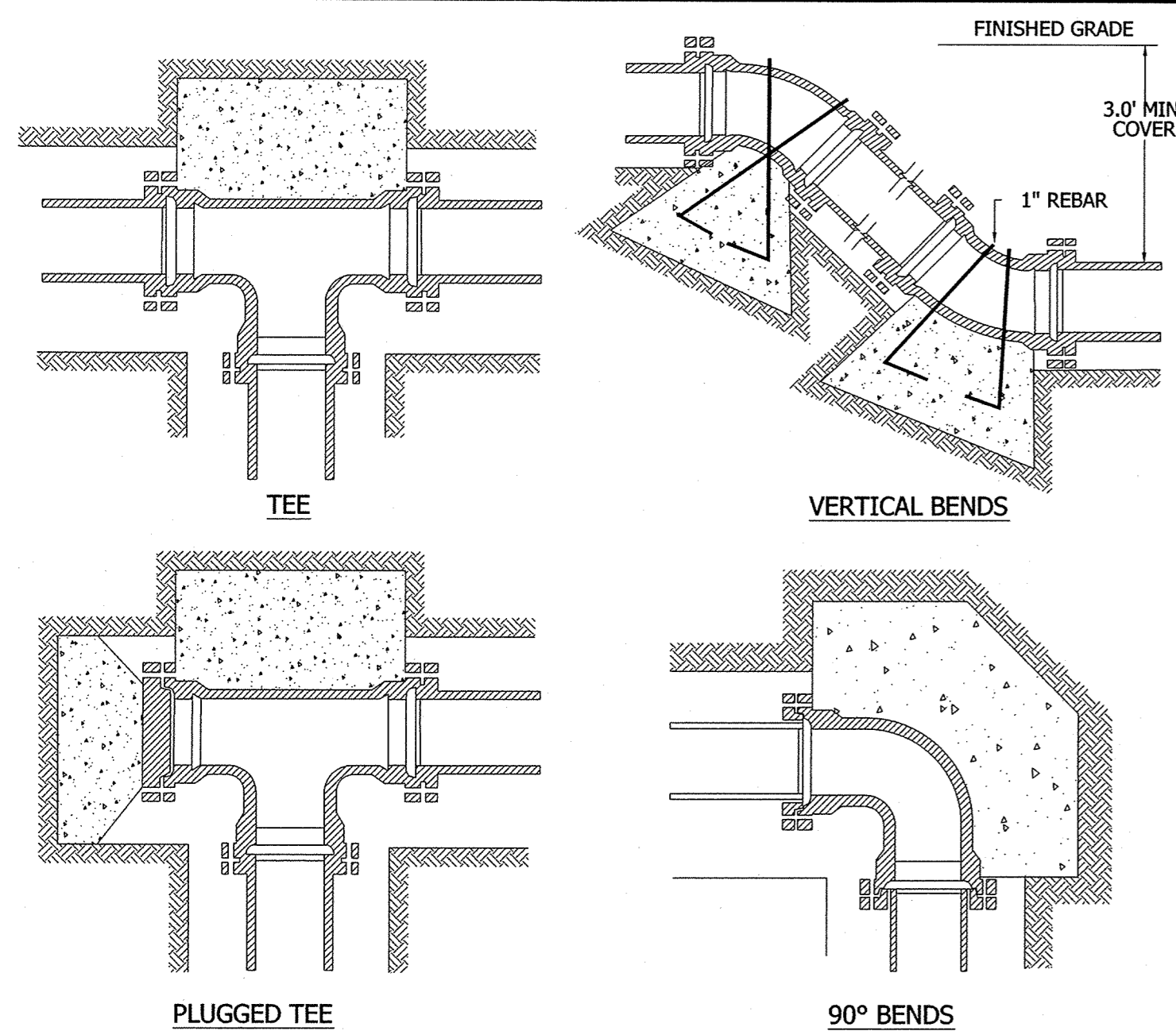
WATER SYSTEM RELOCATION

HIGHLAND COLONY LAND COMPANY, LLC

REVISIONS		
NO.	DATE	BY
1		
2		
3		
4		
5		
6		

SCALE	SEE GRAPHIC
DATE	01/14/13
APPROVED BY	
DRAWN BY	D.E.S.
CHECKED BY	

SHEET TITLE	
OVERALL WATERWORKS LAYOUT	
FILE NAME	SHEET NO. 2



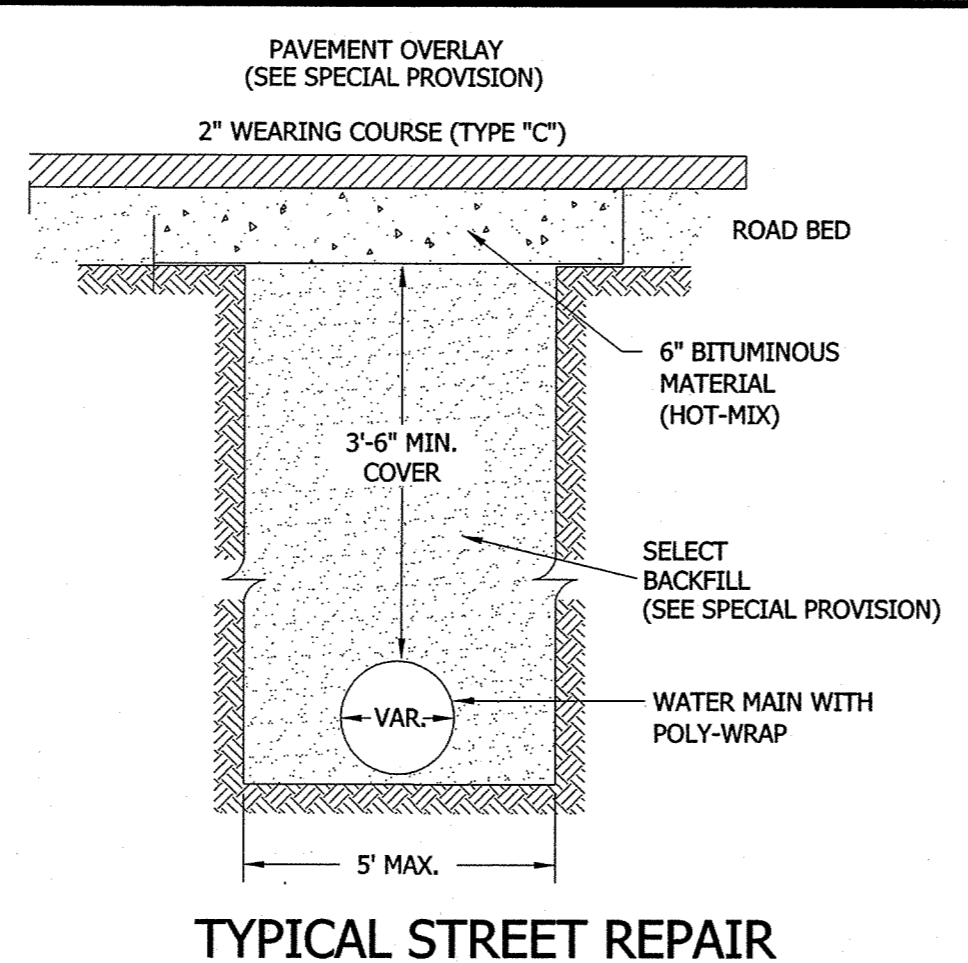
BEARING AREA IN SQ. FT.

NOMINAL PIPE DIAMETER (DN.)	DEAD END OR TEE	90° BEND	45° BEND	22.12° BEND	11.14° BEND
4	2.0	2.0	2.0	2.0	2.0
6	2.0	2.0	2.0	2.0	2.0
8	3.0	3.0	2.0	2.0	2.0
12	5.0	6.0	4.0	3.0	3.0
16	8.0	12.0	6.0	4.0	4.0

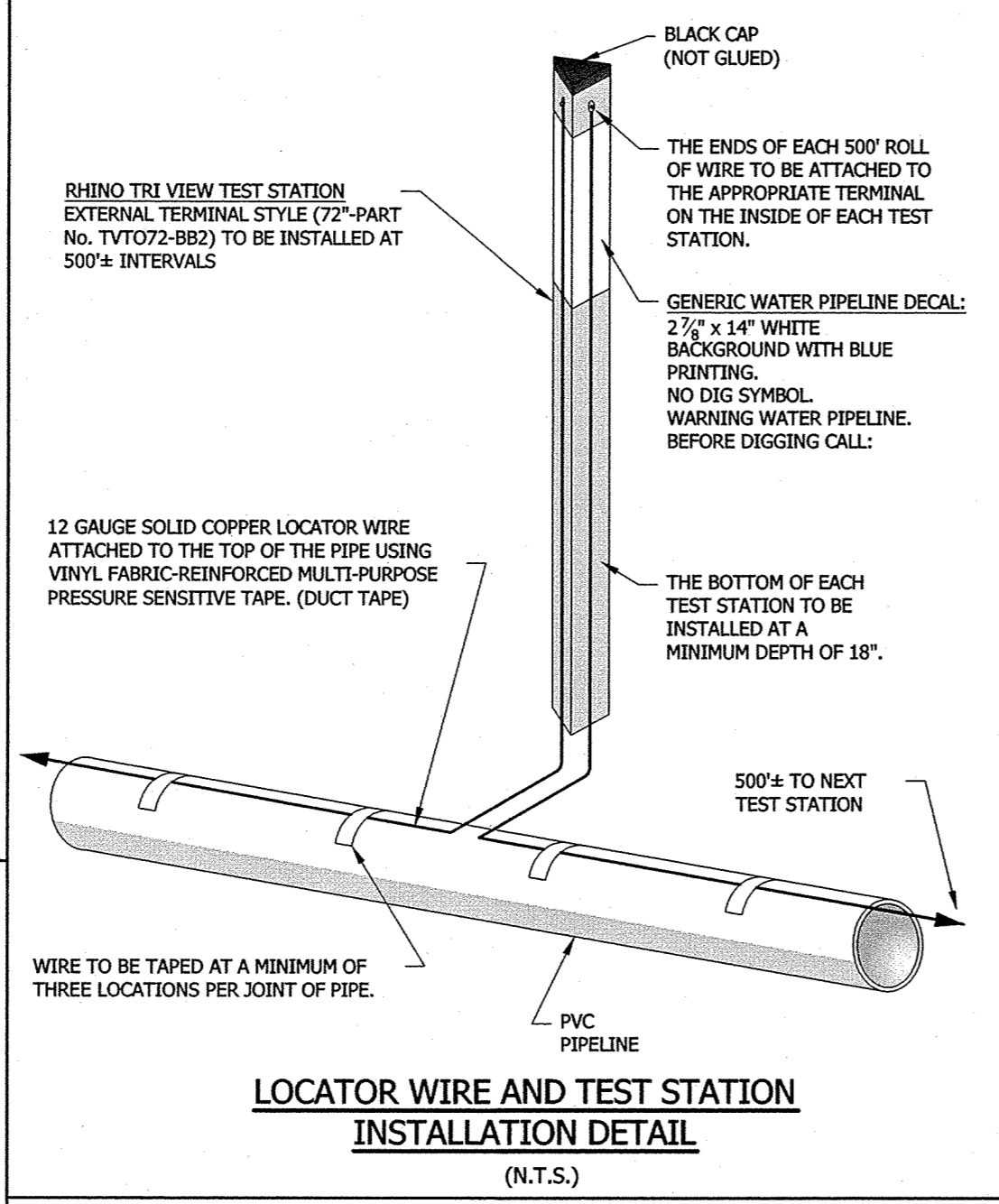
4	—	—	6.0 (.22)	4.0 (.15)	4.0 (.15)
6	—	—	14.0 (.52)	6.0 (.22)	4.0 (.15)
8	—	—	27.0 (1.0)	9.0 (.32)	6.0 (.22)
12	—	—	68.0 (2.5)	22.0 (.80)	9.0 (.32)
16	—	—	96.0 (3.5)	32.0 (1.0)	18.0 (.67)

Volume of blocks including soil load CLFT. (DL1Y5.)

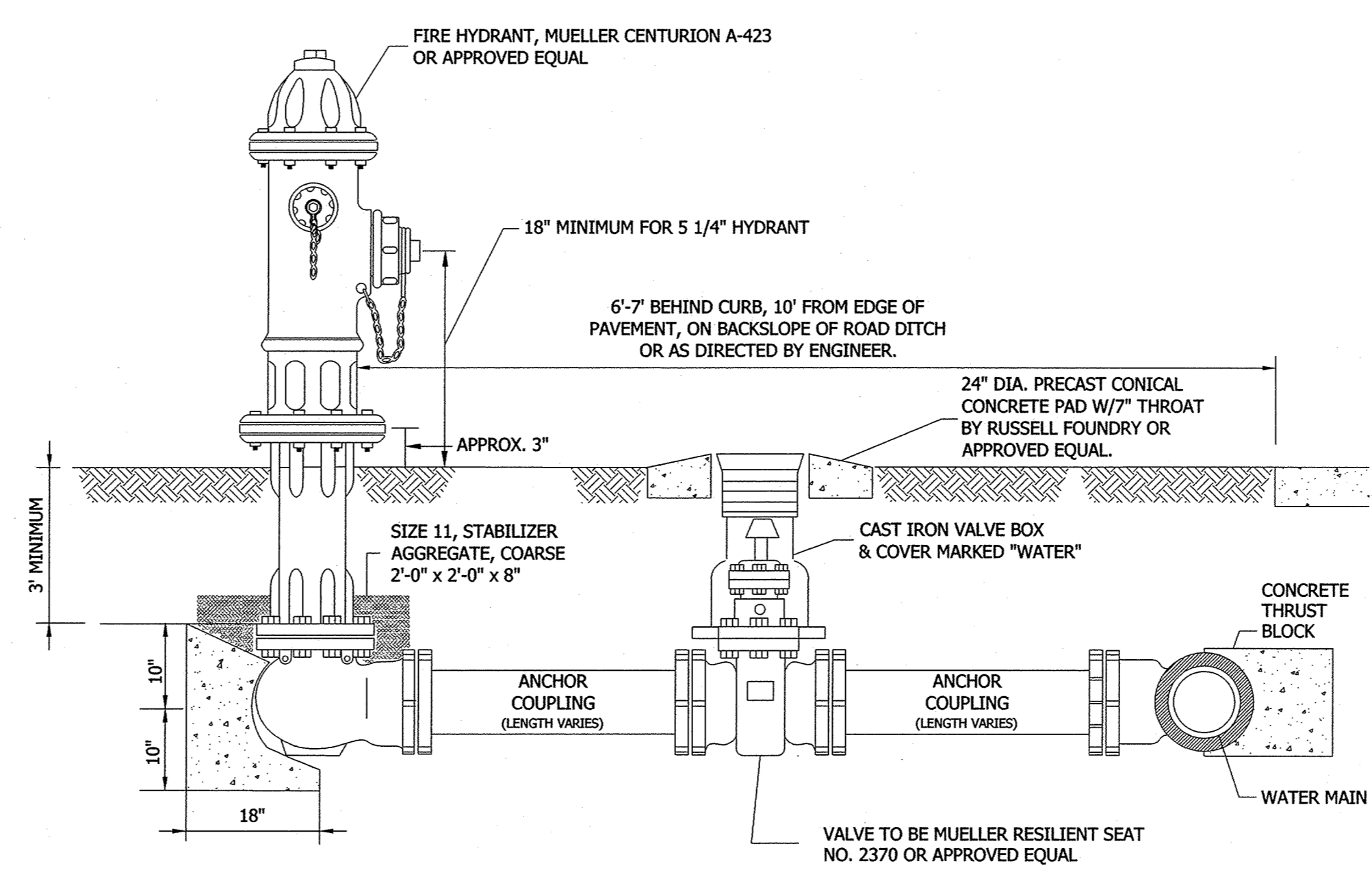
WATER DISTRIBUTION THRUST BLOCK DETAILS



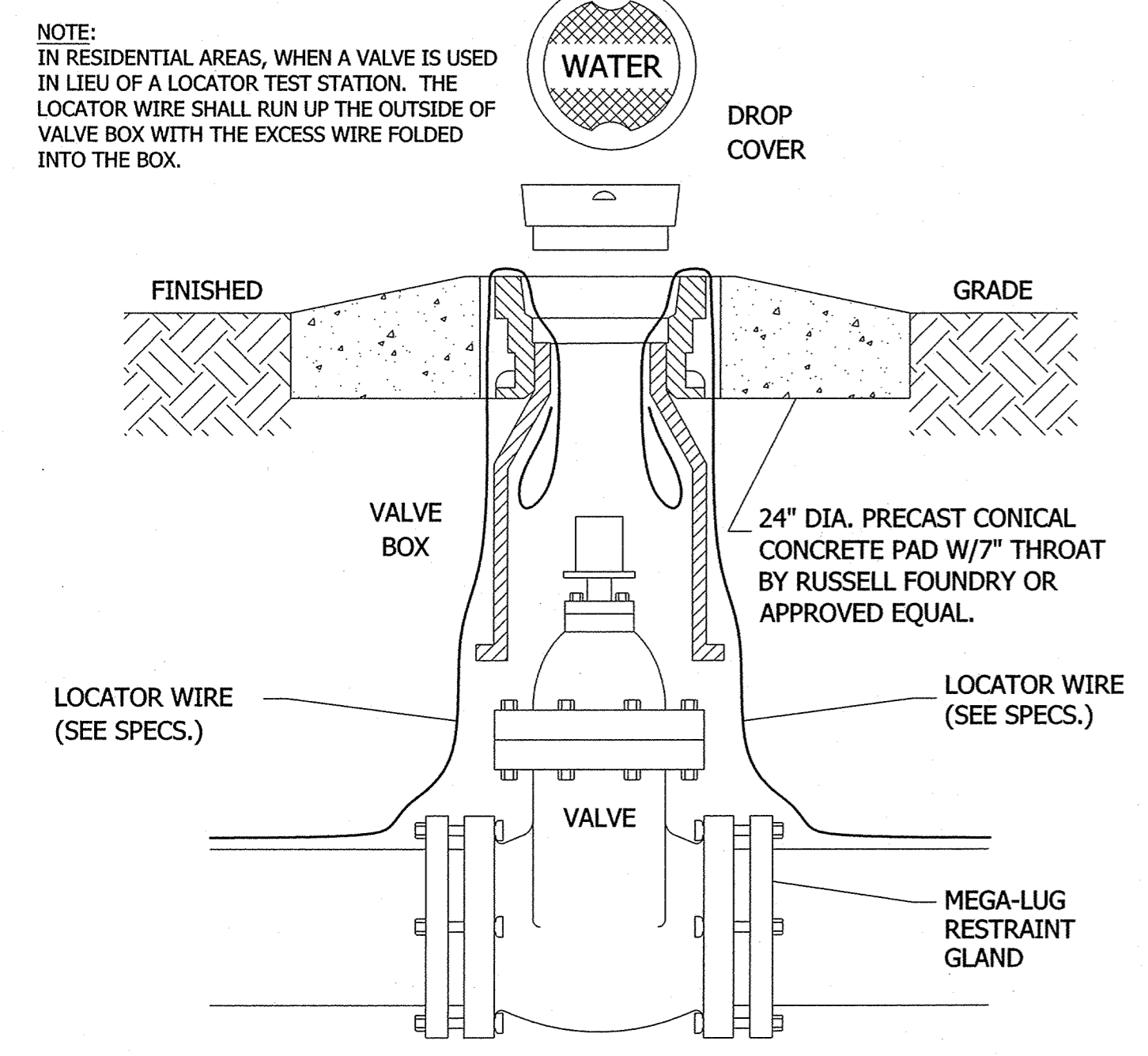
TYPICAL STREET REPAIR



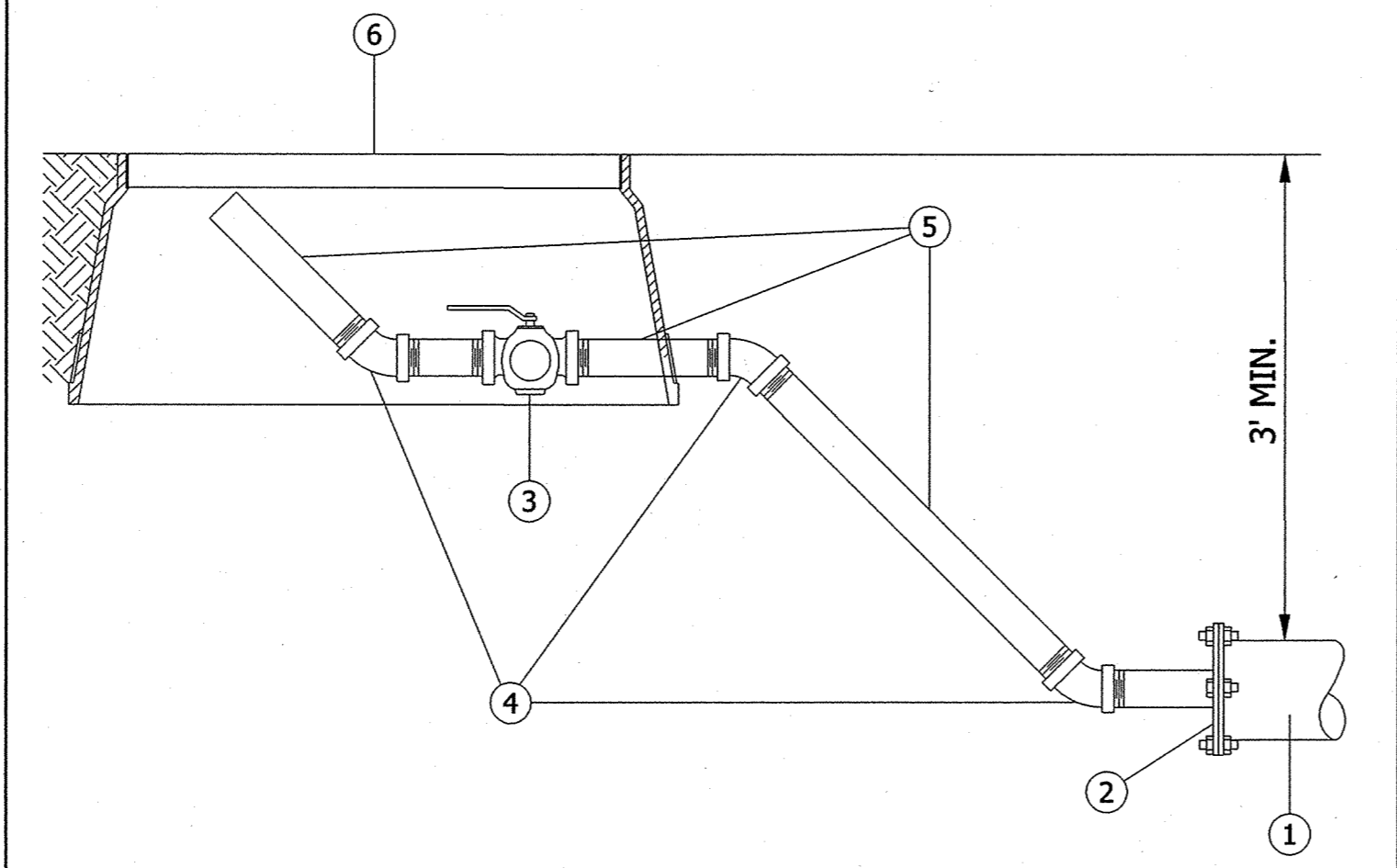
LOCATOR WIRE AND TEST STATION INSTALLATION DETAIL (N.T.S.)



FIRE HYDRANT ASSEMBLY



TYPICAL GATE VALVE



TYPICAL 2" BLOW-OFF ASSEMBLY

ITEM NO.	NO. REQ'D.	SIZE AND DESCRIPTION	MATERIAL SPECIFICATIONS
1	1	P.V.C. MAIN	
2	1	DUCTILE IRON M.J. TAPPED CAP w/ MEGA-LUG	
3	1	2" LEVER BALL VALVE - SCREWED ENDS	
4	3	2" GALVANIZED BENDS - THREADED	
5	3	2" GALVANIZED PIPE - THREADED	
6	1	OVERSIZED BLACK PLASTIC METER BOX.	

NOTE:
IN RESIDENTIAL AREAS, WHEN A VALVE IS USED IN LIEU OF A LOCATOR TEST STATION, THE LOCATOR WIRE SHALL RUN UP THE OUTSIDE OF VALVE BOX WITH THE EXCESS WIRE FOLDED INTO THE BOX.

DCI **DIVERSIFIED CONSULTANTS, INC.**
CONSULTING ENGINEERS ... CITY, COUNTY, AND REGIONAL PLANNERS
395 EDGEWOOD TERRACE
JACKSON, MS 39206

This document, and the ideas and designs incorporated herein, as an instrument of professional services, is the property of DIVERSIFIED CONSULTANTS, INC. and is not to be used, in whole or part, for any other project without the written authority of DIVERSIFIED CONSULTANTS, INC.

HIGHLAND COLONY & CONCOURSE

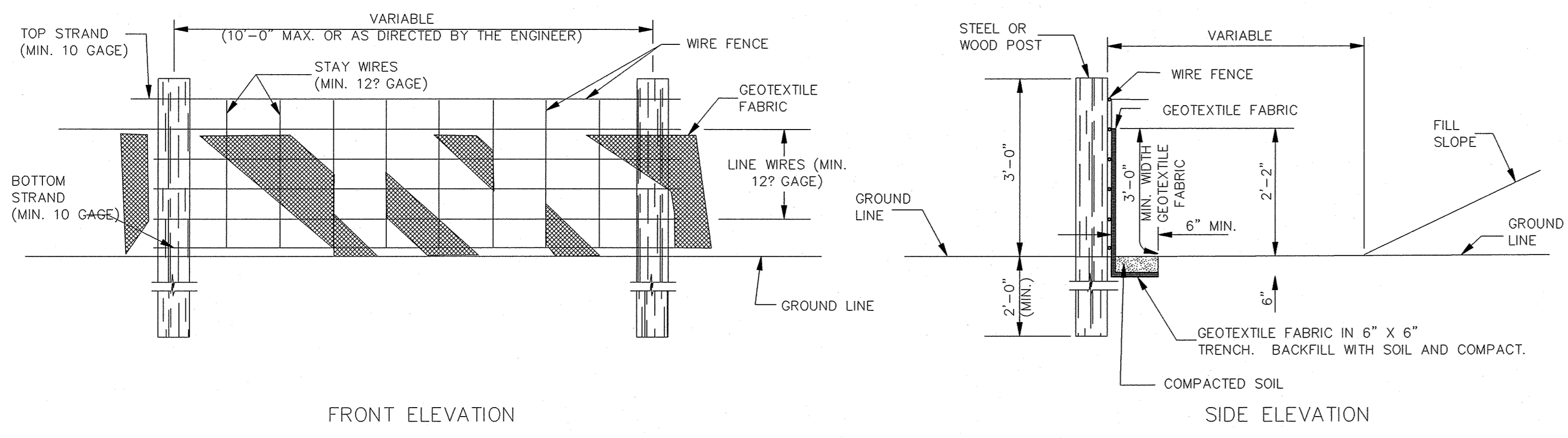
WATER SYSTEM RELOCATION

HIGHLAND COLONY LAND COMPANY, LLC.

REVISIONS		
NO.	DATE	BY
1		
2		
3		
4		
5		
6		

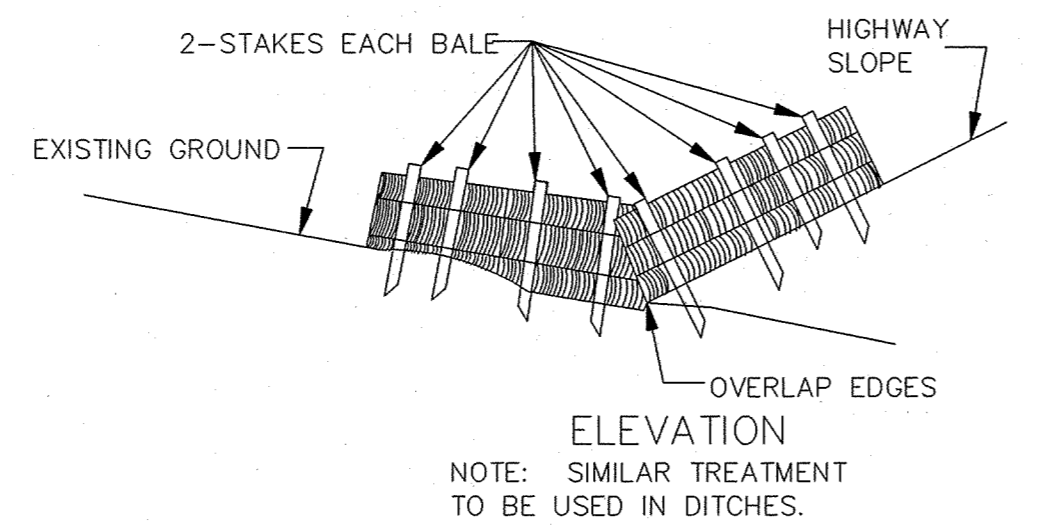
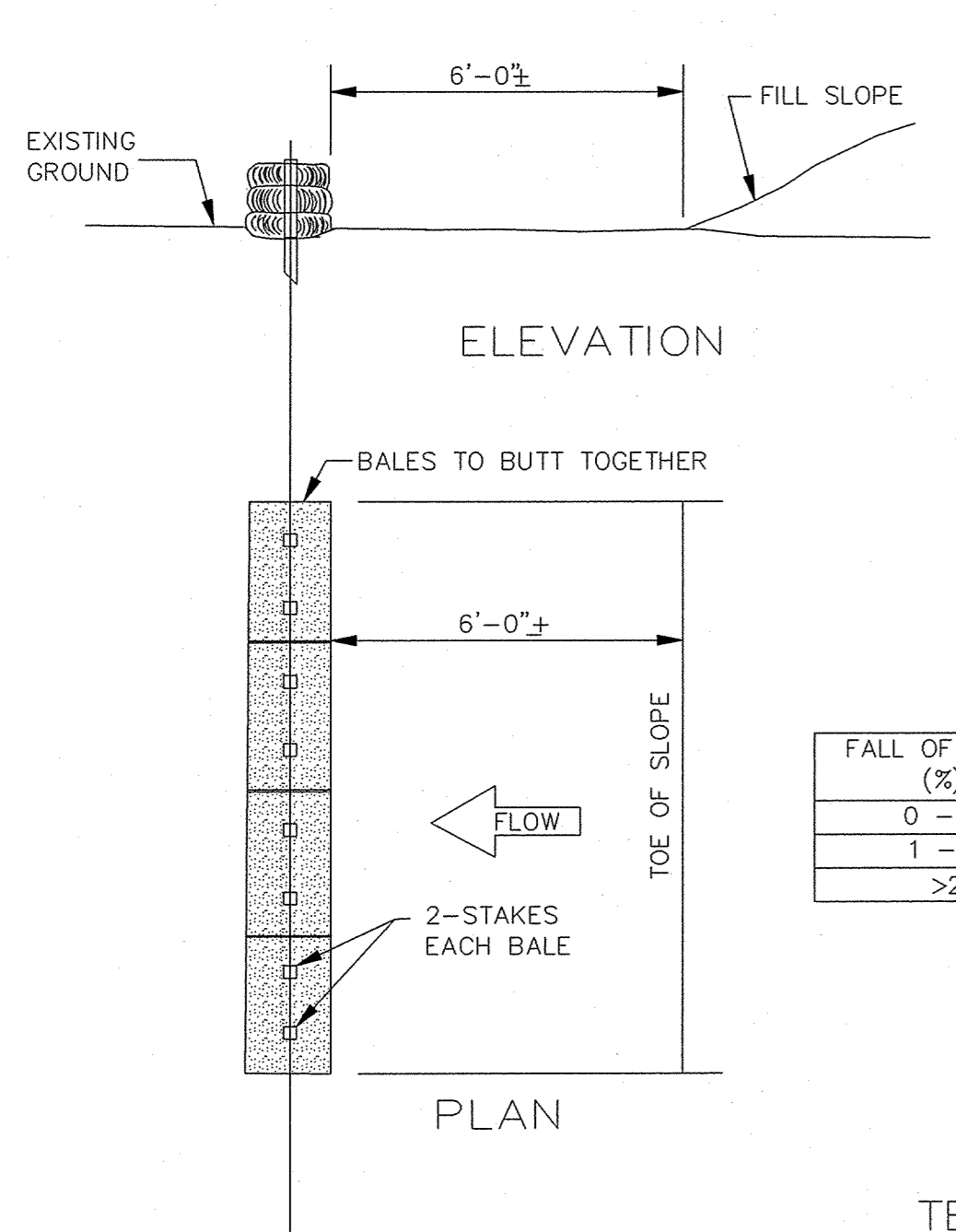
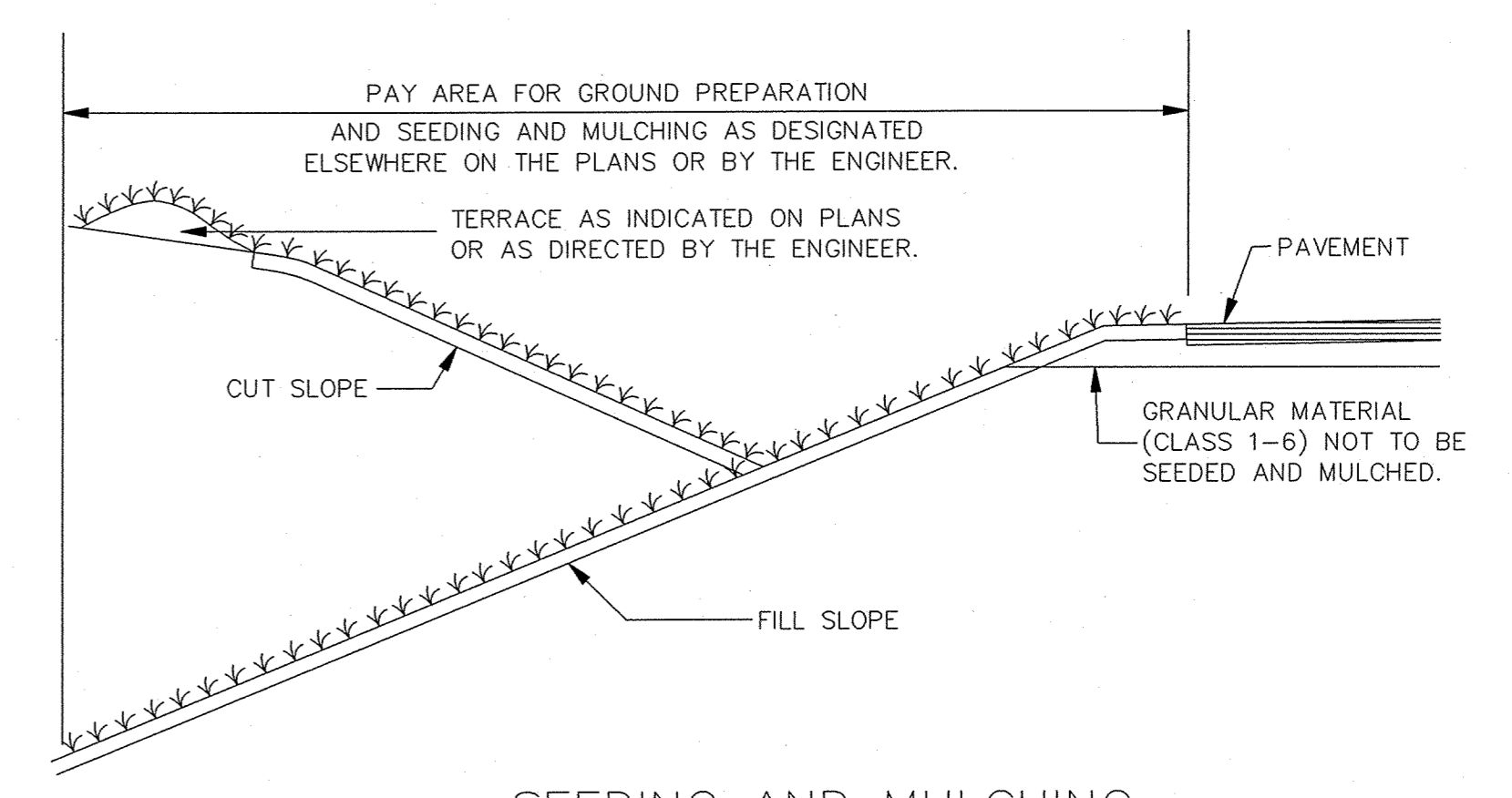
SCALE	NO SCALE
DATE	01/14/13
APPROVED BY	
DRAWN BY	D.E.S.
CHECKED BY	

SHEET TITLE	STANDARD WATERWORKS DETAILS
FILE NAME	
SHEET NO.	3

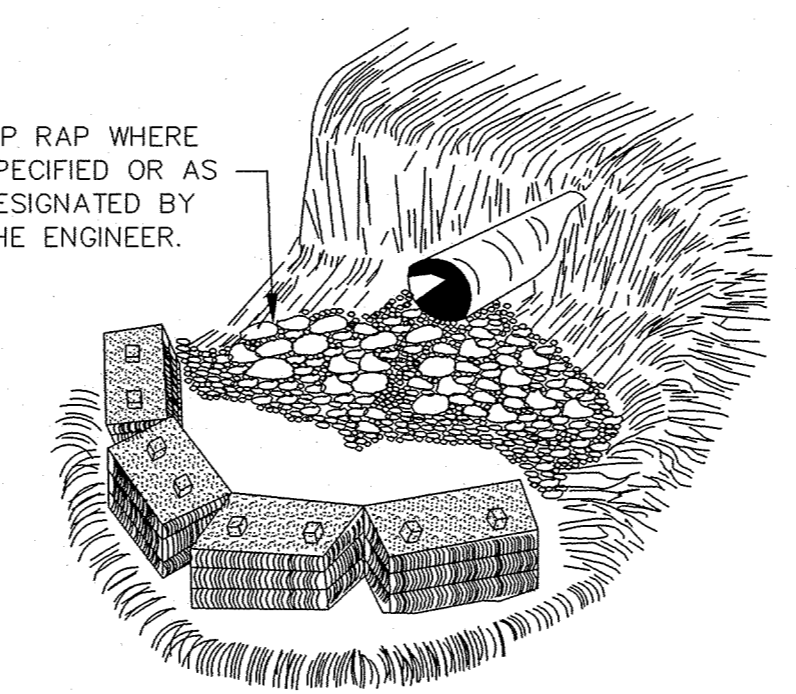
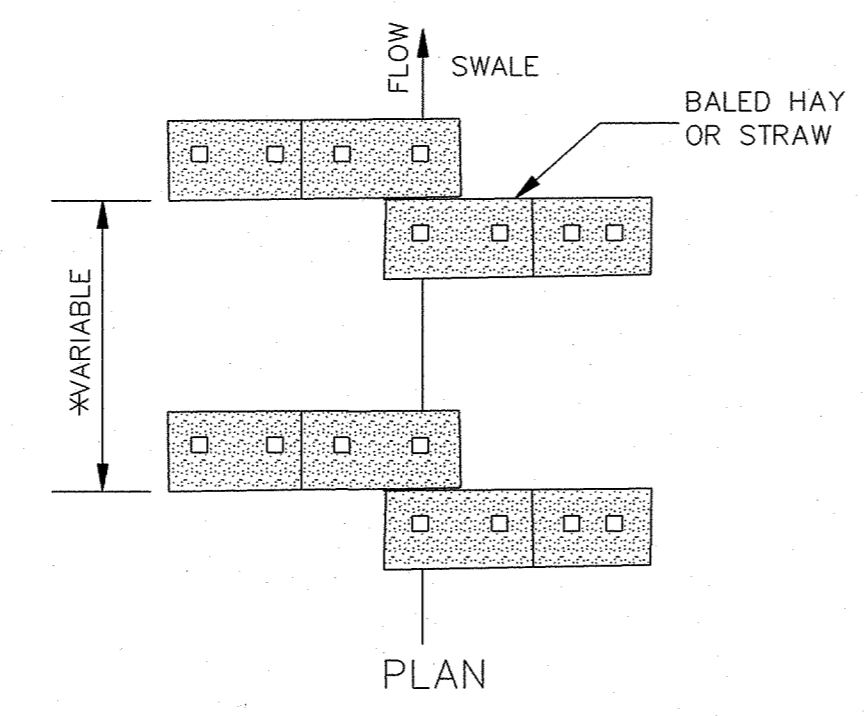


TEMPORARY SILT FENCE

- NOTES:
1. WIRE SHALL BE MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
 2. GEOTEXTILE FABRIC SHALL BE A MINIMUM OF 36" IN WIDTH AND SHALL BE FASTENED ADEQUATELY TO THE WIRE AS DIRECTED BY THE ENGINEER.
 3. STEEL POST SHALL BE 5'-0" IN HEIGHT AND OF THE SELF-FASTENER ANGLE STEEL TYPE. WOOD POST SHALL BE A MINIMUM OF 5'-0" IN HEIGHT AND 3" OR MORE IN DIAMETER. WIRE FENCE SHALL BE FASTENED TO WOODEN POST WITH NOT LESS THAN 9 GAGE WIRE STAPLES 1" LONG.
 4. GEOTEXTILE FABRIC MEETING THE TYPE II MATERIAL REQUIREMENTS AND INSTALLED ACCORDING TO SPECIFICATIONS MAY BE USED WITHOUT WIRE FENCE.



FALL OF DITCH (%)	DISTANCE (ft)
0 - 1	100'
1 - 2	50'
>2	25'



TEMPORARY EROSION CHECKS USING HAY OR STRAW BALES

NOTE: EMBED ALL BALES 3" MINIMUM INTO GROUND AND STAKE (2" X 2" X 36") SECURELY.

- GENERAL NOTES:
1. THE CONTRACTOR SHALL BE REQUIRED TO FURNISH ALL MATERIALS AND PERFORM ALL WORK FOR THE PROPER INSTALLATION, MAINTENANCE AND REMOVAL OF TEMPORARY EROSION CONTROL MEASURES NECESSARY TO CONTROL SILTATION.
 2. TEMPORARY BRUSH BARRIERS SHALL BE USED AS REQUIRED BUT WILL NOT BE MEASURED FOR SEPARATE PAYMENT.
 3. THE USE OF TEMPORARY EROSION CONTROL MEASURES OTHER THAN TEMPORARY BRUSH BARRIERS WILL ONLY BE REQUIRED AND MEASURED FOR SEPARATE PAYMENT WHEN APPROPRIATE PAY ITEM(S) IS INCLUDED IN THE BID SCHEDULE OF THE PROPOSAL.

DCI **DIVERSIFIED CONSULTANTS, INC.**
CONSULTING ENGINEERS ... CITY, COUNTY, AND REGIONAL PLANNERS
395 EDGEWOOD TERRACE
JACKSON, MS 39206

This document, and the ideas and designs incorporated herein, as an instrument of professional services, is the property of DIVERSIFIED CONSULTANTS, INC. and is not to be used, in whole or part, for any other project without the written authority of DIVERSIFIED CONSULTANTS, INC.

HIGHLAND COLONY AND CONCOURSE

WATER SYSTEM RELOCATION

HIGHLAND COLONY LAND COMPANY, LLC.

REVISIONS		
NO.	DATE	BY
1		
2		
3		
4		
5		
6		

SCALE
NO SCALE
DATE
01/14/13
APPROVED BY
DRAWN BY
D.E.S.
CHECKED BY

SHEET TITLE
EROSION CONTROL STANDARD DETAILS
FILE NAME
SHEET NO. **4**