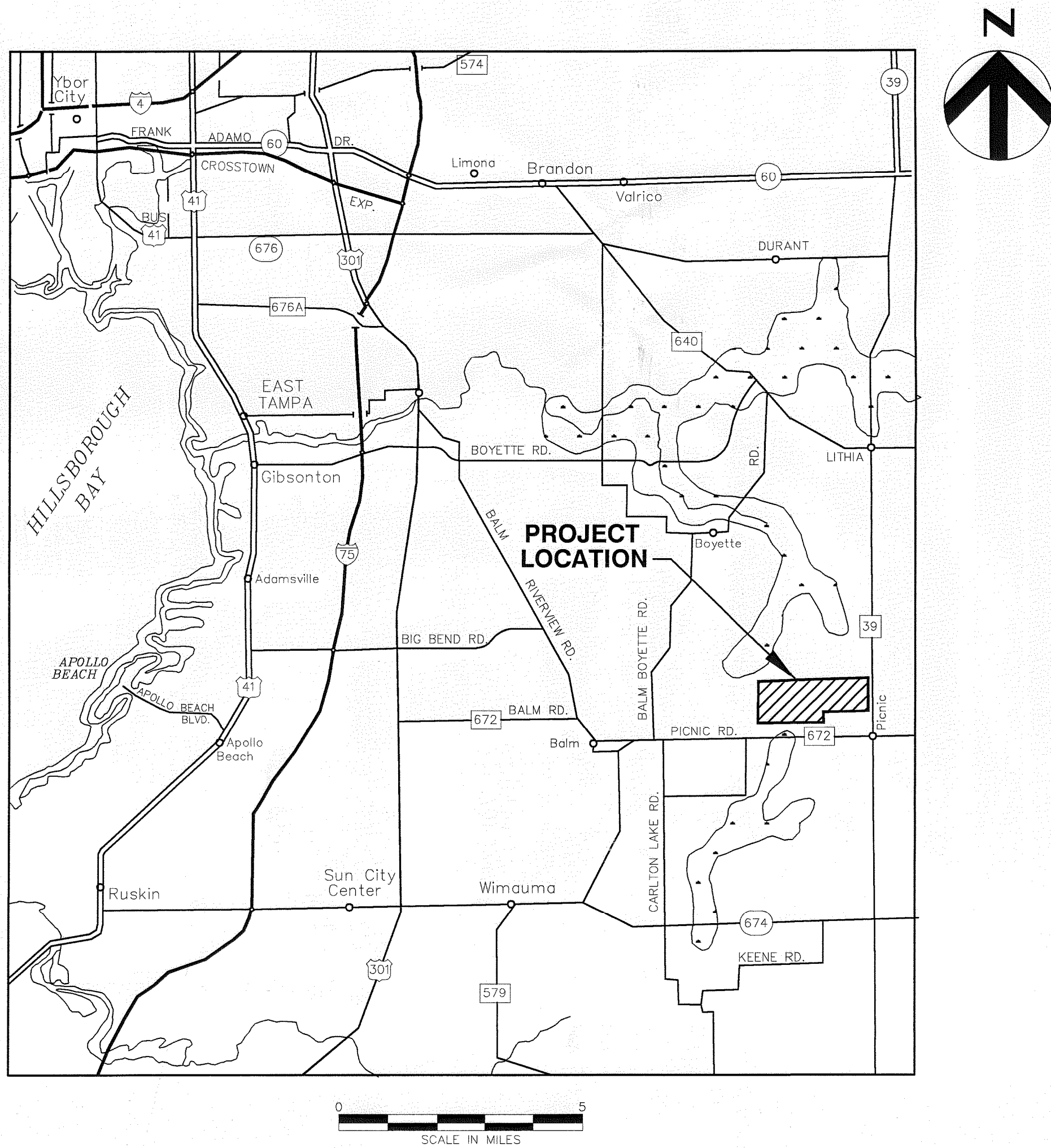




HDR Engineering, Inc.  
5426 Bay Center Drive  
Suite 400  
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HDR CA# 4213

Dept. of Environment  
Protection  
MAR 09 2012

Southwest District



SITE VICINITY MAP

Drawings For

# SECTIONS 7, 8, AND 9 LANDFILL GAS COLLECTION AND CONTROL SYSTEM EXPANSION

SOUTHEAST COUNTY LANDFILL  
HILLSBOROUGH COUNTY,  
FLORIDA

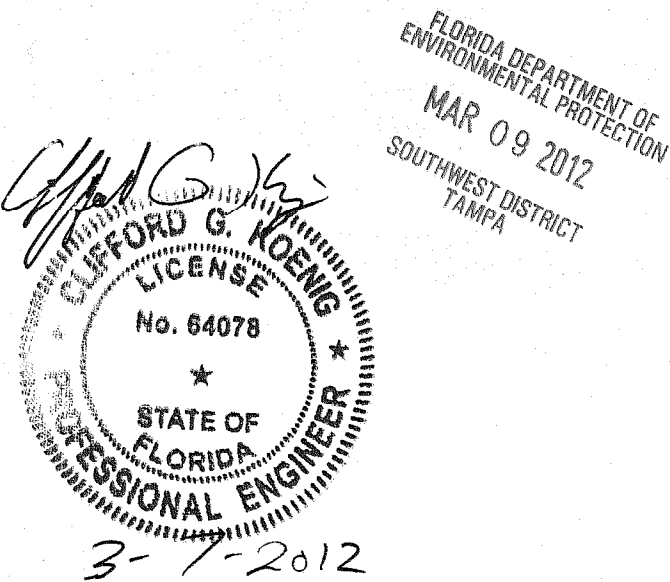
CIP NO. 54056

Project No.  
096-171445-002

LITHIA, FLORIDA  
MARCH 2012

DRAWING INDEX

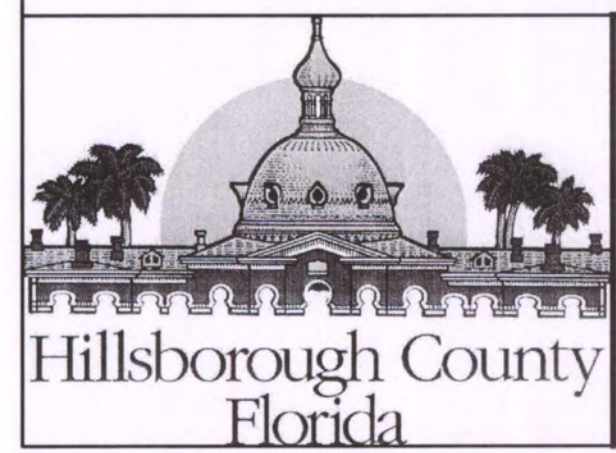
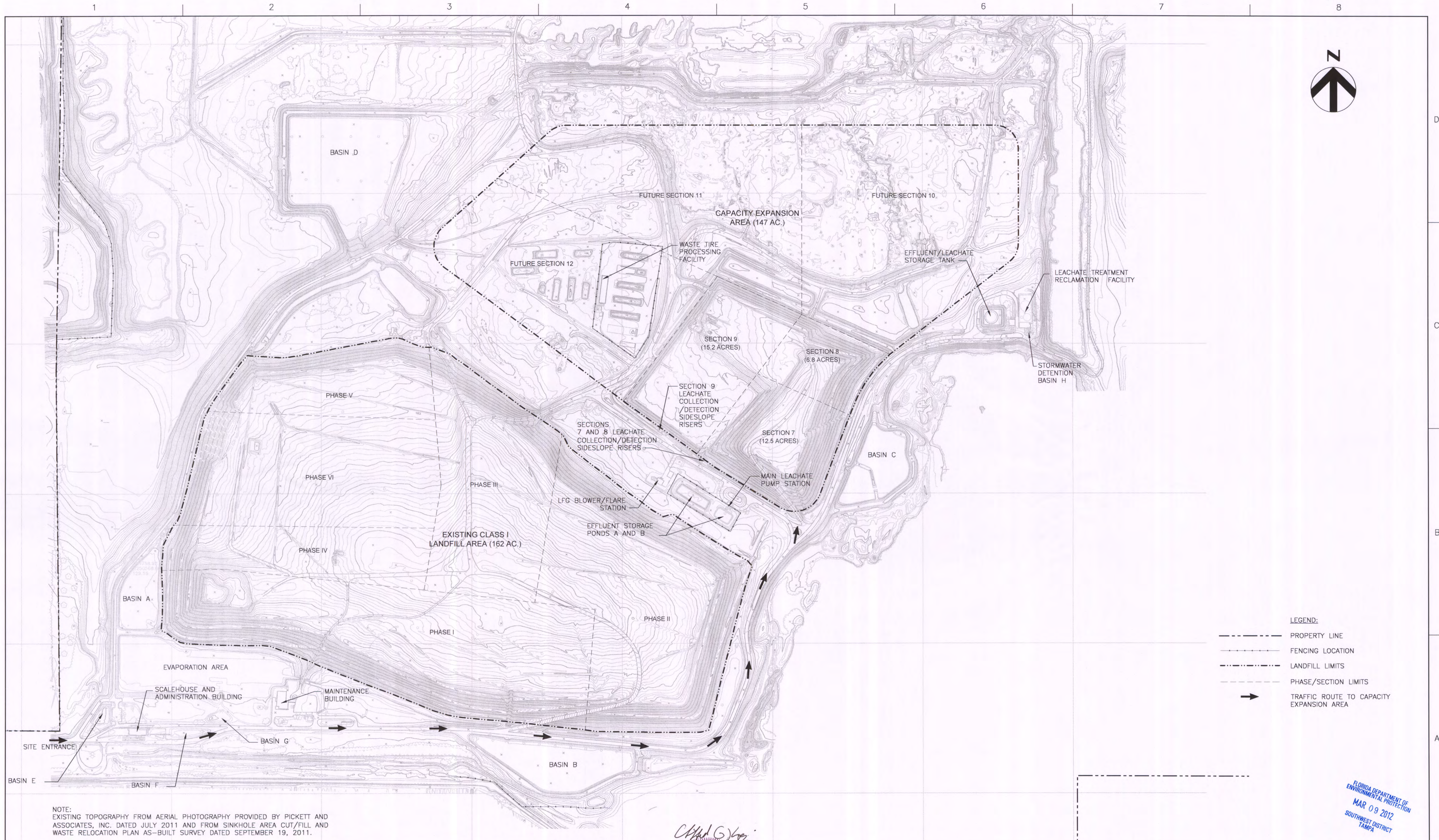
G-01	COVER SHEET
G-02	GENERAL NOTES AND LEGEND
C-01	OVERALL SITE PLAN
C-02	EXISTING CONDITIONS
C-03	SECTIONS 7, 8, AND 9 GCCS EXPANSION-SEQUENCE 1 (FILL SEQUENCE 13)
C-04	SECTIONS 7, 8, AND 9 GCCS EXPANSION-SEQUENCE 2 (FILL SEQUENCE 16)
C-05	SECTIONS 7, 8, AND 9 GCCS EXPANSION-SEQUENCE 3 (FILL SEQUENCE 18)
C-06	EXTRACTION WELL DETAILS AND WELL SCHEDULE
C-07	HORIZONTAL COLLECTOR DETAILS
C-08	WELLHEAD AND CONFIGURATION DETAILS
C-09	WELL HEAD AND CONFIGURATION DETAILS
C-10	GENERAL DETAILS











**HDR**

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5426 Bay Center Drive  
Suite 400  
Tampa, FL 33609-3444  
HDR CA# 4213

A	3/2012	FDEP SUBMITTAL
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	R. SIEMERING
REVIEWED BY	C. LEBRON
DESIGN BY	C. KOENIG
DESIGN BY	C. RESTREPO
DRAWN BY	B. JOHNSON
PROJECT NUMBER	0096-171445-002

*Clifford G. Koenig*

**CLIFFORD G. KOENIG**  
LICENSE  
No. 64078  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
3-7-2012

CLIFFORD G. KOENIG, P.E.  
LICENSE NO. 64078

**SECTION 7, 8, AND 9 LANDFILL GAS COLLECTION AND CONTROL SYSTEM EXPANSION  
SOUTHEAST COUNTY LANDFILL  
HILLSBOROUGH COUNTY, FLORIDA**

**OVERALL SITE PLAN**

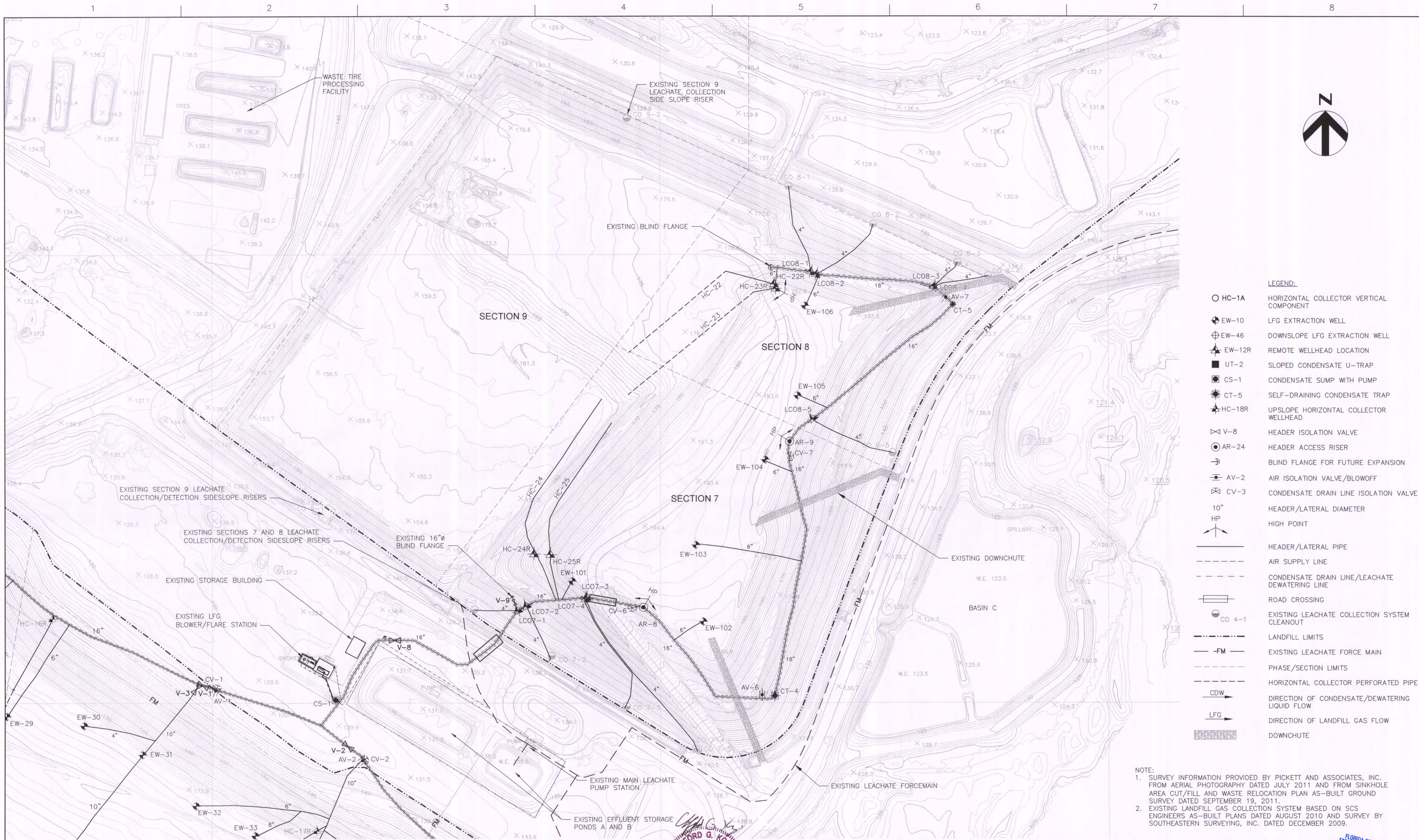
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FILENAME 00C-01.DWG  
SCALE 1=300'

SHEET  
**C-01**

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
MAR 09 2012  
SOUTHWEST DISTRICT  
TAMPA





NOTE:  
1. SURVEY INFORMATION PROVIDED BY PICKETT AND ASSOCIATES, INC. FROM AERIAL PHOTOGRAPHY DATED JULY 2011 AND FROM SINKHOLE AREA CUT/FILL AND WASTE RELOCATION PLAN AS-BUILT GROUND SURVEY DATED SEPTEMBER 19, 2011.  
2. EXISTING LANDFILL GAS COLLECTION SYSTEM BASED ON SCS ENGINEERS AS-BUILT PLANS DATED AUGUST 2010 AND SURVEY BY SOUTHEASTERN SURVEYING, INC. DATED DECEMBER 2009.



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CLIFFORD G. KOENIG  
No. 64078  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
5/7/2012  
CLIFFORD G. KOENIG, P.E.  
LICENSE NO. 64078

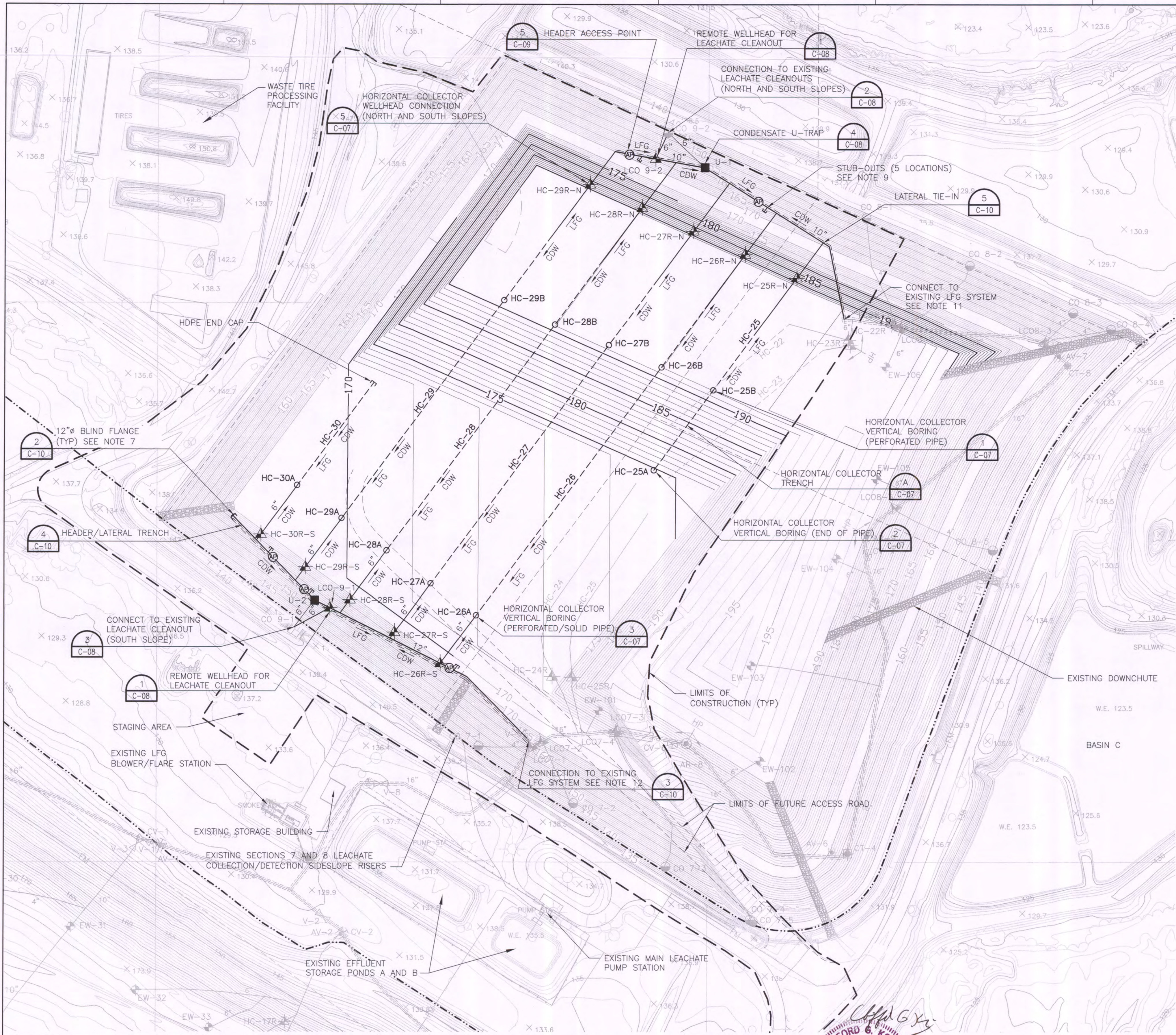
**SECTION 7, 8, AND 9 LANDFILL GAS COLLECTION AND CONTROL SYSTEM EXPANSION  
SOUTHEAST COUNTY LANDFILL  
HILLSBOROUGH COUNTY, FLORIDA**

**EXISTING CONDITIONS**

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
MAR 09 2012  
SOUTHWEST DISTRICT TAMPA

0 1" 2"	FILENAME	OOC-02.DWG	SHEET
	SCALE	1"=100'	<b>C-02</b>





LEGEND:

- HC-26 EXISTING HORIZONTAL COLLECTOR VERTICAL COMPONENT
- EW-10 EXISTING LFG EXTRACTION WELL
- EW-46 EXISTING DOWNSLOPE LFG EXTRACTION WELL
- EW-12R EXISTING REMOTE WELLHEAD LOCATION
- UT-2 EXISTING SLOPED CONDENSATE U-TRAP
- CS-1 EXISTING CONDENSATE SUMP WITH PUMP
- CT-5 EXISTING SELF-DRAINING CONDENSATE TRAP
- HC-18R EXISTING UPSLOPE HORIZONTAL COLLECTOR WELLHEAD
- V-8 EXISTING HEADER ISOLATION VALVE
- AR-24 EXISTING HEADER ACCESS RISER
- BL EXISTING BLIND FLANGE FOR FUTURE EXPANSION
- AV-2 AIR ISOLATION VALVE/BLOWOFF
- CV-3 CONDENSATE DRAIN LINE ISOLATION VALVE
- 10" HP EXISTING HEADER/LATERAL DIAMETER
- HP EXISTING HIGH POINT
- HP EXISTING HEADER/LATERAL PIPE
- AS EXISTING AIR SUPPLY LINE
- CDW EXISTING CONDENSATE DRAIN LINE/LEACHATE DEWATERING LINE
- RC EXISTING ROAD CROSSING
- CO 4-1 EXISTING EXISTING LEACHATE COLLECTION SYSTEM CLEANOUT
- FM EXISTING LEACHATE FORCE MAIN
- CDW EXISTING DIRECTION OF CONDENSATE/DEWATERING LIQUID FLOW
- LFG EXISTING DIRECTION OF LANDFILL GAS FLOW
- LL LANDFILL LIMITS
- PL PHASE/SECTION LIMITS
- HC-26 HORIZONTAL COLLECTOR VERTICAL COMPONENT
- U-1 CONDENSATE U-TRAP
- HC-18R UPSLOPE HORIZONTAL COLLECTOR WELLHEAD (N-NORTH, S-SOUTH)
- AP HEADER ACCESS POINT
- BL BLIND FLANGE FOR FUTURE EXPANSION
- HP HEADER/LATERAL PIPE
- HP HORIZONTAL COLLECTOR PERFORATED PIPE
- AS AIR SUPPLY LINE
- CDW CONDENSATE DRAIN LINE/LEACHATE DEWATERING LINE
- RC ROAD CROSSING
- LL LIMITS OF CONSTRUCTION
- CDW DIRECTION OF CONDENSATE/DEWATERING LIQUID FLOW
- LFG DIRECTION OF LANDFILL GAS FLOW
- DC DOWNCHUTE

NOTE:

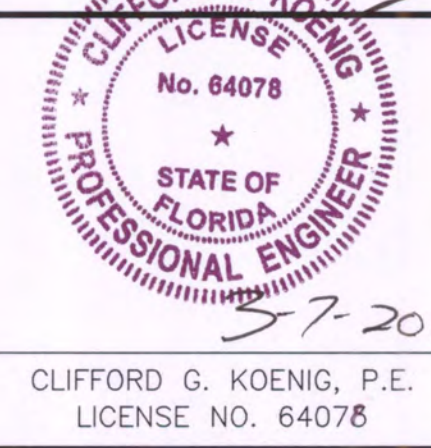
1. SURVEY INFORMATION PROVIDED BY PICKETT AND ASSOCIATES, INC. FROM AERIAL PHOTOGRAPHY DATED JULY 2011.
2. EXISTING LANDFILL GAS COLLECTION SYSTEM BASED ON SCS ENGINEERS AS-BUILT PLANS DATED AUGUST 2010 AND SURVEY BY SOUTHEASTERN SURVEYING, INC. DATED DECEMBER 2009.
3. PROPOSED SECTION 9 FILL SEQUENCE DESIGN BY HDR ENGINEERING, INC., TAMPA, FLORIDA. ACTUAL CONDITIONS MAY VARY. CONTRACTOR TO VERIFY.
4. CONTRACTOR TO PROVIDE A PRE-CONSTRUCTION SURVEY PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES TO VERIFY EXISTING CONDITIONS.
5. LOCATION AND DENSITY OF SECTION 9 LFGCCS EXPANSION IS APPROXIMATE AND SUBJECT TO CHANGE BASED ON EXISTING CONDITIONS.
6. HEADER PIPE SHALL BE HDPE SDR 17 AND LATERALS/HORIZONTAL COLLECTORS SHALL BE HDPE SDR 11.
7. PROPOSED BLIND FLANGE AT END OF SOUTH HEADER IN SECTION 9 SHALL BE LOCATED 20 FEET FROM EAST SIDE SLOPE. ACTUAL LOCATION TO BE DETERMINED AFTER PRE-CONSTRUCTION SURVEY.
8. CONSTRUCTION OF THE SEQUENCE 1 LFG EXPANSION IS ESTIMATED TO BEGIN IN JANUARY 2013.
9. CONTRACTOR TO PROVIDE STUB-OUTS (5 LOCATIONS) FOR SEQUENCE 2 LFG EXPANSION. REFER TO SHEET C-04 FOR PIPE SIZES. STUB-OUT WITH HDPE END CAP TO EXTEND 10 FEET FROM HEADER LINE AT 5% SLOPE. REFER TO DETAIL 5/C-10 FOR ADDITIONAL INFORMATION.
10. CONTRACTOR SHALL REPLACE ALL DAMAGED OR REMOVED SOD AS A RESULT OF CONSTRUCTION.
11. LOCATION OF EXISTING 16"Ø BLIND FLANGE BASED ON SCS ENGINEERS AS-BUILT PLANS DATED AUGUST 2010.  
N. 1,251,970.90  
E. 599,246.37  
EL. 177.41
12. LOCATION OF 16X16X16 TEE TO V-9 BASED ON SCS ENGINEERS AS-BUILT PLANS DATED AUGUST 2010.  
N. 1,251,205.66  
E. 598,681.73  
EL. 150.88



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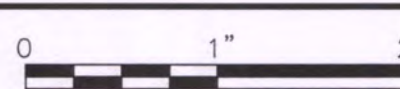
A	3/2012	FDEP SUBMITTAL
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PROJECT MANAGER	R. SIEMERING
REVIEWED BY	C. LEBRON
DESIGN BY	C. KOENIG
DESIGN BY	C. RESTREPO
DRAWN BY	B. JOHNSON
PROJECT NUMBER	0096-171445-002



SECTION 7, 8, AND 9 LANDFILL GAS COLLECTION AND CONTROL SYSTEM EXPANSION  
SOUTHEAST COUNTY LANDFILL  
HILLSBOROUGH COUNTY, FLORIDA

SECTIONS 7, 8 AND 9 GCCS  
EXPANSION-SEQUENCE 1 (FILL SEQUENCE 13)

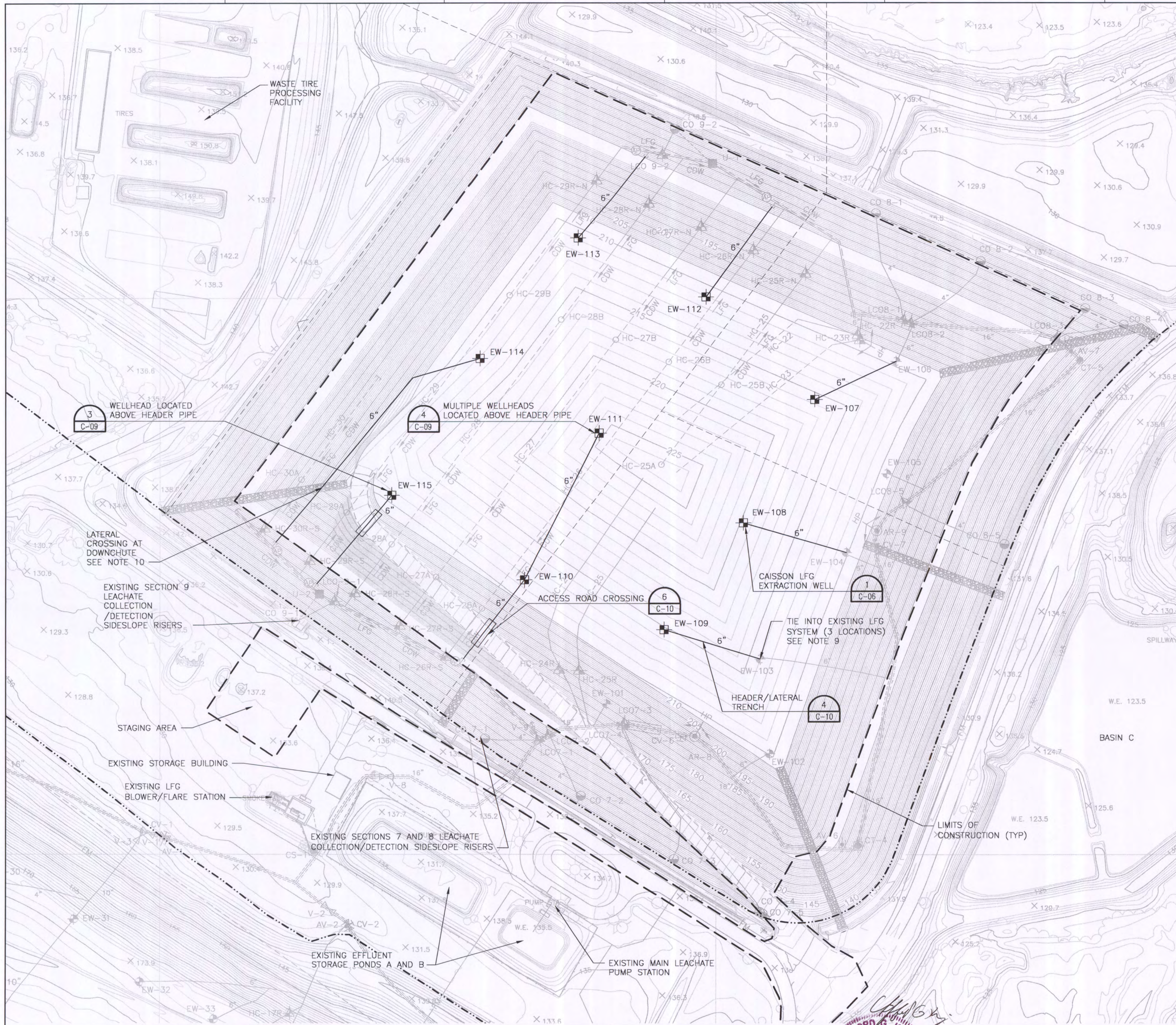


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SCALE	1"=100'

SHEET	C-03
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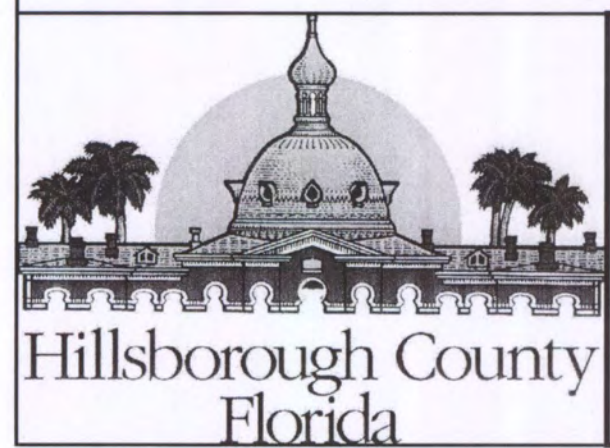
FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
MAR 09 2012  
SOUTHWEST DISTRICT  
TAMPA





- LEGEND:**
- HC-26 EXISTING HORIZONTAL COLLECTOR VERTICAL COMPONENT
  - ⊕ EW-10 EXISTING LFG EXTRACTION WELL
  - ⊕ EW-46 EXISTING DOWNSLOPE LFG EXTRACTION WELL
  - ⊕ EW-12R EXISTING REMOTE WELLHEAD LOCATION
  - UT-2 EXISTING SLOPED CONDENSATE U-TRAP
  - ⊕ CS-1 EXISTING CONDENSATE SUMP WITH PUMP
  - ⊕ CT-5 EXISTING SELF-DRAINING CONDENSATE TRAP
  - ⊕ HC-18R EXISTING UPSLOPE HORIZONTAL COLLECTOR WELLHEAD
  - ⊕ V-8 EXISTING HEADER ISOLATION VALVE
  - ⊕ AR-24 EXISTING HEADER ACCESS RISER
  - ⊕ EXISTING BLIND FLANGE FOR FUTURE EXPANSION
  - ⊕ AV-2 AIR ISOLATION VALVE/BLOWOFF
  - ⊕ CV-3 CONDENSATE DRAIN LINE ISOLATION VALVE
  - 10" HP EXISTING HEADER/LATERAL DIAMETER
  - EXISTING HEADER/LATERAL PIPE
  - EXISTING AIR SUPPLY LINE
  - EXISTING CONDENSATE DRAIN LINE/LEACHATE DEWATERING LINE
  - EXISTING ROAD CROSSING
  - ⊕ CO 4-1 EXISTING EXISTING LEACHATE COLLECTION SYSTEM CLEANOUT
  - FM EXISTING LEACHATE FORCE MAIN
  - CDW EXISTING DIRECTION OF CONDENSATE/DEWATERING LIQUID FLOW
  - LFG EXISTING DIRECTION OF LANDFILL GAS FLOW
  - LANDFILL LIMITS
  - PHASE/SECTION LIMITS
  - HC-26 HORIZONTAL COLLECTOR VERTICAL COMPONENT
  - ⊕ EW-110 CAISSON LFG EXTRACTION WELL
  - U-1 CONDENSATE U-TRAP
  - ⊕ AP HEADER ACCESS POINT
  - ⊕ BLIND FLANGE FOR FUTURE EXPANSION
  - HEADER/LATERAL PIPE
  - HORIZONTAL COLLECTOR PERFORATED PIPE
  - AIR SUPPLY LINE
  - CONDENSATE DRAIN LINE/LEACHATE DEWATERING LINE
  - ROAD CROSSING
  - LIMITS OF CONSTRUCTION
  - CDW DIRECTION OF CONDENSATE/DEWATERING LIQUID FLOW
  - LFG DIRECTION OF LANDFILL GAS FLOW
  - DOWNCHUTE

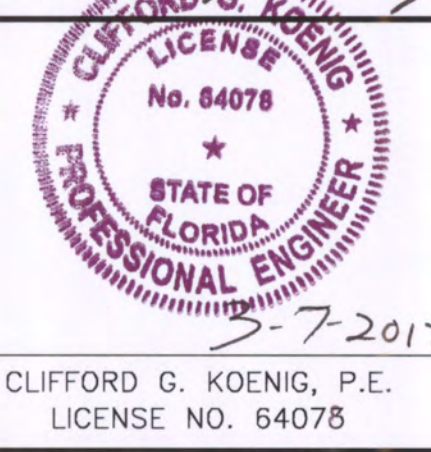
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  6. HEADER PIPE SHALL BE HDPE SDR 17 AND LATERALS/HORIZONTAL COLLECTORS SHALL BE HDPE SDR 11.
  7. PROPOSED BLIND FLANGE AT END OF SOUTH HEADER IN SECTION 9 SHALL BE LOCATED 20 FEET FROM EAST SIDE SLOPE. ACTUAL LOCATION TO BE DETERMINED AFTER PRE-CONSTRUCTION SURVEY.
  8. CONSTRUCTION OF THE SEQUENCE 2 LFG EXPANSION IS ESTIMATED TO BEGIN IN MARCH 2019.
  9. CONTRACTOR TO REPLACE ELBOW AT EXISTING LATERAL RISERS WITH A 6"x6"x6" TEE FOR LATERAL EXTENSION.
  10. CONTRACTOR TO RESTORE DOWNCHUTE TO MATCH ORIGINAL CONDITION.
  11. CONTRACTOR SHALL REPLACE ALL DAMAGED OR REMOVED SOD AS A RESULT OF CONSTRUCTION.



**HDR**  
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HDR CA# 4213

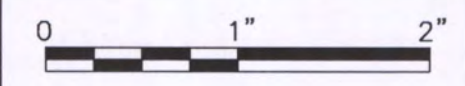
A	3/2012	FDEP SUBMITTAL
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	R. SIEMERING
REVIEWED BY	C. LEBRON
DESIGN BY	C. KOENIG
DESIGN BY	C. RESTREPO
DRAWN BY	B. JOHNSON
PROJECT NUMBER	0096-171445-002



**SECTION 7, 8, AND 9 LANDFILL GAS COLLECTION AND CONTROL SYSTEM EXPANSION  
SOUTHEAST COUNTY LANDFILL  
HILLSBOROUGH COUNTY, FLORIDA**

**SECTIONS 7, 8 AND 9 GCCS  
EXPANSION-SEQUENCE 2 (FILL SEQUENCE 16)**

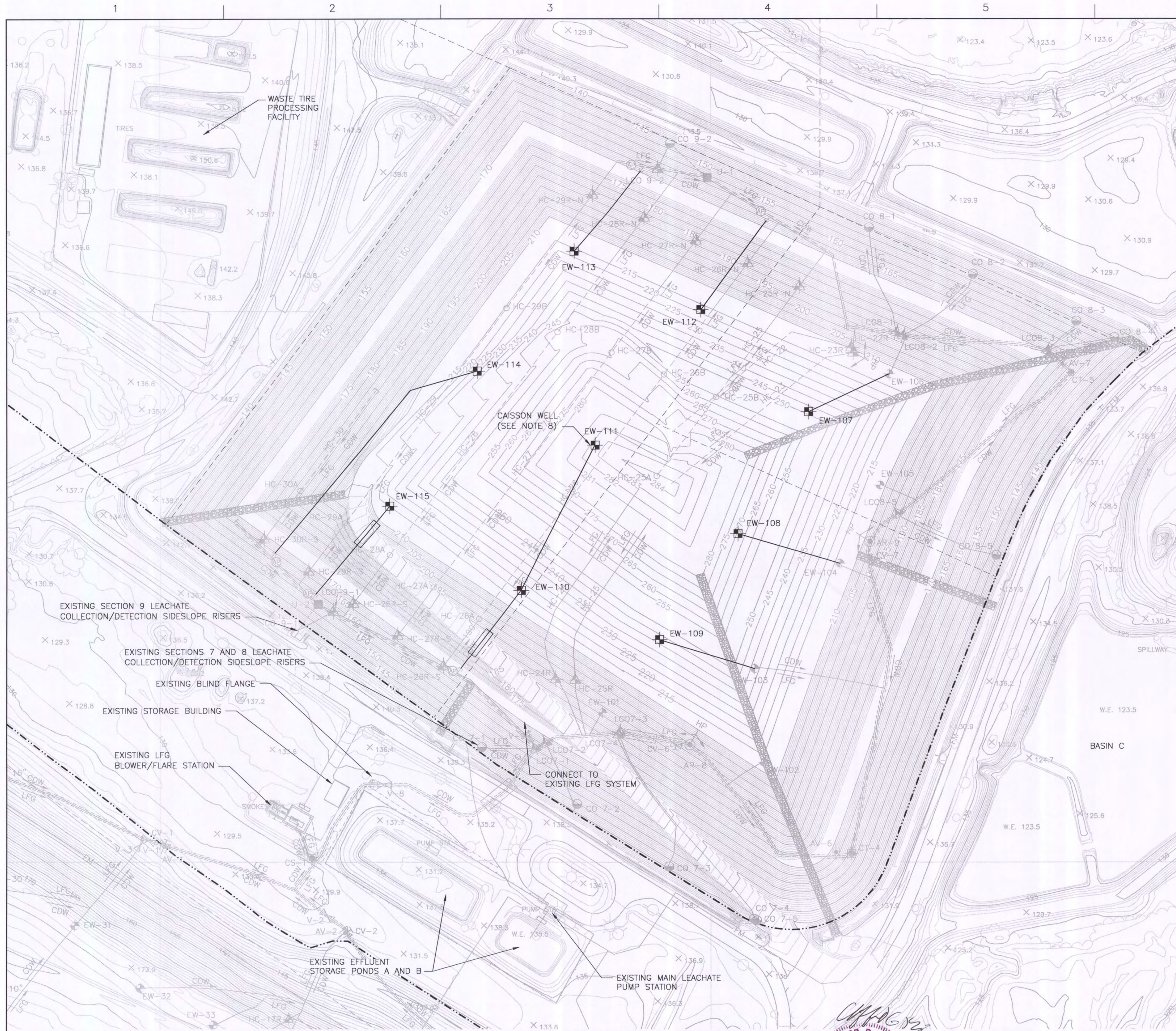


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SHEET	C-04
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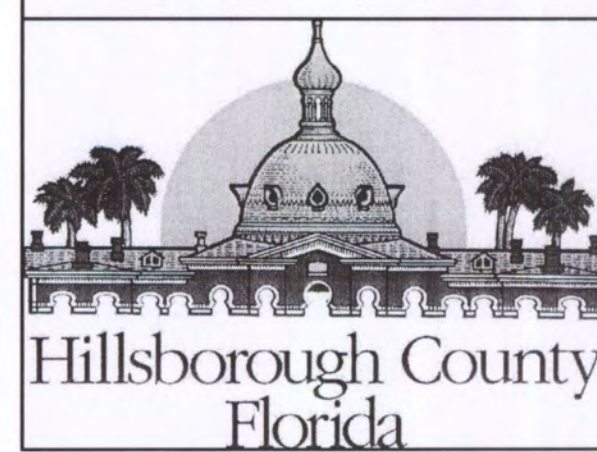
FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
MAR 09 2012  
SOUTHWEST DISTRICT  
TAMPA





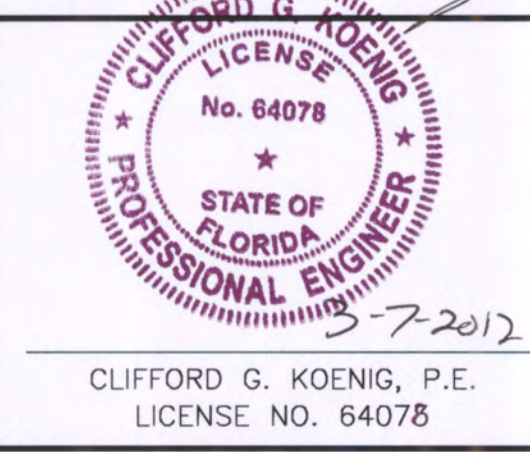
- LEGEND:**
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  - HP EXISTING CONDENSATE DRAIN LINE/LEACHATE DEWATERING LINE
  - HP EXISTING ROAD CROSSING
  - CO 4-1 EXISTING EXISTING LEACHATE COLLECTION SYSTEM CLEANOUT
  - FM EXISTING LEACHATE FORCE MAIN
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  6. HEADER PIPE SHALL BE HDPE SDR 17 AND LATERALS/HORIZONTAL COLLECTORS SHALL BE HDPE SDR 11.
  7. PROPOSED BLIND FLANGE AT END OF SOUTH HEADER IN SECTION 9 SHALL BE LOCATED 20 FEET FROM EAST SIDE SLOPE. ACTUAL LOCATION TO BE DETERMINED AFTER PRE-CONSTRUCTION SURVEY.
  8. CONSTRUCTION OF SEQUENCE 3 LFG EXPANSION, IS ESTIMATED TO BEGIN IN JUNE 2021 ONLY IF CAISSON WELLS ARE REQUIRED TO BE RE-DRILLED.



A	3/2012	FDEP SUBMITTAL
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PROJECT MANAGER	R. SIEMERING
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DRAWN BY	B. JOHNSON
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**SECTION 7, 8, AND 9 LANDFILL GAS COLLECTION AND CONTROL SYSTEM EXPANSION  
SOUTHEAST COUNTY LANDFILL  
HILLSBOROUGH COUNTY, FLORIDA**

**SECTIONS 7, 8 AND 9 GCCS  
EXPANSION-SEQUENCE 3 (FILL SEQUENCE 18)**

0 1" 2"

FILENAME: 00C-05.DWG  
SCALE: 1"=100'

SHEET  
**C-05**

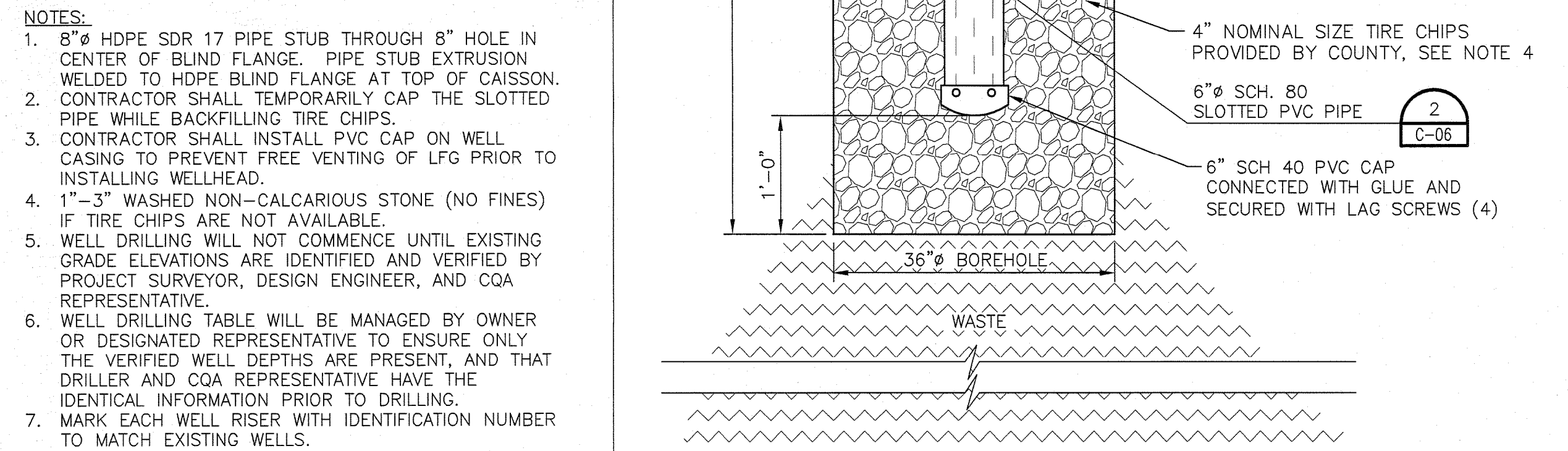
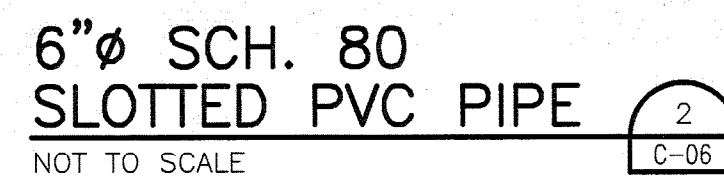
FLORIDA DEPARTMENT OF  
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MAR 09 2012  
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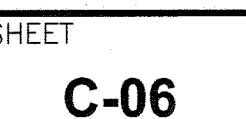
## 8

NOTES:

1. FINAL GRADE ELEVATION FOR LFGCCS EXPANSION SEQUENCE 1 BASED ON FILL SEQUENCE 13.
2. FINAL GRADE ELEVATIONS FOR LFGCCS EXPANSION SEQUENCE 2 BASED ON FILL SEQUENCE 16.
3. BASE GRADE ELEVATION BASED ON SECTION 9 TOPOGRAPHIC SURVEY OF PROTECTIVE COVER BY SOUTHEASTERN SURVEYING, INC. DATED MAY 8, 2008.
4. LENGTH OF SLOTTED PIPE OF LFGCCS EXPANSION SEQUENCE 2 INCLUDES 2 FEET STICK-UP.



FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
MAR 09 2012  
SOUTHWEST DISTRICT  
TAMPA





1

2

3

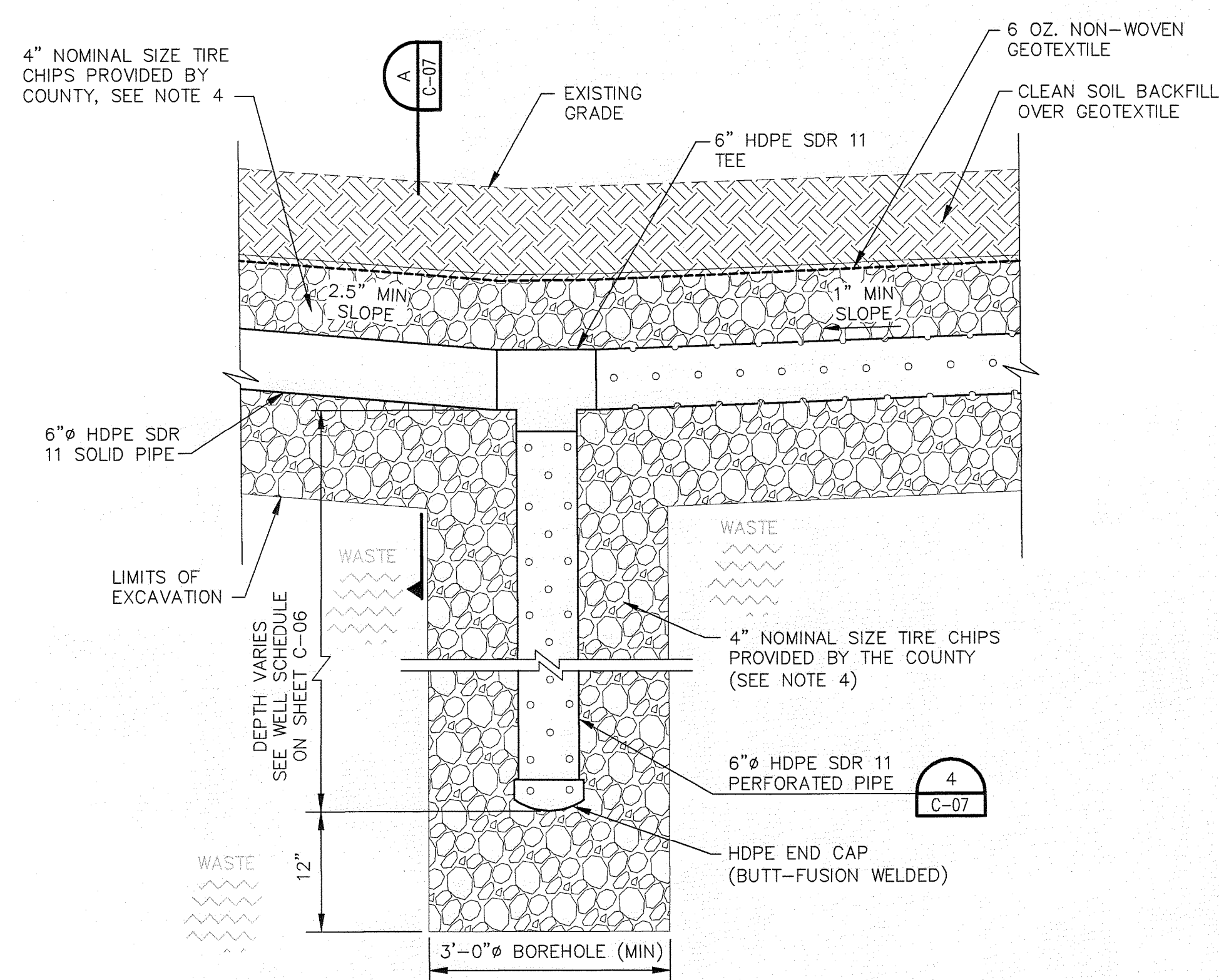
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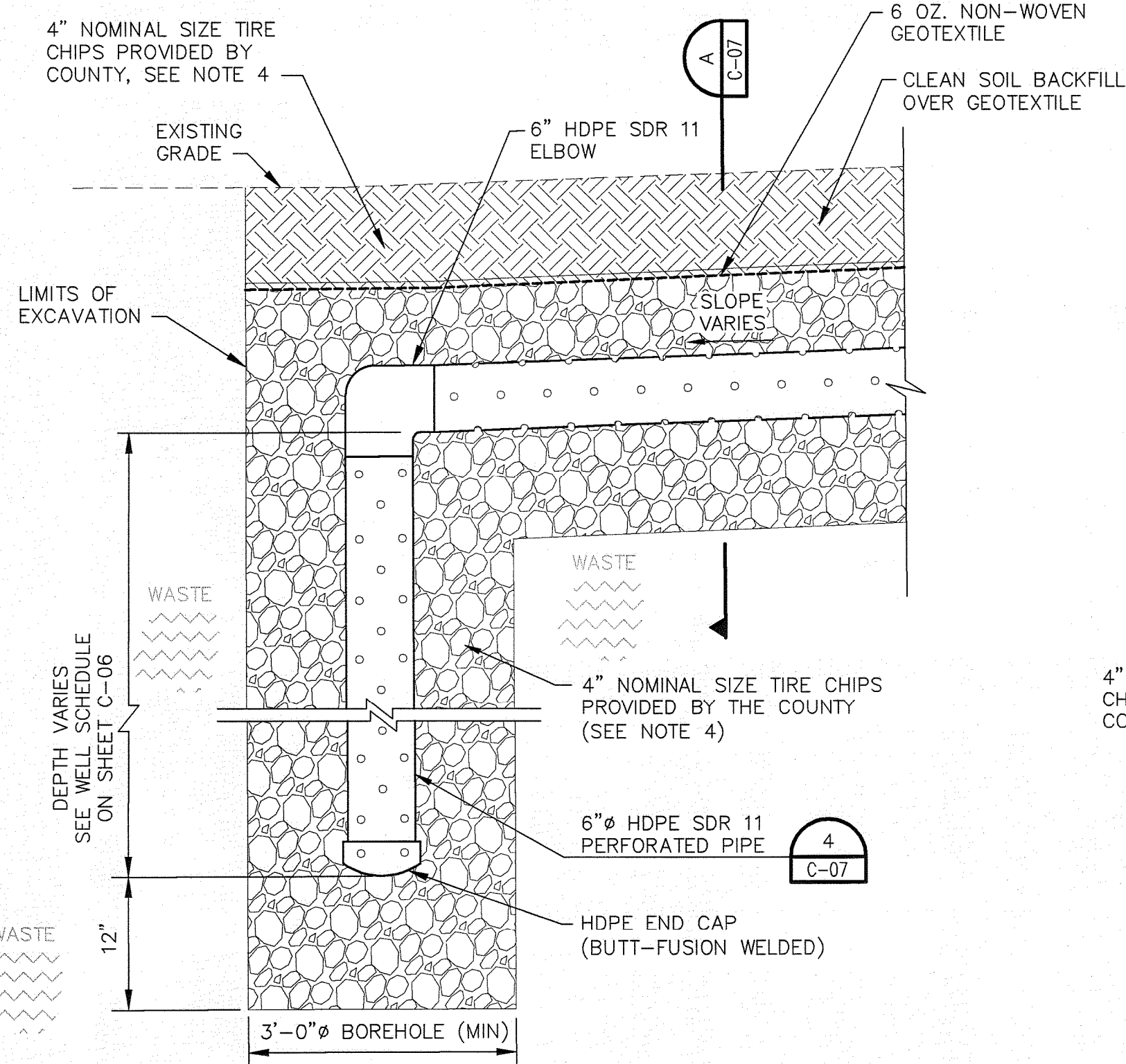
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**HORIZONTAL COLLECTOR VERTICAL BORING  
(PERFORATED/SOLID PIPE) DETAIL**

NOT TO SCALE

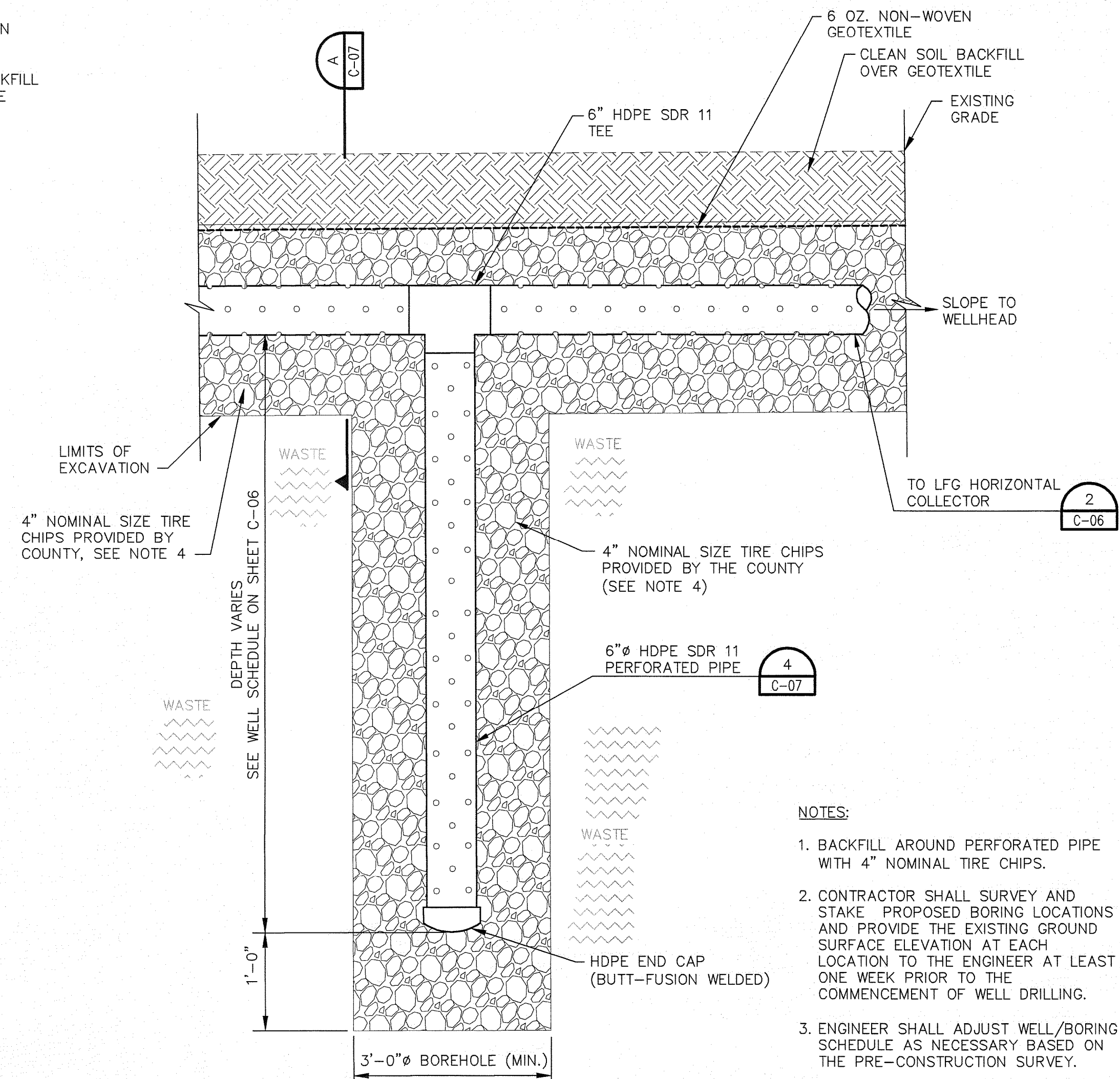
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C-03



**HORIZONTAL COLLECTOR VERTICAL BORING  
(END OF PIPE) DETAIL**

NOT TO SCALE

2  
C-03



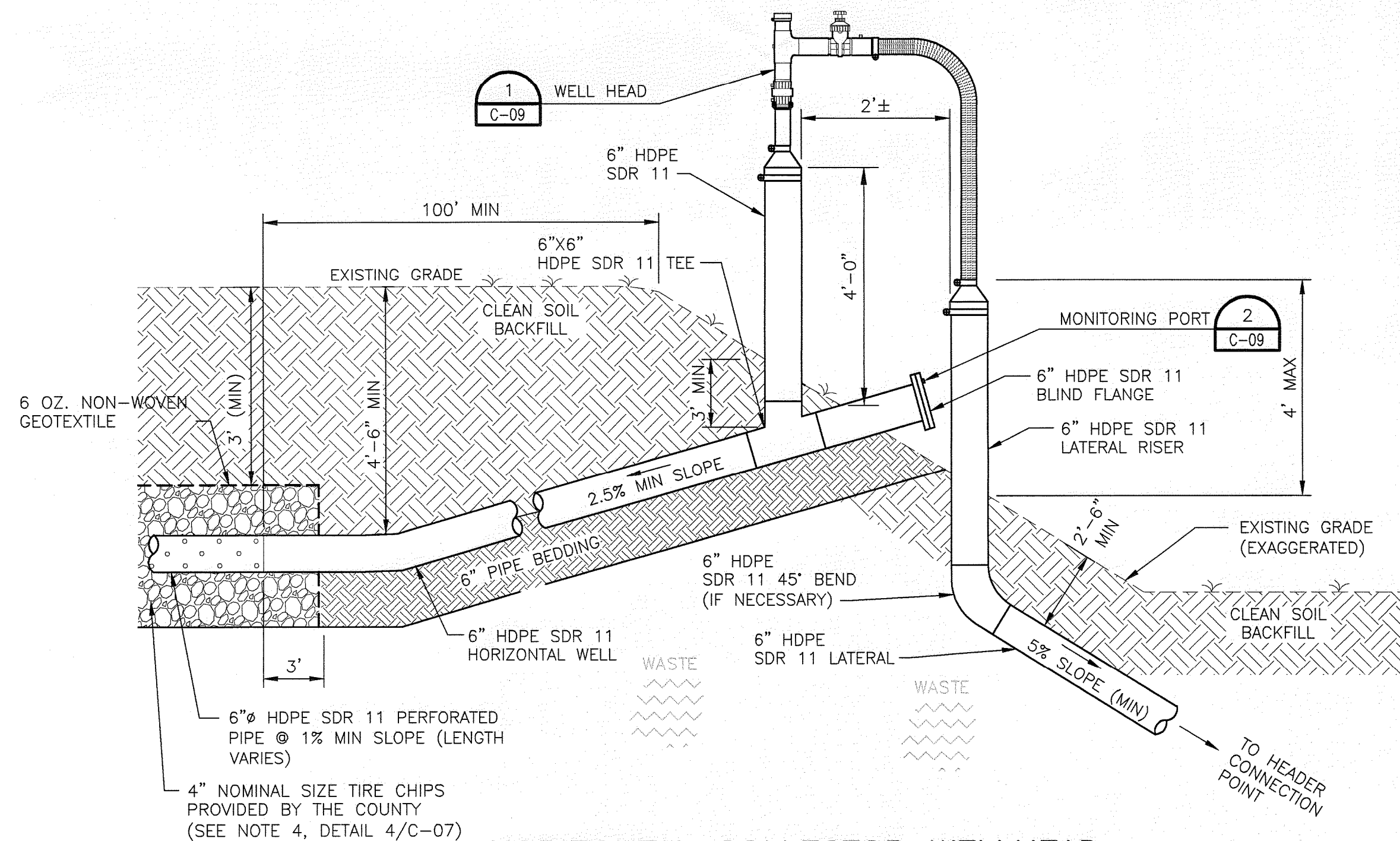
**NOTES:**

1. BACKFILL AROUND PERFORATED PIPE WITH 4" NOMINAL TIRE CHIPS.
2. CONTRACTOR SHALL SURVEY AND STAKE PROPOSED BORING LOCATIONS AND PROVIDE THE EXISTING GROUND SURFACE ELEVATION AT EACH LOCATION TO THE ENGINEER AT LEAST ONE WEEK PRIOR TO THE COMMENCEMENT OF WELL DRILLING.
3. ENGINEER SHALL ADJUST WELL/BORING SCHEDULE AS NECESSARY BASED ON THE PRE-CONSTRUCTION SURVEY.
4. USE 1"-3" WASHED NON-CALCAREOUS STONE (NO FINE) IF TIRE CHIPS ARE NOT AVAILABLE.

**HORIZONTAL COLLECTOR  
VERTICAL BORING DETAIL**

NOT TO SCALE

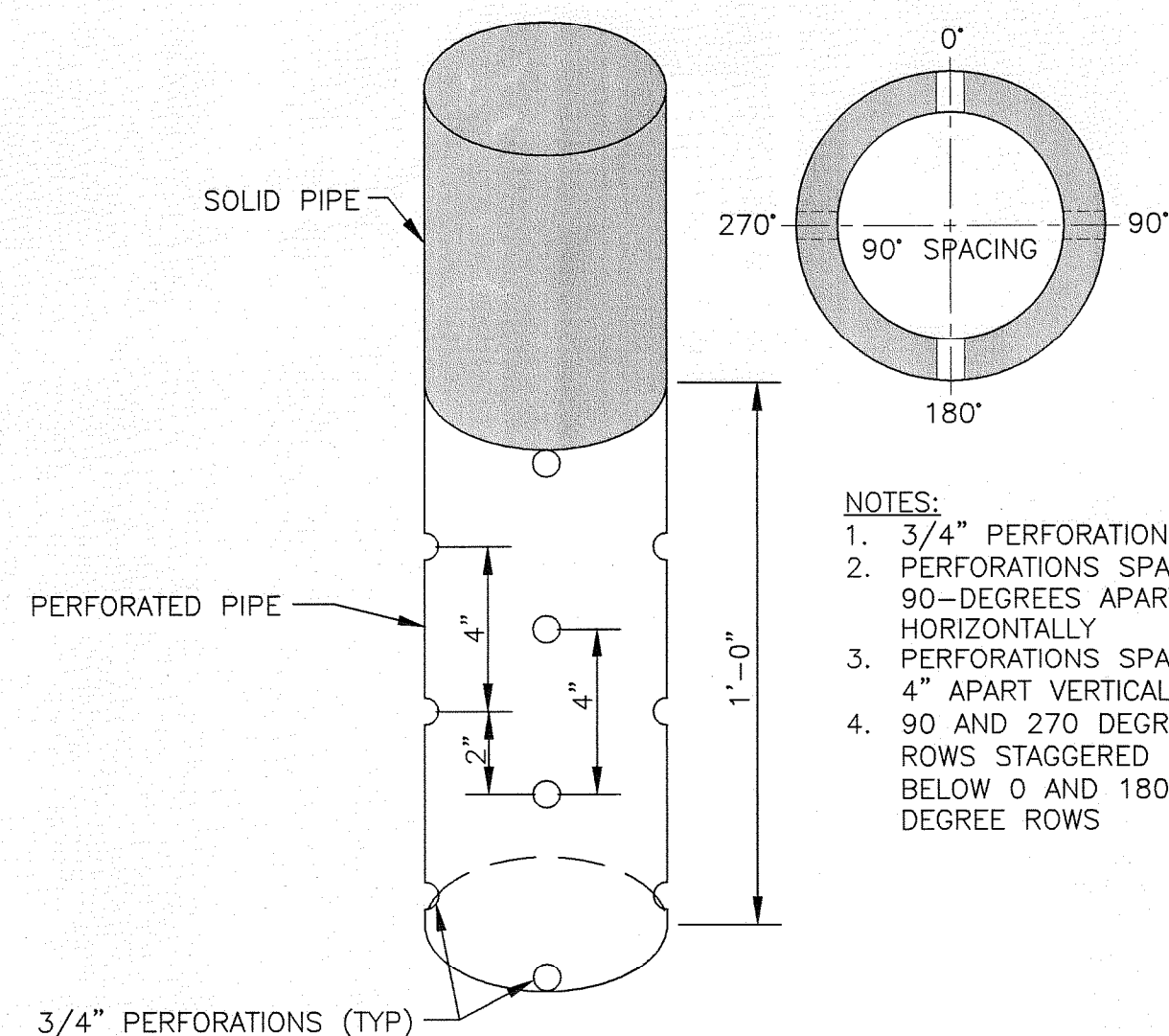
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C-03



**HORIZONTAL COLLECTOR WELLHEAD  
CONNECTION (NORTH AND SOUTH SLOPES)**

NOT TO SCALE

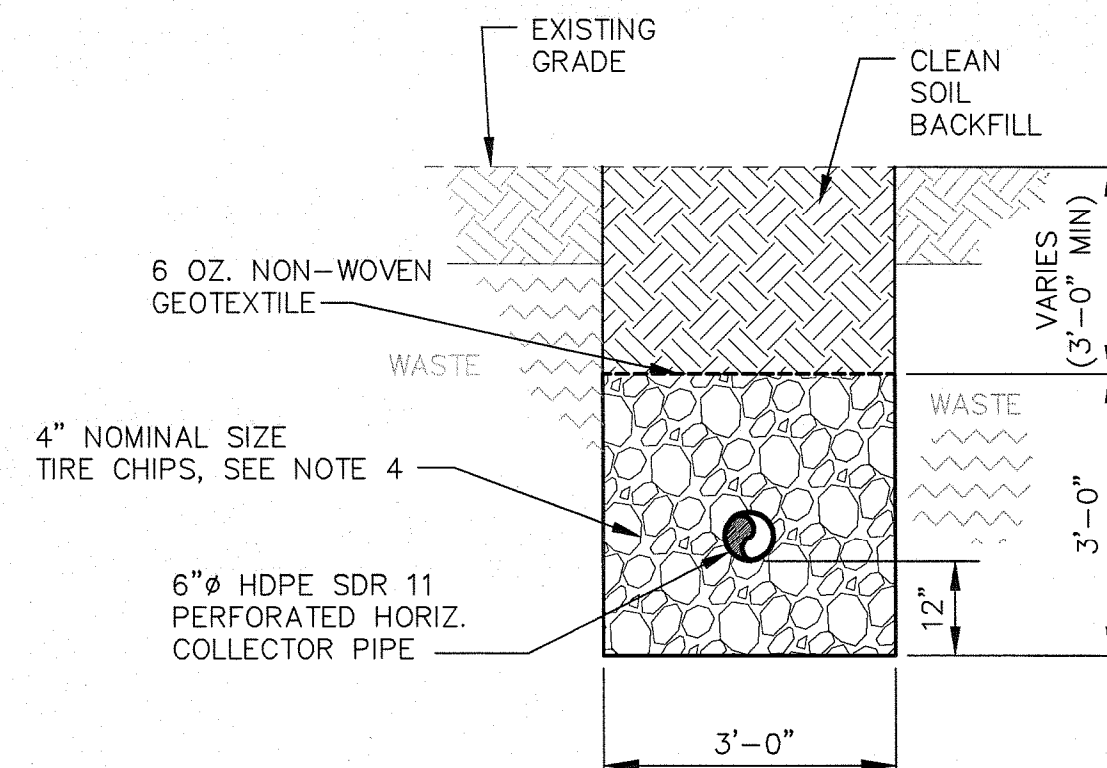
5  
C-03



**6" HDPE SDR 11  
PERFORATED PIPE**

NOT TO SCALE

4  
C-07



**SECTION**

NOT TO SCALE

A  
C-07



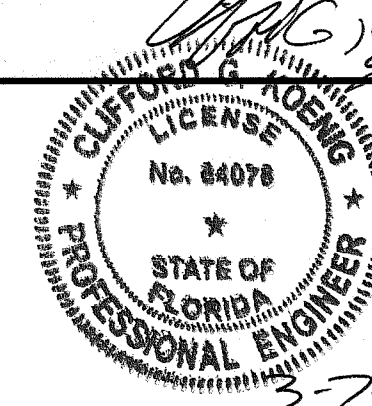
**HDR**

HDR Engineering, Inc.  
5426 Bay Center Drive  
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Tampa, FL 33609-3444  
HDR CA# 4213

ISSUE	DATE	DESCRIPTION
A	3/2012	FDEP SUBMITTAL

PROJECT MANAGER	R. SIEMERING
REVIEWED BY	C. LEBRON
DESIGN BY	C. KOENIG
DESIGN BY	C. RESTREPO
DRAWN BY	B. JOHNSON

PROJECT NUMBER 0096-171445-002



CLIFFORD G. KOENIG, P.E.  
LICENSE NO. 64078

**SECTION 7, 8, AND 9 LANDFILL GAS COLLECTION  
AND CONTROL SYSTEM EXPANSION  
SOUTHEAST COUNTY LANDFILL  
HILLSBOROUGH COUNTY, FLORIDA**

**HORIZONTAL COLLECTOR DETAILS**

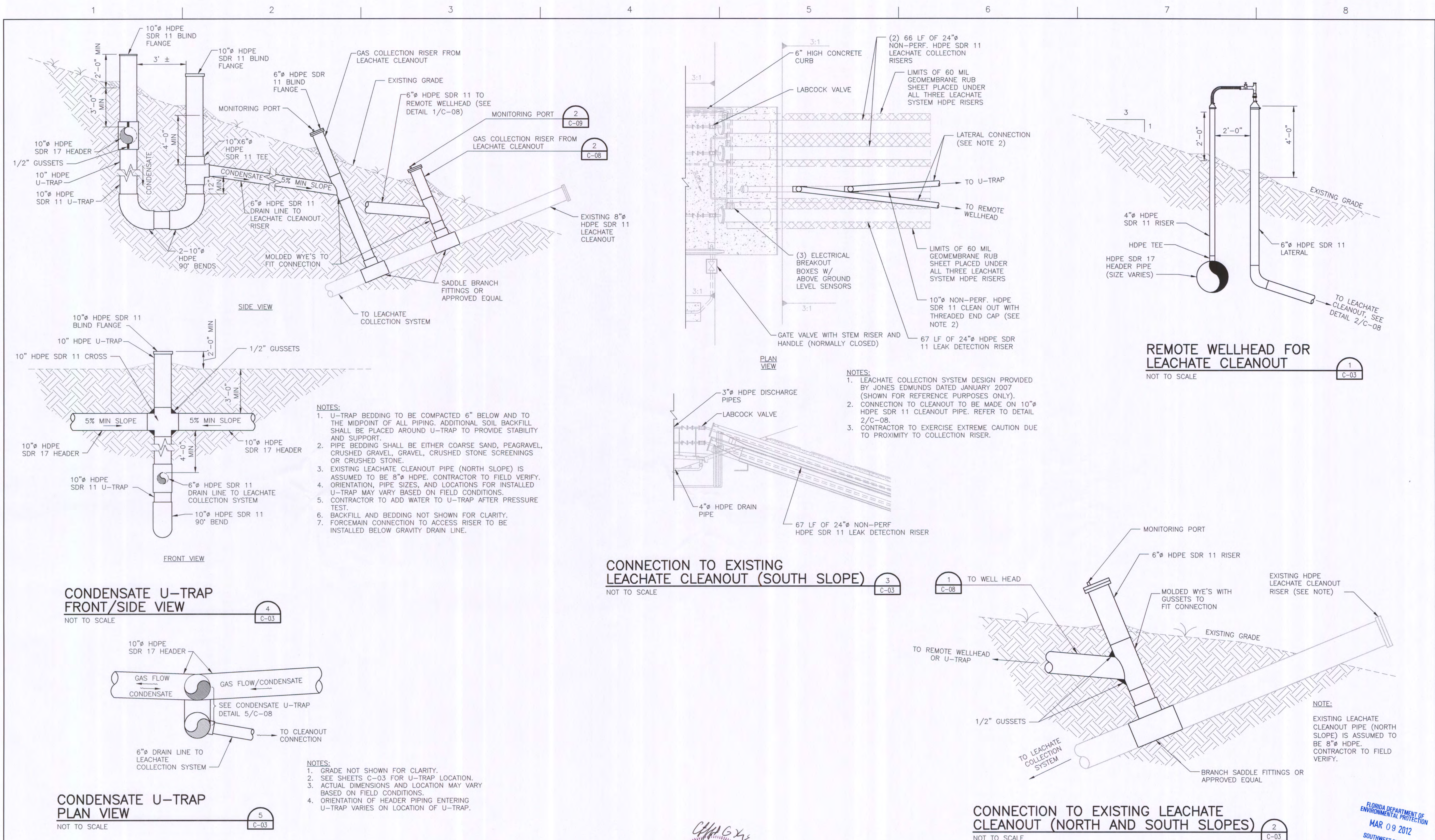


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SCALE	AS SHOWN

SHEET	C-07
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FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
MAR 09 2012  
SOUTHWEST DISTRICT  
TAMPA





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*Clifford G. Koenig*

**CLIFFORD G. KOENIG**  
No. 64078  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
3-7-2012

CLIFFORD G. KOENIG, P.E.  
LICENSE NO. 64078

**SECTION 7, 8, AND 9 LANDFILL GAS COLLECTION AND CONTROL SYSTEM EXPANSION  
SOUTHEAST COUNTY LANDFILL  
HILLSBOROUGH COUNTY, FLORIDA**

**WELLHEAD AND CONFIGURATION DETAILS**

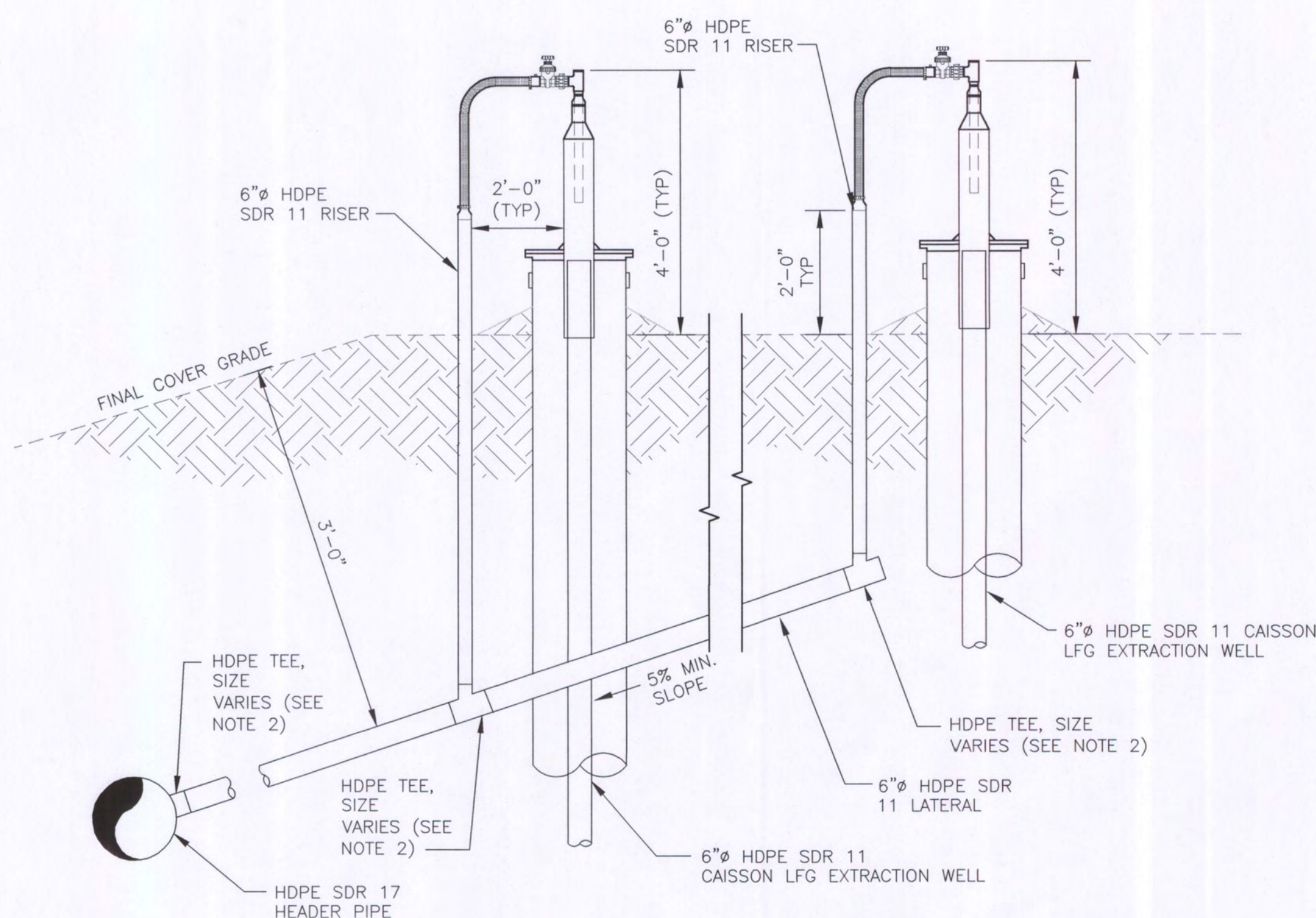
0 1" 2"

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SCALE: AS SHOWN

SHEET  
**C-08**

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
MAR 09 2012  
SOUTHWEST DISTRICT TAMPA





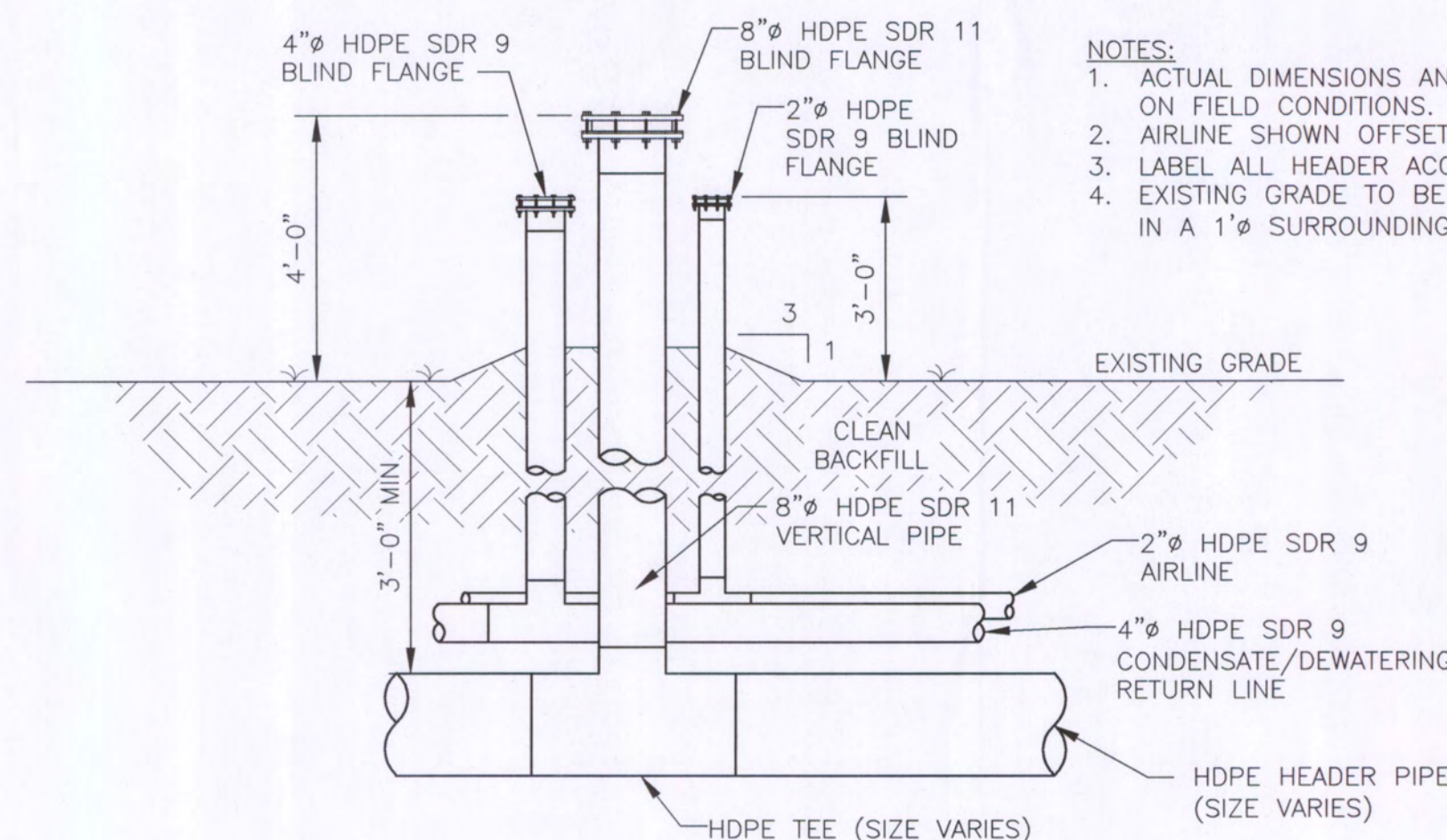
**MULTIPLE WELLS LOCATED ABOVE HEADER PIPE DETAIL**

NOT TO SCALE

4  
C-04

**NOTES:**

1. HDPE TEE AND STUB-OUT AT HEADER LINE TO BE INSTALLED DURING SEQUENCE 1.
2. CONTRACTOR TO MODIFY RISER PIPES AT EXISTING LFG LATERALS FOR LATERAL EXTENSIONS.



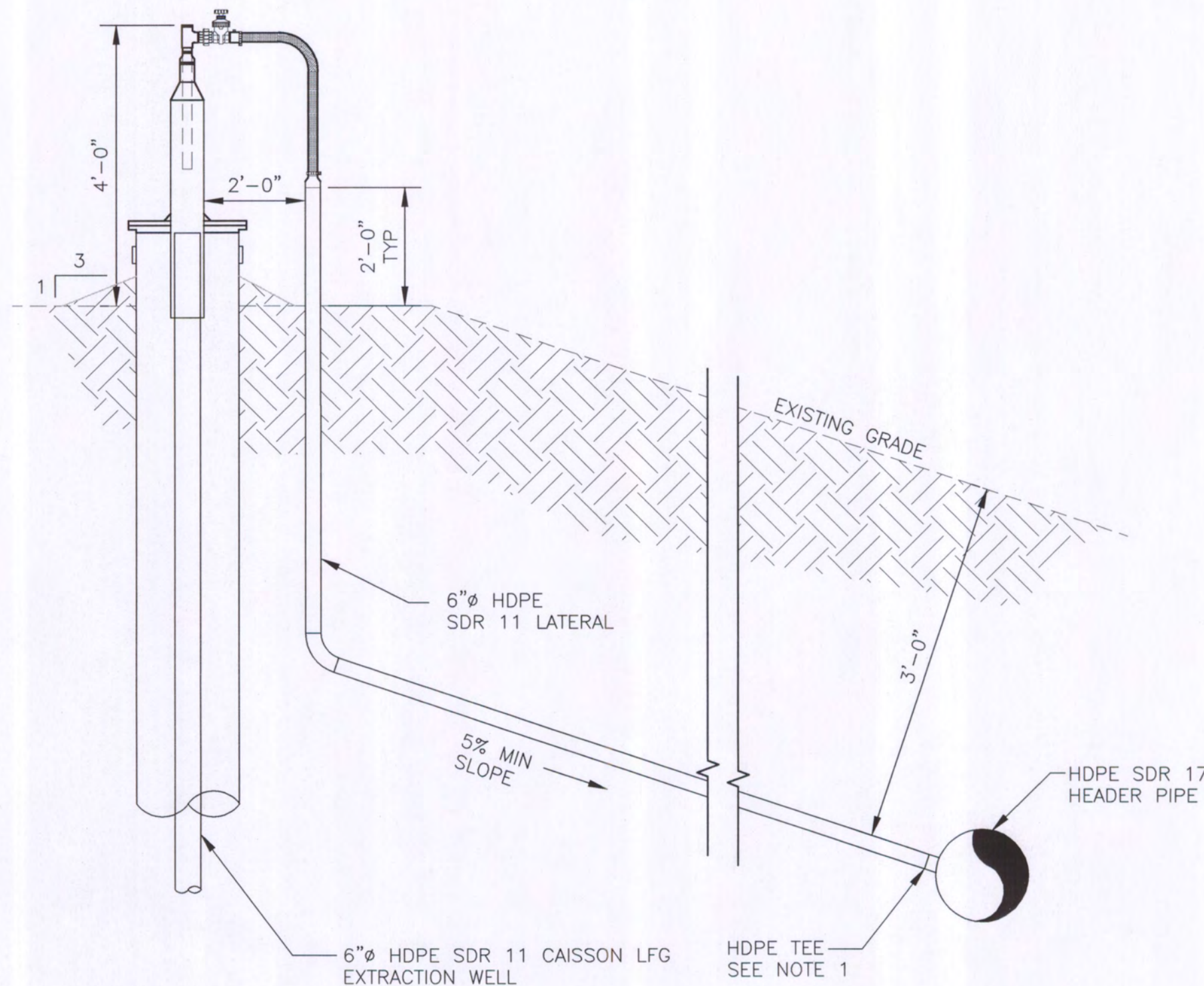
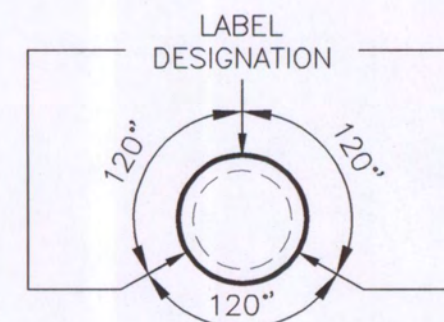
**HEADER ACCESS POINT DETAIL**

NOT TO SCALE

5  
C-03

**NOTES:**

1. ACTUAL DIMENSIONS AND LOCATIONS MAY VARY BASED ON FIELD CONDITIONS.
2. AIRLINE SHOWN OFFSET FOR CLARITY.
3. LABEL ALL HEADER ACCESS POINTS AS 'AP', AIRLINE
4. EXISTING GRADE TO BE SLOPED FOR POSITIVE DRAINAGE IN A 1' SURROUNDING SURFACE EXPRESSION.



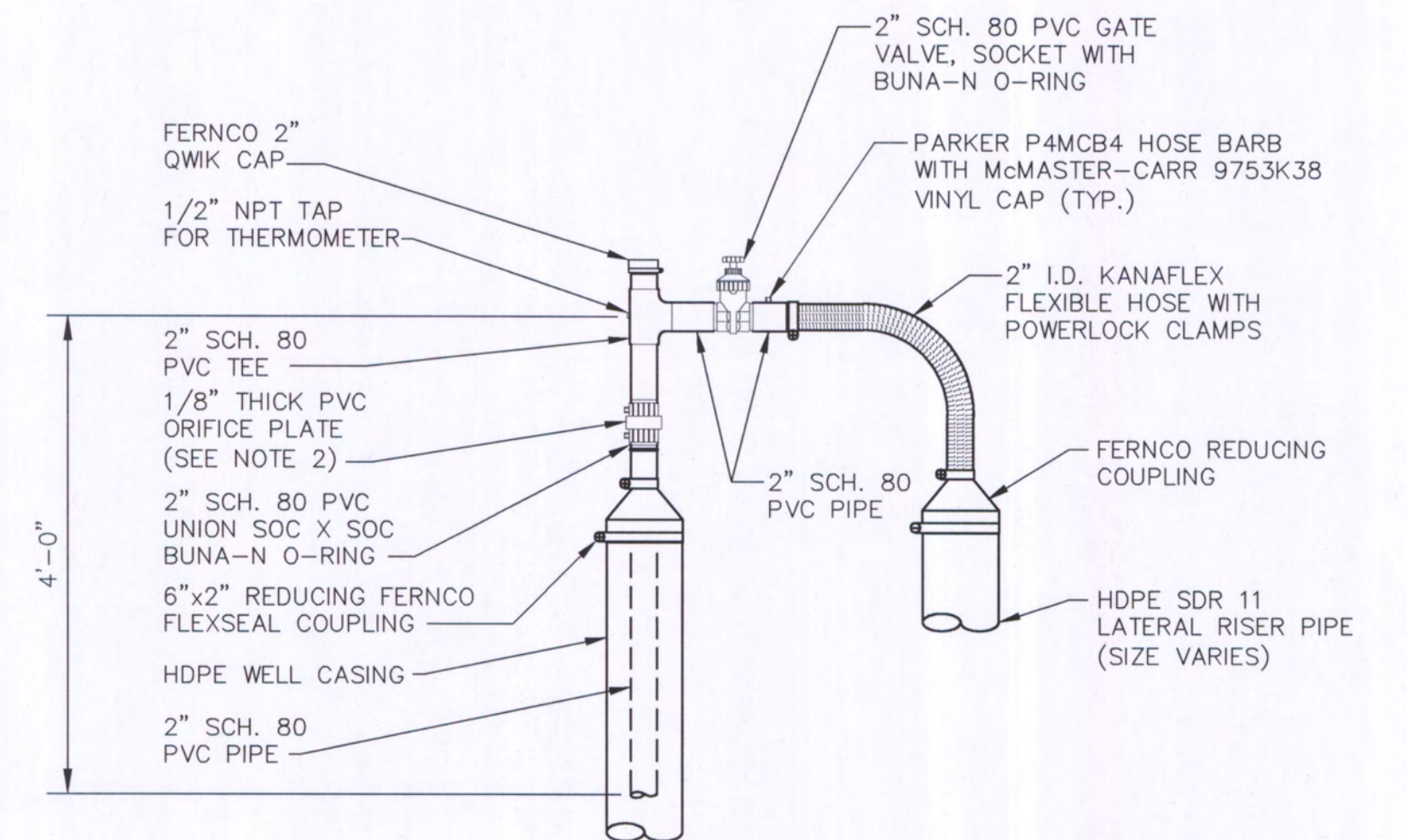
**NOTES:**

1. HDPE TEE AND STUB-OUT TO BE INSTALLED IN SEQUENCE 1.
2. REFER TO SHEET C-06 FOR WELL SCHEDULE.

**WELLHEAD LOCATED ABOVE HEADER PIPE DETAIL**

NOT TO SCALE

3  
C-04



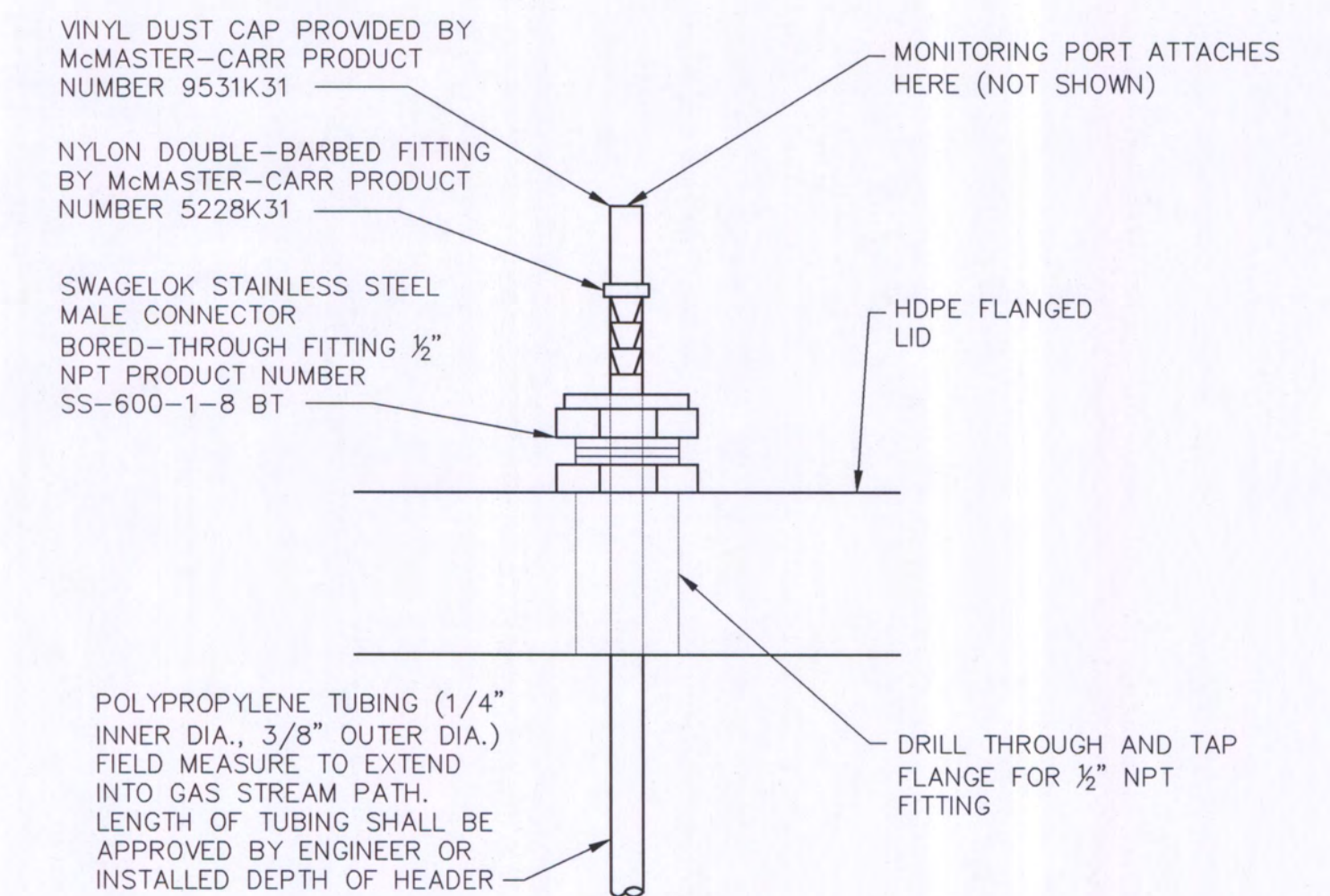
**NOTES:**

1. WELLHEAD DETAIL BASED ON MATERIAL CUT SHEET PROVIDED BY FORRER SUPPLY (800-255-1030).
2. ORIFICE PLATE TO FIT INSIDE UNION. EACH WELLHEAD TO BE PROVIDED WITH 0.25", 0.50", 0.75", 1.00", 1.25", AND 1.50" ORIFICE PLATES.

**WELL HEAD DETAIL**

NOT TO SCALE

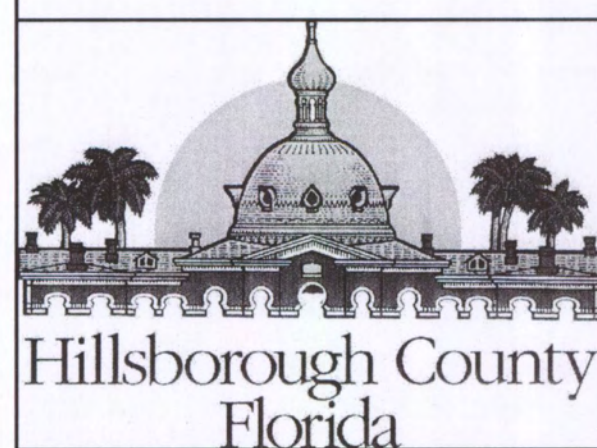
1  
C-06  
C-07



**MONITORING PORT DETAIL (TYP)**

NOT TO SCALE

2  
C-07

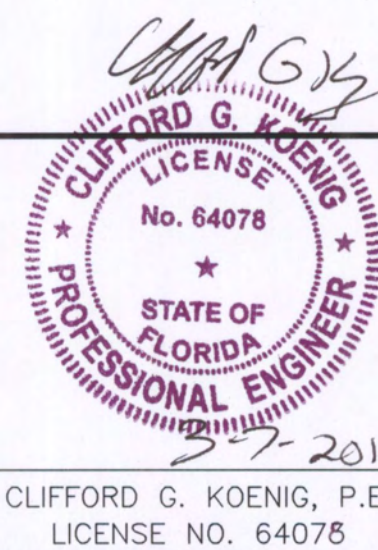


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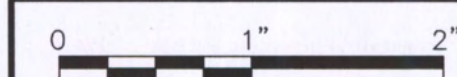
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**SECTION 7, 8, AND 9 LANDFILL GAS COLLECTION AND CONTROL SYSTEM EXPANSION  
SOUTHEAST COUNTY LANDFILL  
HILLSBOROUGH COUNTY, FLORIDA**

**WELL HEAD AND CONFIGURATION DETAILS**

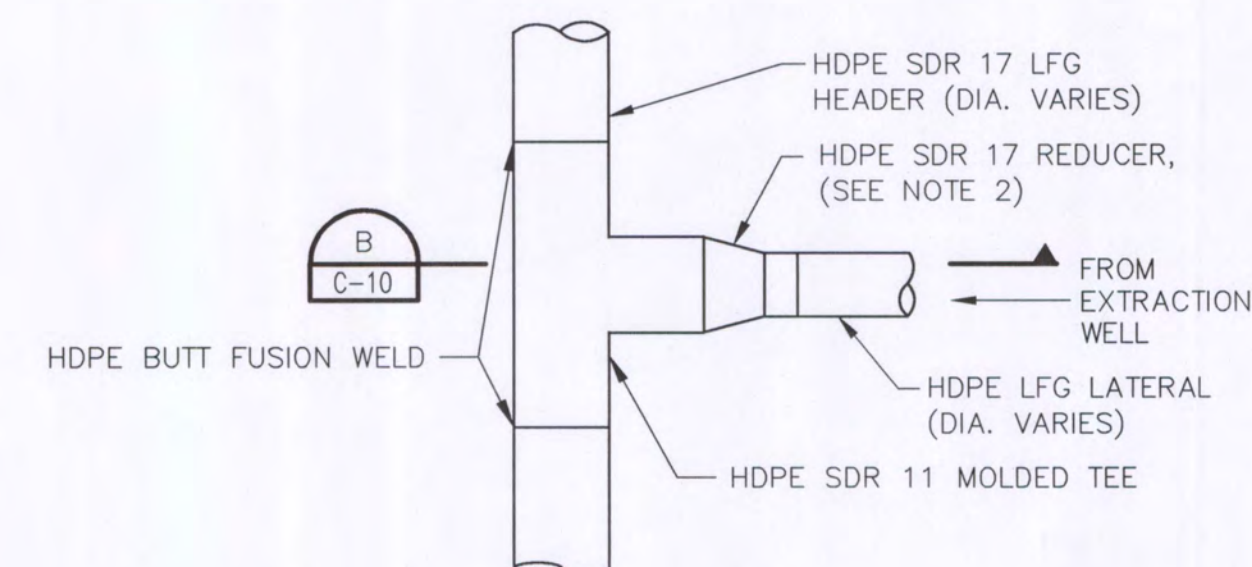
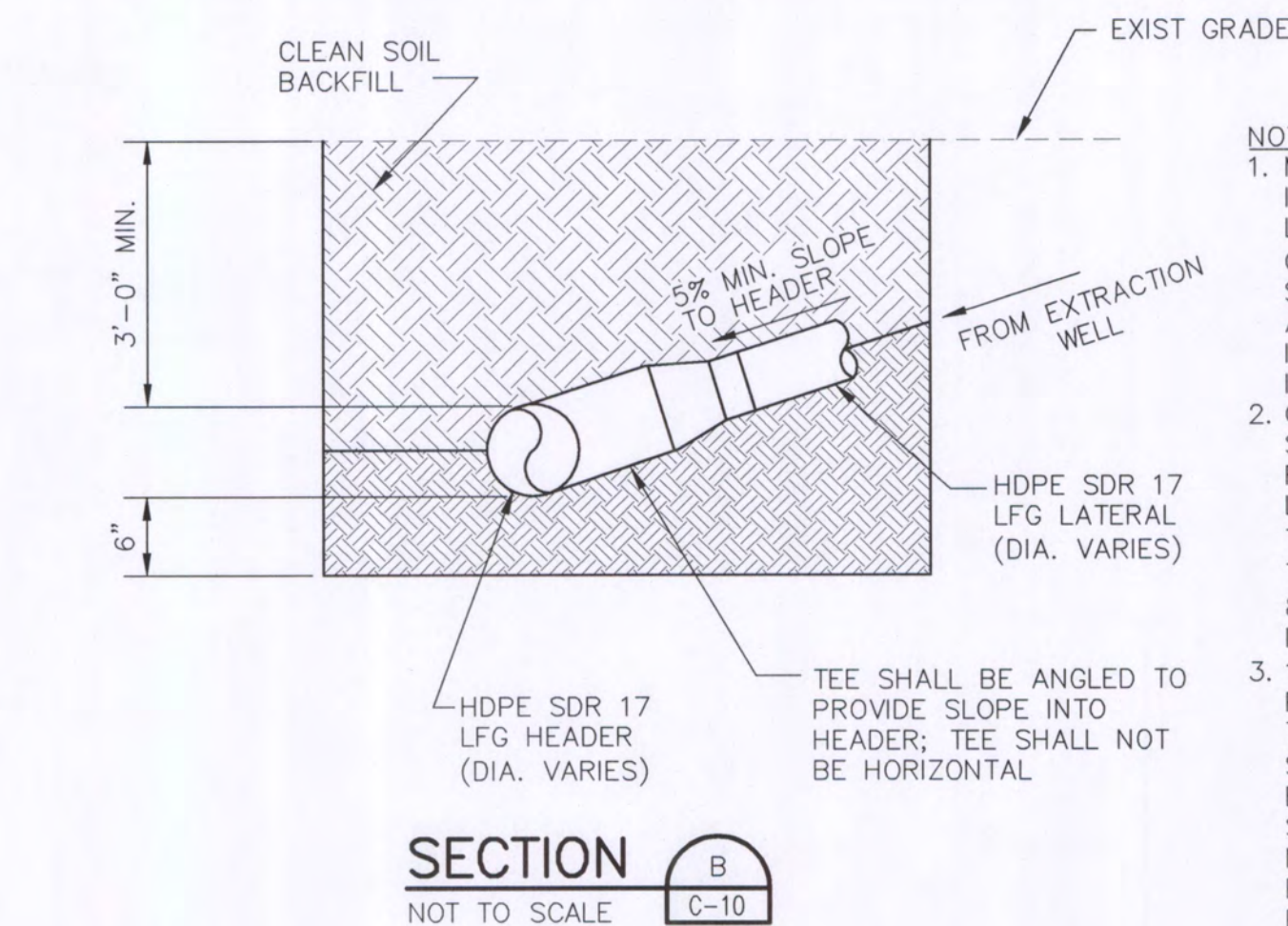


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SCALE	AS SHOWN

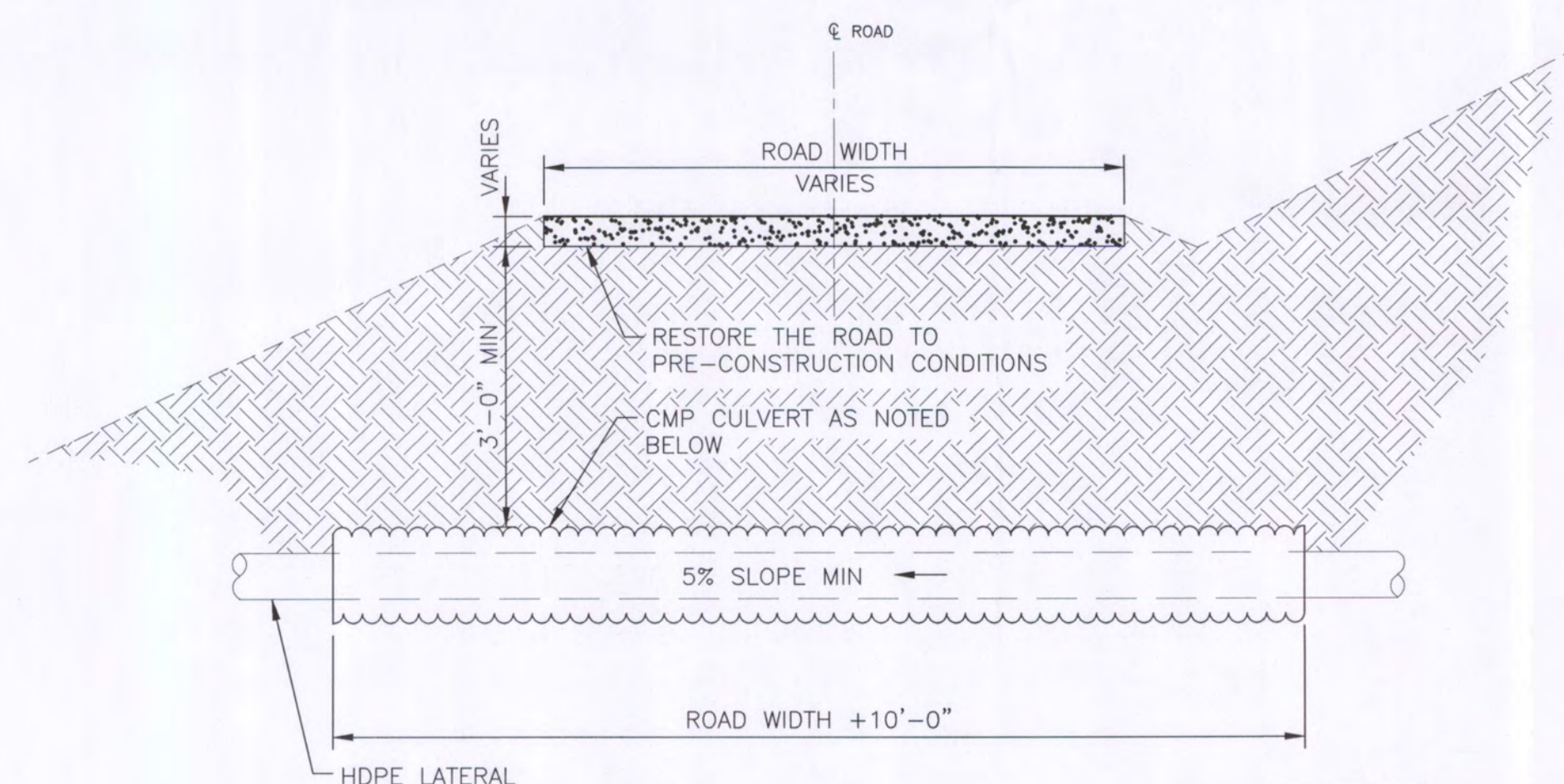
SHEET  
**C-09**

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
MAR 09 2012  
SOUTHWEST DISTRICT  
TAMPA





**LFG LATERAL TIE-IN WITH TEE DETAIL** 5  
NOT TO SCALE C-03

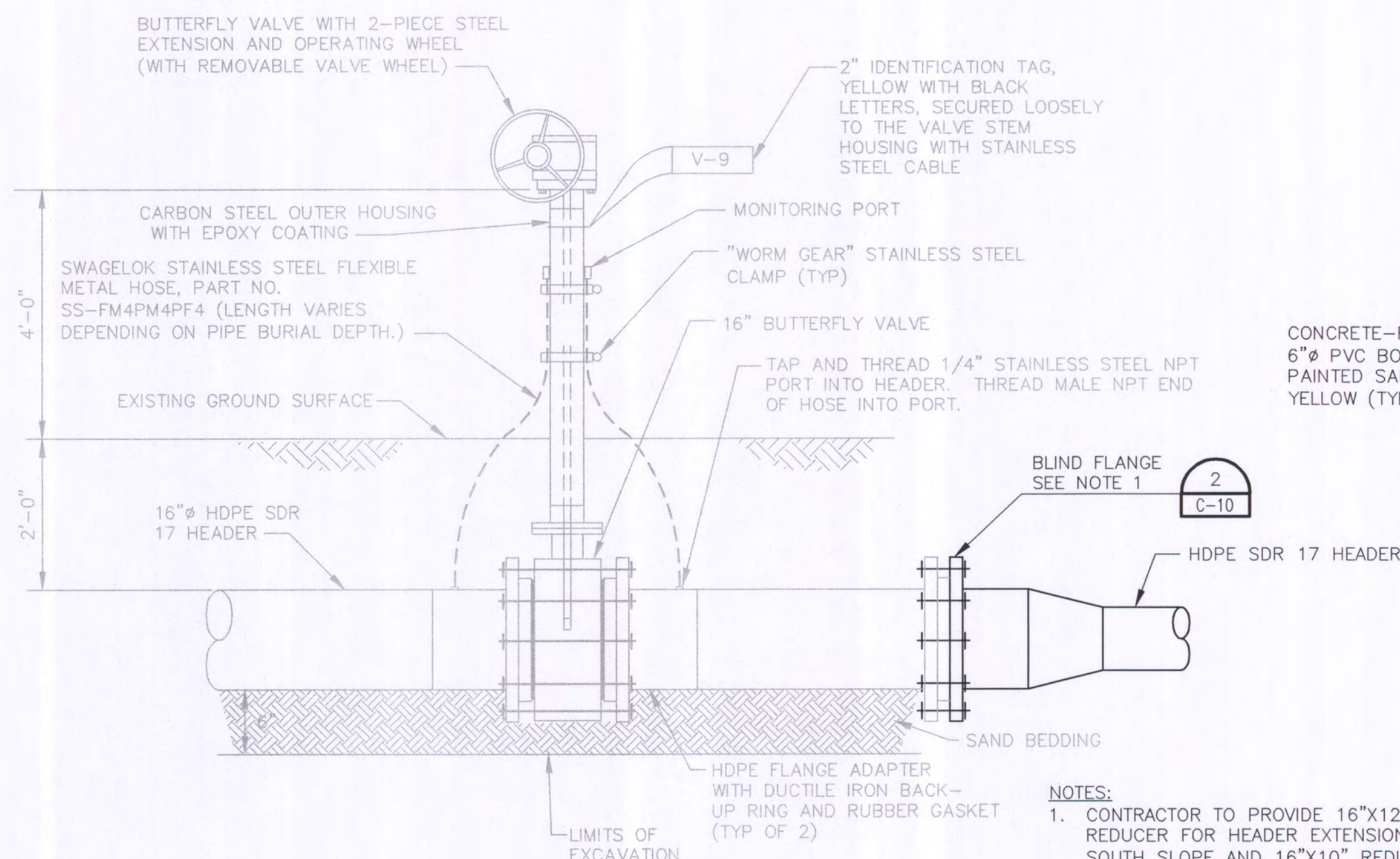


- NOTES:**
1. ACTUAL DIMENSIONS MAY VARY BASED ON FIELD CONDITIONS.
  2. CORRUGATED METAL PIPE CULVERT SHALL BE USED FOR ROAD CROSSING LOCATIONS LOCATED WITHIN SECTION 9 LIMITS OF WASTE. STEEL PIPE SHALL HAVE A MINIMUM WALL THICKNESS OF 0.168 INCHES AND MINIMUM YIELD STRENGTH OF 35,000 PSI.
  3. CONTRACTOR SHALL RESTORE ROAD TO MATCH ORIGINAL CONDITIONS.

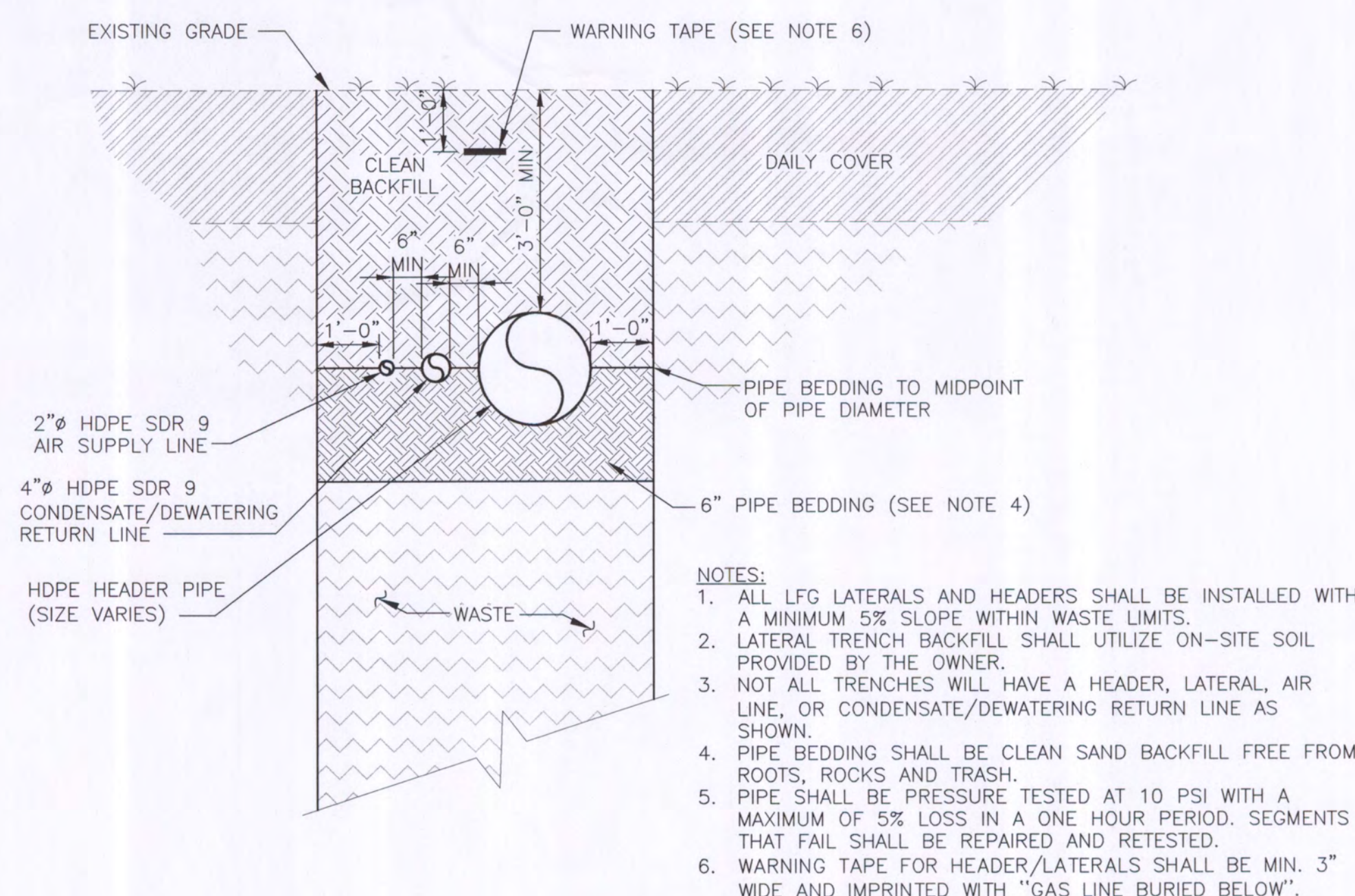
**ACCESS ROAD CROSSING DETAIL** 6  
NOT TO SCALE C-04

- NOTES:**
1. MOLDED HDPE TEES SHALL BE INSTALLED FOR ALL TIE-INS OF LATERALS TO HEADERS OR OTHER LATERALS 10"Ø AND SMALLER. TEE SHALL BE ANGLED TO MAINTAIN SLOPE INTO THE HEADER AS SHOWN IN SECTION VIEW.
  2. CONSECUTIVE SIZE REDUCERS SHALL BE USED TO TRANSITION FROM THE MOLDED TEE TO THE LFG LATERAL. FOR EXAMPLE, TO TRANSITION FROM A 10" TEE, A 10"x8" REDUCER AND 8"x6" REDUCER SHALL BE INSTALLED.
  3. 1' MIN. OF SAND SHALL BE PLACED BELOW EACH TEE. THE SAND SHALL BE INSTALLED SO IT EXTENDS 3' MIN. IN EACH DIRECTION OF THE TEE. SAND SHALL BE SLIGHTLY MOISTENED AND HAND-TAMPED PROVIDING SUPPORT TO ALL POINTS OF THE TEE. CLEAN, GRADED SOIL WILL BE HAND-TAMPED ABOVE TEE (1' MIN.) BEING CAREFUL TO ELIMINATE VOIDS.
  4. HDPE BRANCH SADDLES SHALL ONLY BE USED TO TIE-IN VERTICAL WELL RISERS. BRANCH SADDLES SHALL BE SHOP-FABRICATED.
  5. CONTRACTOR TO INSTALL HDPE END CAP (BUTT-FUSION WELDED) FOR STUB-OUTS DURING SEQUENCE 1.

HDPE PIPE SIZE	SLEEVE PIPE SIZE
6"	18"

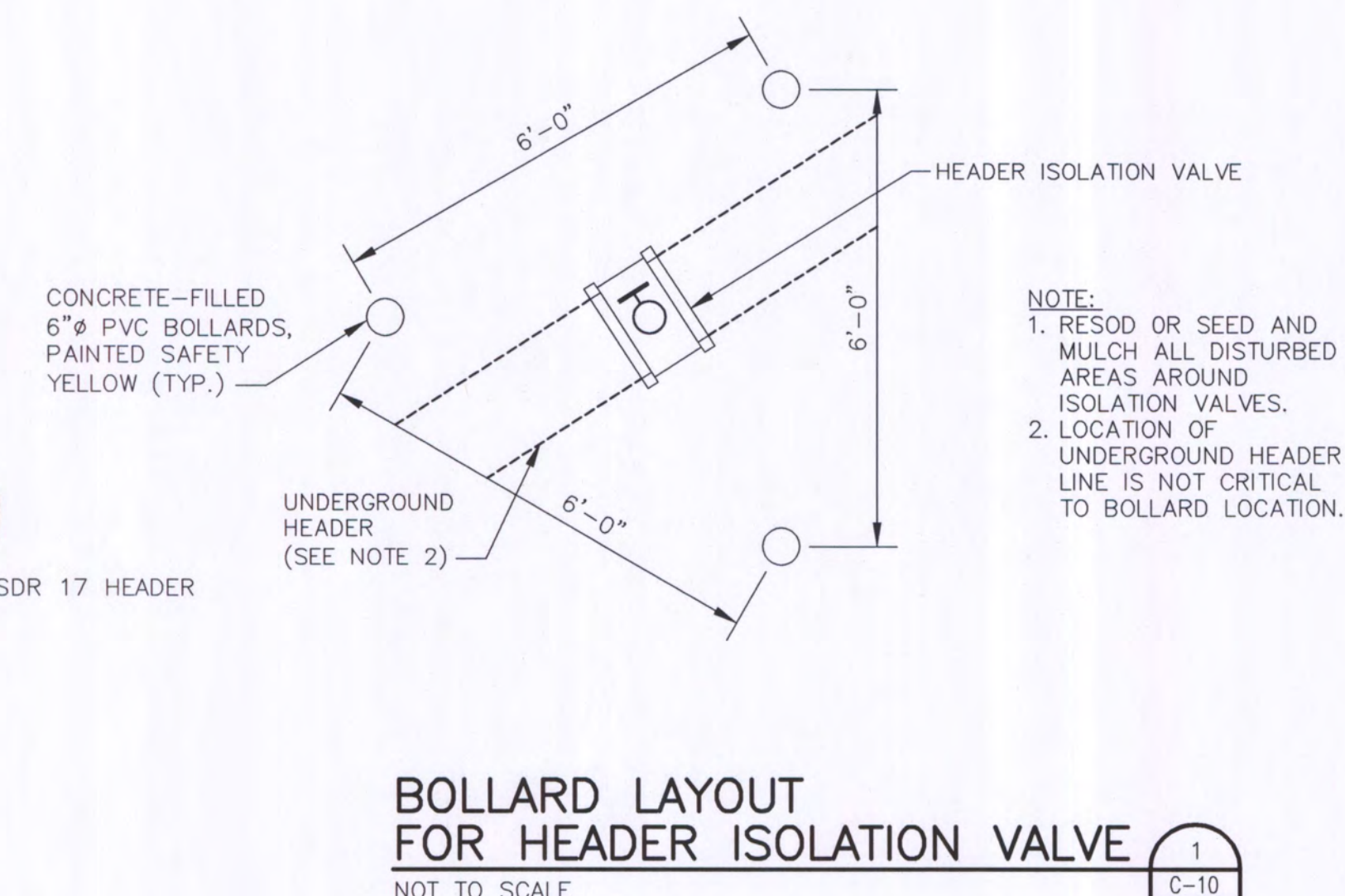


**CONNECTION TO EXISTING LFG SYSTEM** 3  
NOT TO SCALE C-03

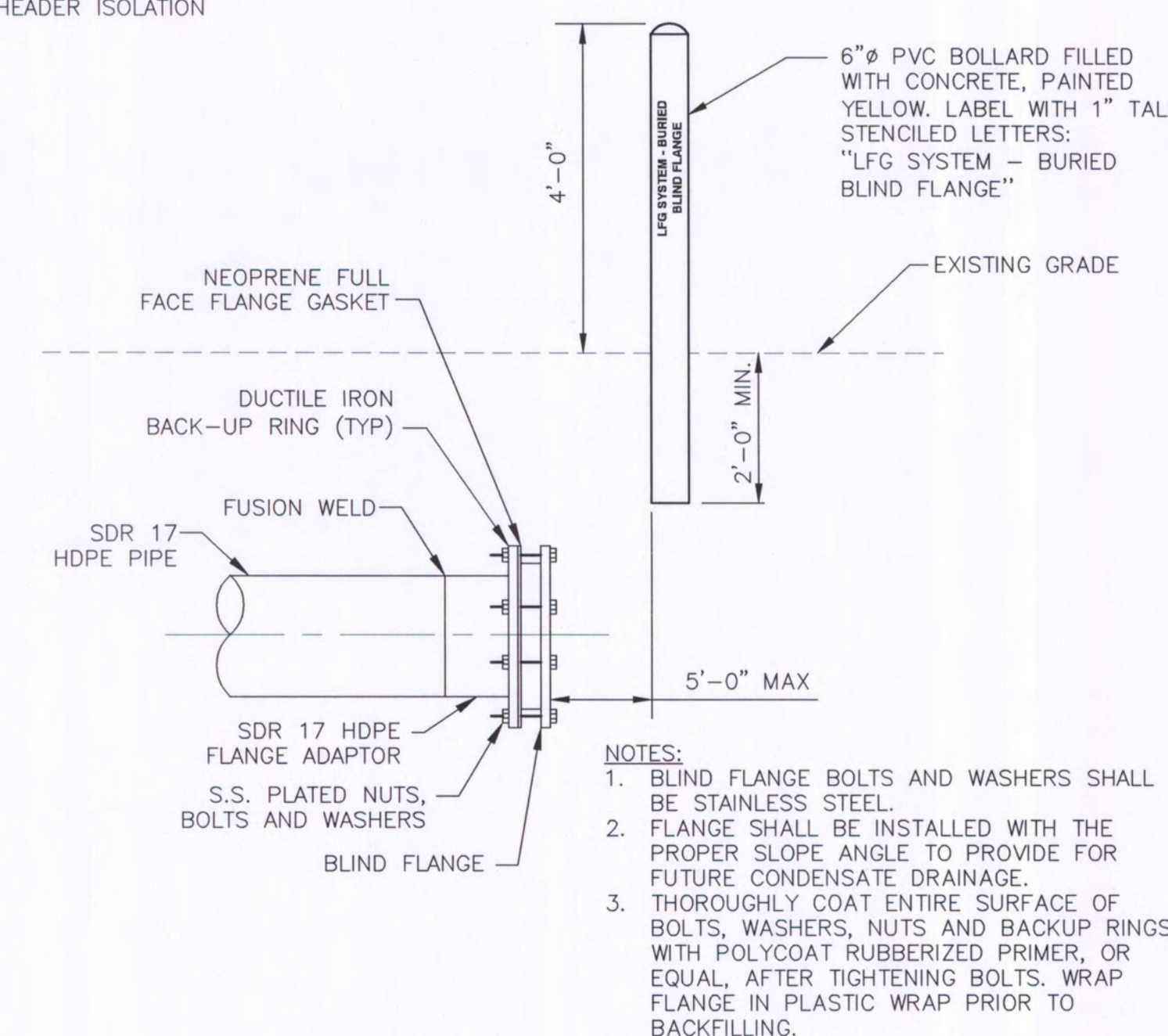


**HEADER/LATERAL TRENCH DETAIL** 4  
NOT TO SCALE C-03

- NOTES:**
1. CONTRACTOR TO PROVIDE 16"x12" REDUCER FOR HEADER EXTENSIONS ON SOUTH SLOPE AND 16"x10" REDUCER FOR HEADER EXTENSION ON NORTH SLOPE.
  2. CONNECTION ON NORTH SLOPE DOES NOT HAVE A HEADER ISOLATION VALVE.
  3. REFER TO DETAIL 1/C-10 FOR BOLLARD LAYOUT AROUND HEADER ISOLATION VALVE.



**BOLLARD LAYOUT FOR HEADER ISOLATION VALVE** 1  
NOT TO SCALE C-10



**BLIND FLANGE WITH LOCATOR BOLLARD DETAIL** 2  
NOT TO SCALE C-03

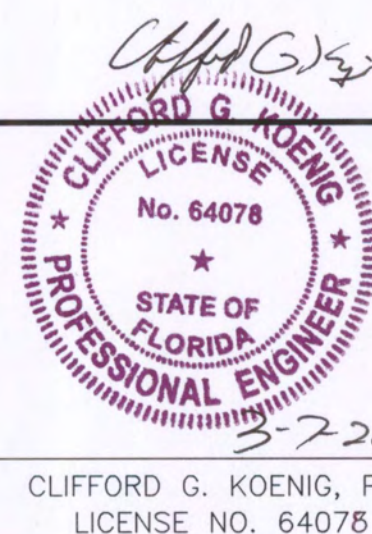
- NOTES:**
1. BLIND FLANGE BOLTS AND WASHERS SHALL BE STAINLESS STEEL.
  2. FLANGE SHALL BE INSTALLED WITH THE PROPER SLOPE ANGLE TO PROVIDE FOR FUTURE CONDENSATE DRAINAGE.
  3. THOROUGHLY COAT ENTIRE SURFACE OF BOLTS, WASHERS, NUTS AND BACKUP RINGS WITH POLYCOAT RUBBERIZED PRIMER, OR EQUAL, AFTER TIGHTENING BOLTS. WRAP FLANGE IN PLASTIC WRAP PRIOR TO BACKFILLING.



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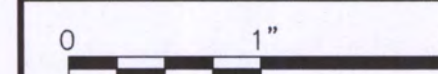
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SOUTHEAST COUNTY LANDFILL  
HILLSBOROUGH COUNTY, FLORIDA**

**GENERAL DETAILS**



FILENAME	00C-10.DWG
SCALE	AS SHOWN

SHEET  
**C-10**

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