

Attention: Linda Faulkner	Date: 9/2/15	Job No: 156499
To: Linda Faulkner 211 Sower Blvd. Frankfort, KY 40601	Phone: (270) 427-5300	

Regarding: Henderson Co. Water District – Water Systems Improvements –US 60 Waterline

RECEIVED

- We are sending you:**
- | | |
|--|--|
| <input checked="" type="checkbox"/> Attached | <input type="checkbox"/> Under separate cover via <u>UPS</u> the following items |
| <input type="checkbox"/> Shop drawings | <input type="checkbox"/> Prints |
| <input type="checkbox"/> Copy of letter | <input type="checkbox"/> Change Order |
| <input type="checkbox"/> Plans | <input type="checkbox"/> Samples |
| <input checked="" type="checkbox"/> Other <u>Record Drawings</u> | <input type="checkbox"/> Specifications |

SEP 03 2015

PUBLIC SERVICE
COMMISSION

Copies	Date	No.	Description
1		each	Final Completion Letter
1		each	CD Copies of the Record Drawings (Revised)

These are transmitted as checked below:

- | | | |
|---|---|--|
| <input type="checkbox"/> For approval | <input type="checkbox"/> Approved as submitted | <input type="checkbox"/> Resubmit _____ copies for approval |
| <input checked="" type="checkbox"/> For your use | <input type="checkbox"/> Approved as noted | <input type="checkbox"/> Submit _____ copies for distribution |
| <input type="checkbox"/> As requested | <input type="checkbox"/> Returned for corrections | <input type="checkbox"/> Return _____ sets of signed documents |
| <input type="checkbox"/> For review/comment | <input type="checkbox"/> Other _____ | |
| <input type="checkbox"/> For bids due _____ | | <input type="checkbox"/> Prints returned after loan to us |

Remarks

Copy to CA file, KDOW

Signed: _____


J. Alan Morris, PE

If enclosures are not as noted, please notify us at once



11/17/14

Pete Conrad, Superintendent
Henderson County Water District
655 South Main Street
Henderson, KY 42420

Re: HCWD US60 Water Systems Improvements Contract C
Henderson, KY
PSC Case No. 2012-00352

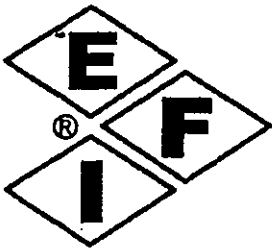
Dear Mr. Conrad,

Please let this letter serve as notice of final completion for the above referenced project. All items have been completed per the Contract Documents. The Substantial Completion Date for this project was June 29th, 2014 with the start-up of the booster station. I have attached the start-up form from Engineering Fluid, Inc. for documentation. The warranty expiration date is June 19th, 2015. Please contact me if you feel there are issues that need to be addressed prior to the expiration of the warranty. It has been a pleasure working with you on this project and I look forward to working on future projects with HCWD.

Sincerely,

Mark Stephens, P.E.
Contract Administrator

CC: Chris Snyder – Cleary Construction Inc.
Joseph Geffert – USDA RD
Linda Faulkner - PSC
HDR CA File



ENGINEERED FLUID, INC.

1311 N MAPLE ST
CENTRALIA, IL 62801 USA

Phone: 618-533-1351
Fax: 618-533-1459

July 09, 2014

CLEARY CONSTRUCTION INC
2006 EDMONTON RD
TOMPKINSVILLE, KY 42167

RE: WSBPS
HENDERSON, KY
WATERSHED BOOSTER PUMP STATION
EFI#91659-01

RECEIVED

JUL 21 2014

HDR Engineering, Inc.

Dear Sir or Madam:

Please be advised that on Thursday, June 19, 2014, official startup was performed on the above referenced project; therefore commencing the one(1) Year warranty. The warranty will expire June 19, 2015.

Thank you. Please do not hesitate to call with any questions or comments.

Sincerely,
ENGINEERED FLUID, INC.

DAN VANDELOO
DIRECTOR OF SERVICES

cc: HDR ENGINEERING INC
JASON BIVINS, DELANEY & ASSOCIATES INC

2012 WATER SYSTEM IMPROVEMENTS HENDERSON COUNTY WATER DISTRICT

HENDERSON COUNTY, KENTUCKY

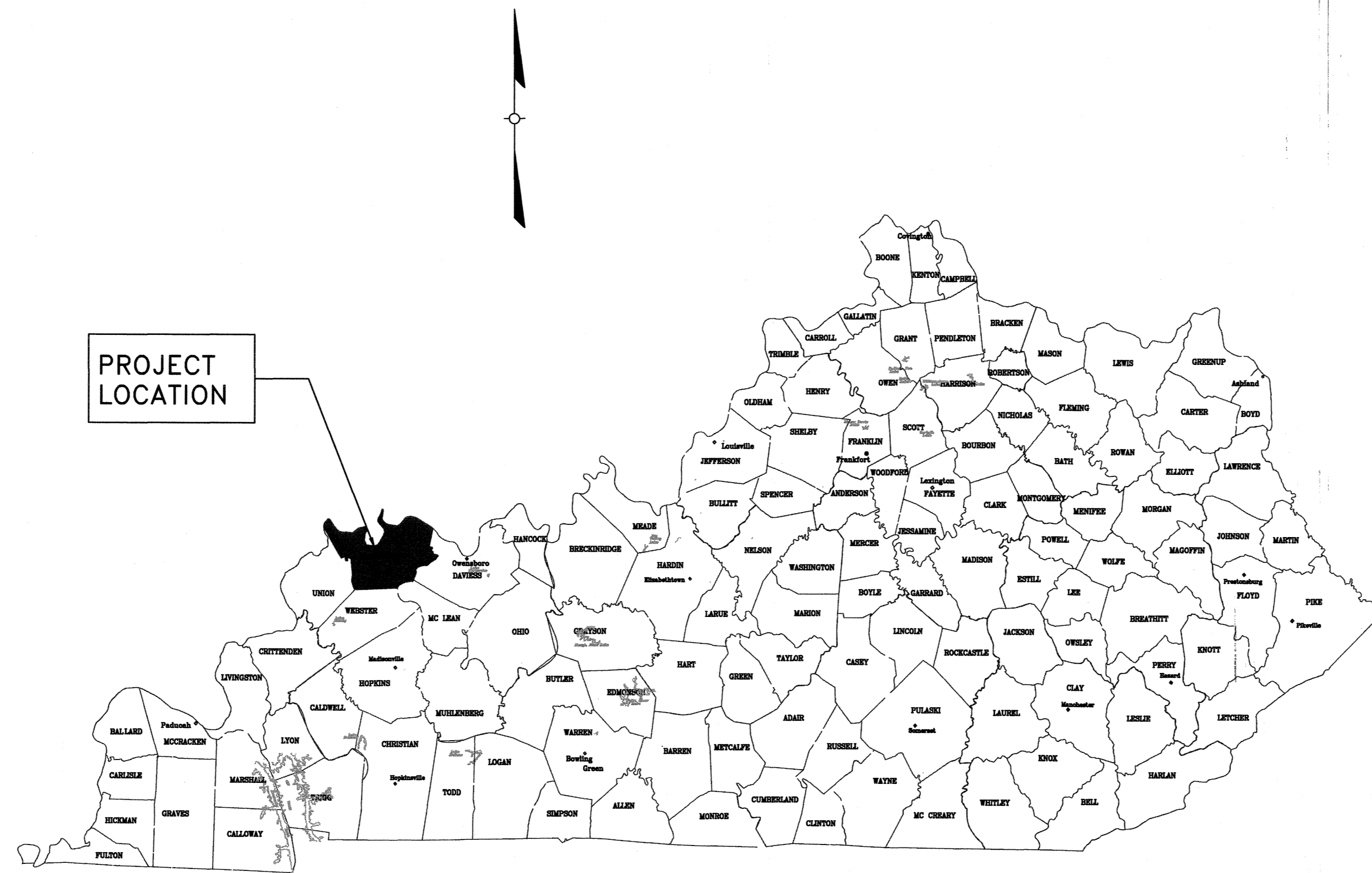
MAY, 2012

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01C-03	STA. 66+00 TO STA. 94+50 - PACKAGE 'A'
01C-04	STA. 94+50 TO STA. 126+00 - PACKAGE 'A'
01C-05	STA. 126+00 TO STA. 156+00 - PACKAGE 'A'
01C-06	STA. 156+00 TO STA. 187+00 - PACKAGE 'A' & 'B'
01C-07	STA. 187+00 TO STA. 218+25 - PACKAGE 'B'
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DISTRICT BOARD

DAVID SPAINHOWARD, CHAIRMAN
BRIAN PRITCHETT, SECRETARY
KENNY RIDEOUT, TREASURER
MIKE SKAGGS, MEMBER
BOBBY YATES, MEMBER
DAVID MOORE, SUPERINTENDENT



VICINITY MAP
NOT TO SCALE

HDR

RECORD DRAWING

THIS DRAWING HAS BEEN REVISED FROM THE ORIGINAL CONTRACT DRAWING BASED ON DATA SUPPLIED BY THE CONTRACTOR TO SHOW MAJOR CHANGES MADE DURING CONSTRUCTION. NO WARRANTY IS MADE FOR COMPLETE ACCURACY OF THIS DRAWING.

HDR ENGINEERING, INC.

DATE 4/5/15 BY [Signature]

NOTE: THE ORIGINAL CONSTRUCTION DRAWING WITH ISSUE DATE 05/30/2012 HAD THE P.E. SEAL OF BRENT ALAN TIPPEY NUMBER 19851 AFFIXED.

GENERAL NOTES:

1. THE CONTRACTOR SHALL ABIDE BY AND ARRANGE FOR ALL PERMITS AND APPROVALS REQUIRED BY THE KENTUCKY DIVISION OF WATER REGULATIONS THAT PERTAIN TO STORM WATER DISCHARGE AND EROSION AND SEDIMENT CONTROL.
2. LOCATIONS SHOWN FOR EXISTING UTILITIES ARE APPROXIMATE AND ARE BASED ON AVAILABLE DRAWINGS AND FIELD INFORMATION. OTHER UTILITIES MAY EXIST WHICH ARE NOT SHOWN ON THE PLANS. CONTRACTOR SHALL INVESTIGATE ALL AREAS FOR THE PRESENCE OF EXISTING UTILITIES PRIOR TO ANY EXCAVATION.
3. KENTUCKY STATUTE (KRS 367) REQUIRES THAT ALL EXCAVATORS PLANNING EXCAVATION OR DEMOLITION WORK SHALL NOTIFY AND ALERT ALL UTILITY COMPANIES IN THE AREA AND/OR UNDERGROUND PROTECTION SERVICE SUCH AS B.U.D. (1-800-752-6007) AT LEAST TWO (2) WORKING DAYS BEFORE COMMENCING THE PLANNED EXCAVATION OR DEMOLITION ACTIVITIES.
4. WHERE THE WATERLINE IS OUTSIDE OF RIGHT-OF-WAY THE EASEMENT IS TYPICALLY 30 FEET WIDE, UNLESS OTHERWISE NOTED ON THE PLANS.
5. THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER TWO (2) WORKING DAYS IN ADVANCE OF ANY WORK THAT REQUIRES EXISTING UTILITIES TO BE TEMPORARILY TAKEN OUT OF SERVICE.
6. FITTINGS SHALL BE DUCTILE IRON MECHANICAL JOINT, UNLESS NOTED OTHERWISE. ALL FITTINGS (TEES, BENDS, REDUCERS) SHALL BE ANCHORED BY THRUST BLOCKS AND RESTRAINED JOINTS, WITH MEGALUG RESTRAINT SYSTEM OR APPROVED EQUAL.
7. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING AND LOCATING EXISTING METERS AND SERVICES ALONG THESE ROADS AND TRANSFERRING SERVICES OVER TO THE NEWLY INSTALLED WATER MAIN.
8. ALL EXISTING HYDRANTS ALONG THE ROUTE SHALL BE DISCONNECTED FROM THE EXISTING W.M. AND RECONNECTED TO THE NEW W.M.
9. INDIANA BAT TREES HAVE BEEN DESIGNATED ALONG THE WM INSTALLATION ROUTE. THE WM ROUTE HAS BEEN DESIGNED TO NAVIGATE ALONG THE ROUTE WITHOUT THE NEED FOR CUTTING TREES. CONTRACTOR SHALL MAKE EFFORTS TO AVOID ANY TREE CUTTING ALONG THE PATH. IF ANY TREES ARE TO BE CUT THE ACCEPTABLE TIME FRAME FOR CUTTING TREES IS BETWEEN AUGUST 16 - MARCH 31.
10. EXERCISE CAUTION IN AREAS WITH GAS METERS. SOME GAS CUSTOMERS ON THE NORTH SIDE OF US60 MAY HAVE METERS LOCATED SOUTH OF US60. USE CAUTION TO ENSURE SERVICE LINES ARE NOT DAMAGED.
11. TEMPORARY POWER POLE SUPPORTS SHALL BE UTILIZED IN SOME AREAS IF NECESSARY AT CONTRACTOR'S EXPENSE. COST SHALL BE INCLUDED IN UNIT PRICE FOR WM INSTALLATION. CONTRACTOR IS RESPONSIBLE FOR ANY TEMPORARY SUPPORTS USED.
12. TEN (10) LINE MARKERS SHALL BE PROVIDED FOR PACKAGE 'A' AND PACKAGE 'B' RESPECTIVELY. MARKERS SHALL BE PLACED BY CONTRACTOR AT LOCATIONS AS DIRECTED BY OWNER/ENGINEER.
13. CONTRACTOR SHALL VERIFY EXISTING LINE SIZES BEFORE ORDERING EQUIPMENT FOR INSTALLATION.
14. USE EXTREME CAUTION AROUND EXISTING AC LINE. CONTRACTOR SHALL BE EQUIPPED WITH APPROPRIATE APPARATUS TO REPAIR ANY AC LINE BREAKS THAT OCCUR AS A RESULT OF CONSTRUCTION ACTIVITIES.

**KENTUCKY TRANSPORTATION CABINET - DEPARTMENT OF HIGHWAYS
GENERAL NOTES**

1. WATER MAIN INSTALLED INSIDE STATE RIGHT-OF-WAY SHALL BE LOCATED WITHIN 3-5 FEET FROM THE EDGE OF THE RIGHT-OF-WAY UNLESS OTHERWISE SHOWN ON THE PLANS.
2. WATER MAIN SHOWN MORE THAN 5 FEET FROM THE EDGE OF THE RIGHT-OF-WAY SHALL BE INSTALLED WITH A MINIMUM DEPTH OF COVER OF 42 INCHES.
3. WATER MAIN CROSSING ANY PAVED DRIVEWAY INSIDE STATE RIGHT-OF-WAY SHALL BE INSTALLED BY BORING UNLESS WRITTEN PERMISSION TO OPEN CUT IS OBTAINED FROM THE PROPERTY OWNER.
4. WATER MAIN SHALL NOT BE INSTALLED IN ANY CUT OR FILL AREAS.
5. PROJECT SHALL BE STAKED BY THE CONTRACTOR & PROPOSED UTILITY LOCATIONS MUST BE APPROVED BY KDOT PRIOR TO EXCAVATION AND UTILITY INSTALLATION. CONTACT DISTRICT 2 PERMITS AT 270-824-7080 FOR APPROVAL.

COUNTY ROAD GENERAL NOTES

1. ALL ROADS WHICH ARE BITUMINOUS CONCRETE OR CONCRETE SURFACED SHALL BE BORED AND SLEEVED.

UTILITY INFORMATION

WATER:	HENDERSON COUNTY WATER DISTRICT DAVID MOORE, SUPERINTENDENT	(270) 826-9802
ELECTRIC:	KENERGY ROB STUMP	(270) 869-9688
CABLE:	INSIGHT JOE SHAFER	(812) 428-2482
TELEPHONE:	BELL SOUTH GLENN SHANE	(270) 993-8074 (CELL)
GAS:	WESTERN KENTUCKY GAS DOUG HOARD	(270) 821-2640
	TEXAS GAS TRANSMISSION DIXIE STORAGE FIELD	(270) 533-9018
	BP PIPELINE (Petroleum Line) CHARLES McLEAN	(812) 455-0279
	COUNTRYMARK CO-OP LLP JIM CRUISE	(812) 838-8513

TRANSPORTATION

STATE:	KTC-DOH DISTRICT #2 KEVIN GENTRY, CONTACT	MADISONVILLE, KY. (270) 824-7080
COUNTY:	HENDERSON COUNTY ROAD DEPARTMENT BILL HUBIAK, ENGINEER	(270) 826-8843
CSX RAILROAD:		(270) 765-1807
KENTUCKY UNDERGROUND PROTECTION INC: 1-800-752-6007		



LOCATION MAP
NTS

LEGEND

	PROPOSED	EXISTING
WATER MAIN		
GATE VALVE & BOX		
REDUCER		
FIRE/FLUSHING HYDRANT ASSEMBLY (INCLUDES VALVE)		
RIGHT-OF-WAY		
PROPERTY LINE		
GAS LINE (UNDERGROUND)		
TELEPHONE (UNDERGROUND)		
GRAVEL DRIVE		
ASPHALT PAVEMENT DRIVE		
CONCRETE PAVEMENT DRIVE		
POWER POLE		
RECONNECT EXIST. WATER METER TO PROP. WATER LINE		

RECORD DRAWING

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HDR ENGINEERING, INC.

DATE 6/5/15 BY [Signature]

NOTE: THE ORIGINAL CONSTRUCTION DRAWING WITH ISSUE DATE 05/30/2012 HAD THE P.E. SEAL OF BRENT ALAN TIPPEY NUMBER 19851 AFFIXED.



ISSUE	DATE	DESCRIPTION
A	5/23/2012	BID SET

PROJECT MANAGER	BRENT A. TIPPEY
DESIGNED	M.M. KUSNIR
DRAWN	M.M. KUSNIR
QA/QC	J.C. LEWIS
PROJECT NUMBER	156494

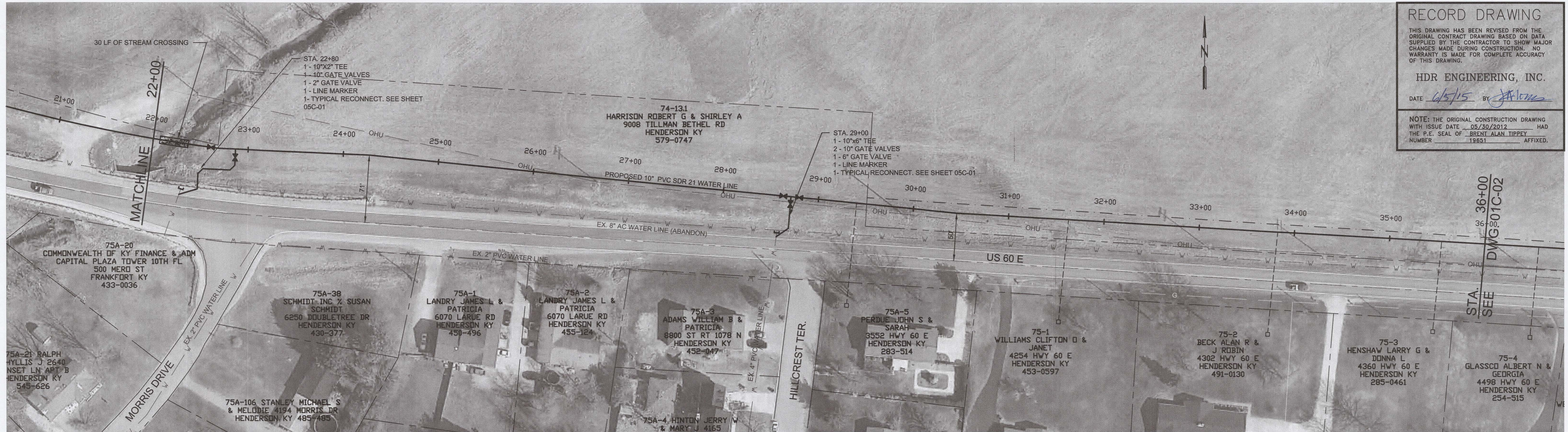
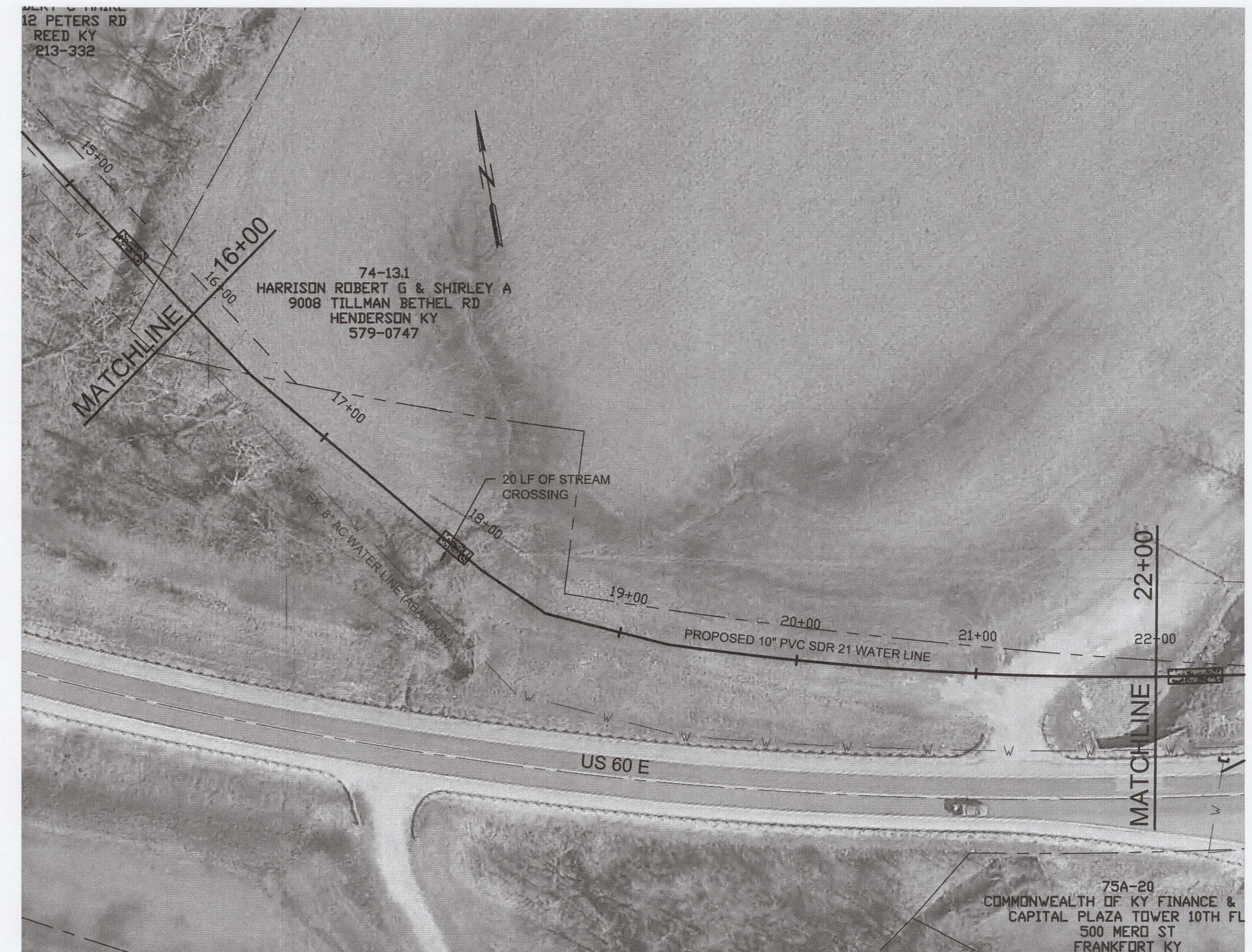
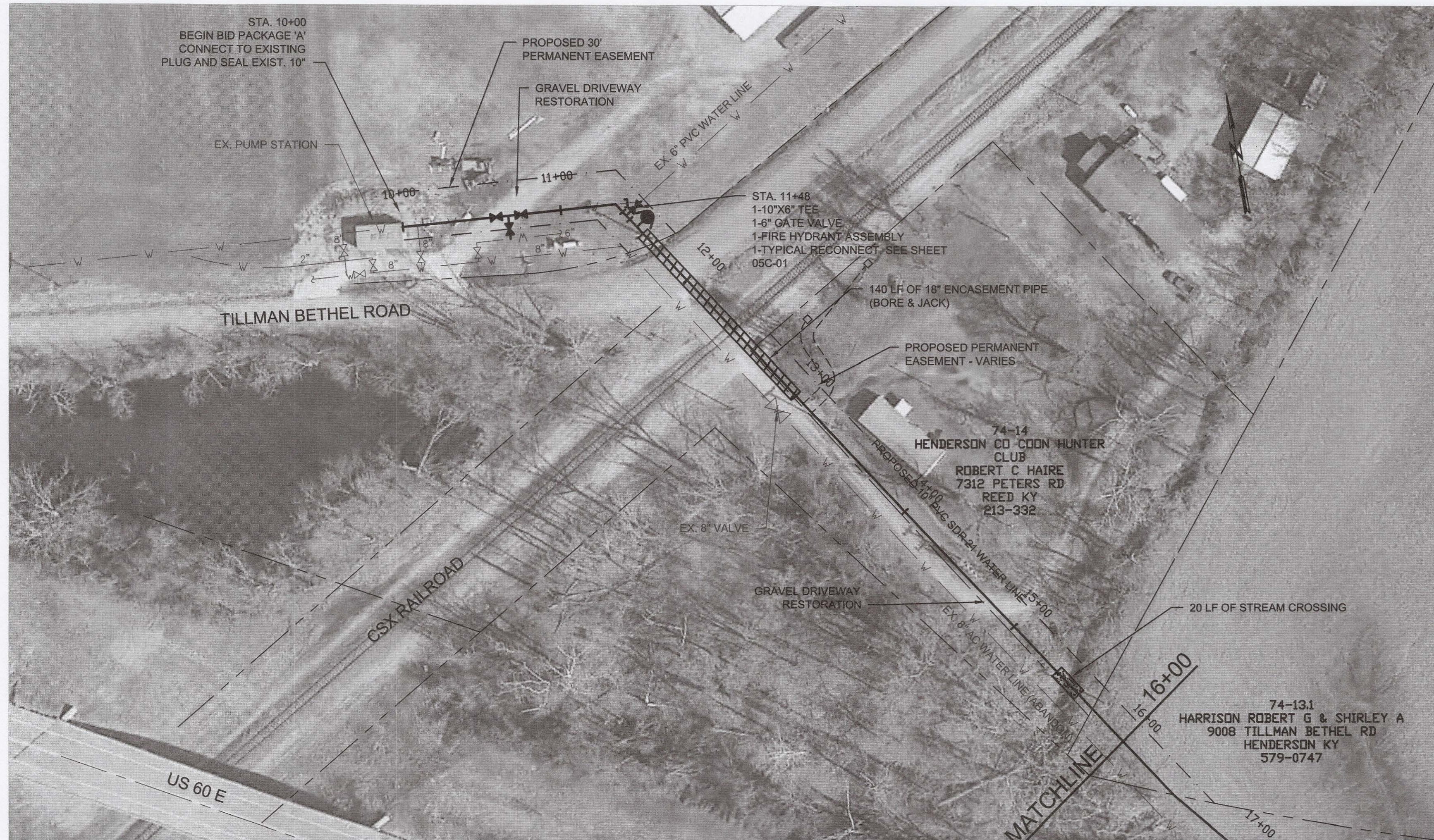
2012 WATER SYSTEM IMPROVEMENTS
HENDERSON COUNTY WATER DISTRICT
HENDERSON COUNTY, KENTUCKY
MAY 2012

GENERAL NOTES & LEGEND

0 50' 100'

FILENAME RD_00G-02.dwg
SCALE -

SHEET
00G-02



RECORD DRAWING

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HDR ENGINEERING, INC.

DATE 6/5/15 BY [Signature]

NOTE: THE ORIGINAL CONSTRUCTION DRAWING WITH ISSUE DATE 08/30/2012 HAD THE P.E. SEAL OF BRENT ALAN TIPPEY NUMBER 19851 AFFIXED.



ISSUE	DATE	DESCRIPTION
A	5/23/2012	BID SET

PROJECT MANAGER	BRENT A. TIPPEY
DESIGNED	M.M. KUSNIR
DRAWN	J.R. BULLOCK
QA/QC	J.C. LEWIS
PROJECT NUMBER	156494

2012 WATER SYSTEM IMPROVEMENTS
HENDERSON COUNTY WATER DISTRICT
HENDERSON COUNTY, KENTUCKY
MAY 2012

STA 10+00 TO STA 36+00 PACKAGE 'A'		FILENAME	RD_01C-01.dwg	SHEET	01C-01
		SCALE	1"=50'		



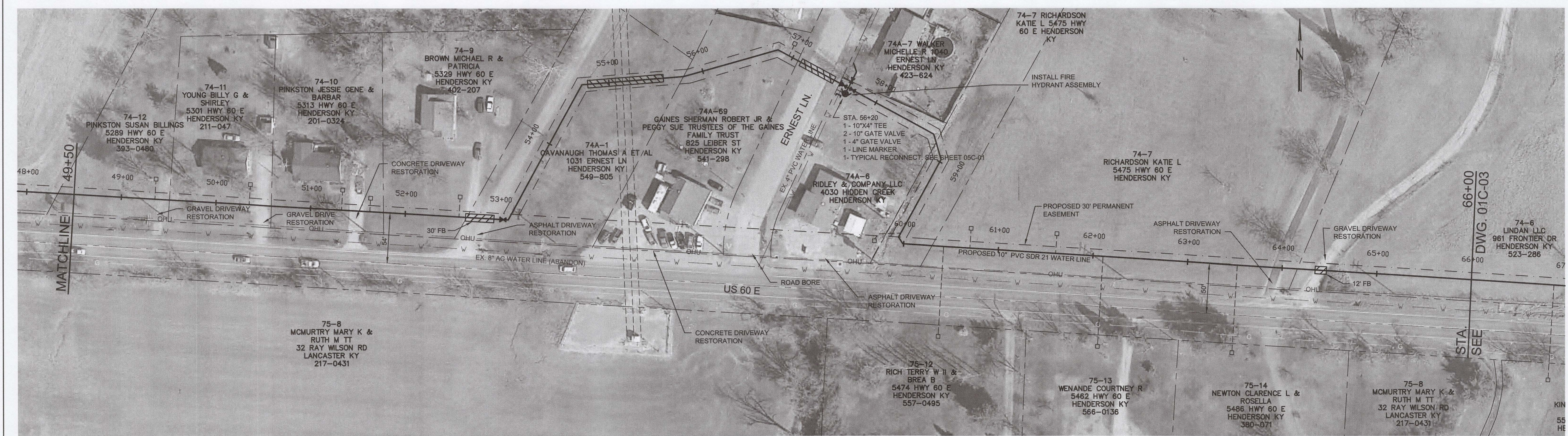
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HDR ENGINEERING, INC.

DATE 6/5/15 BY [Signature]

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ISSUE	DATE	DESCRIPTION
A	5/23/2012	BID SET

PROJECT MANAGER	BRENT A. TIPPEY
DESIGNED	M.M. KUSNIR
DRAWN	J.R. BULLOCK
QA/QC	J.C. LEWIS
PROJECT NUMBER	156494

2012 WATER SYSTEM IMPROVEMENTS
 HENDERSON COUNTY WATER DISTRICT
 HENDERSON COUNTY, KENTUCKY
 MAY 2012

STA. 36+00 TO STA. 66+00 PACKAGE 'A'		FILENAME	RD_01C-02.dwg	SHEET	01C-02
		SCALE	1" = 50'		



RECORD DRAWING
 THIS DRAWING HAS BEEN REVISED FROM THE ORIGINAL CONTRACT DRAWING BASED ON DATA SUPPLIED BY THE CONTRACTOR TO SHOW MAJOR CHANGES MADE DURING CONSTRUCTION. NO WARRANTY IS MADE FOR COMPLETE ACCURACY OF THIS DRAWING.
HDR ENGINEERING, INC.
 DATE 4/5/15 BY JAL
 NOTE: THE ORIGINAL CONSTRUCTION DRAWING WITH ISSUE DATE 05/20/2012 HAD THE P.E. SEAL OF BRENT ALAN TIPPEY NUMBER 19551 AFFIXED.



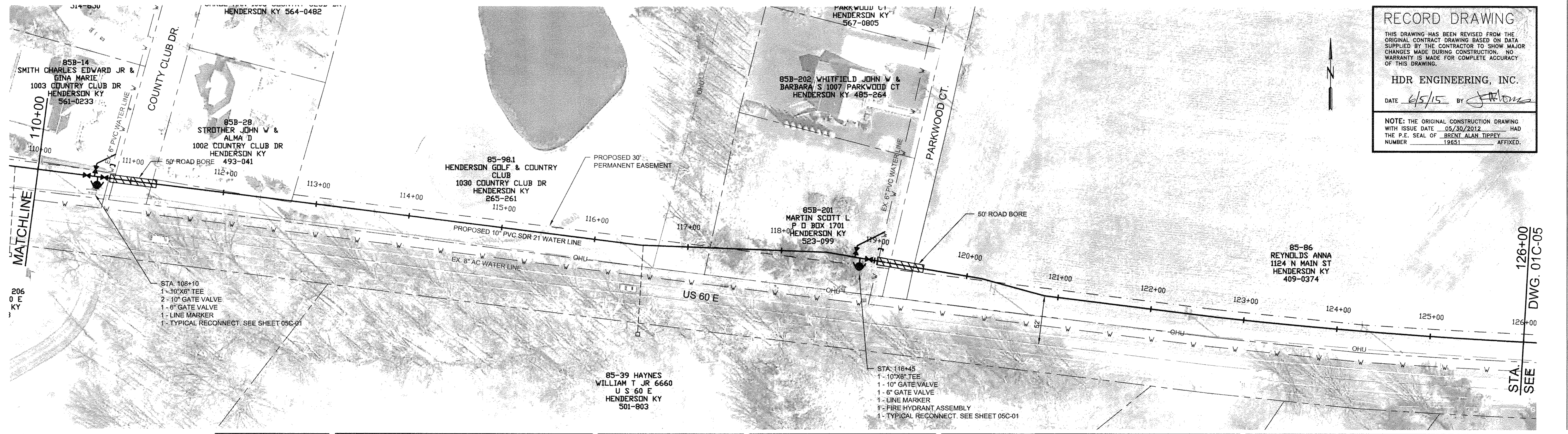
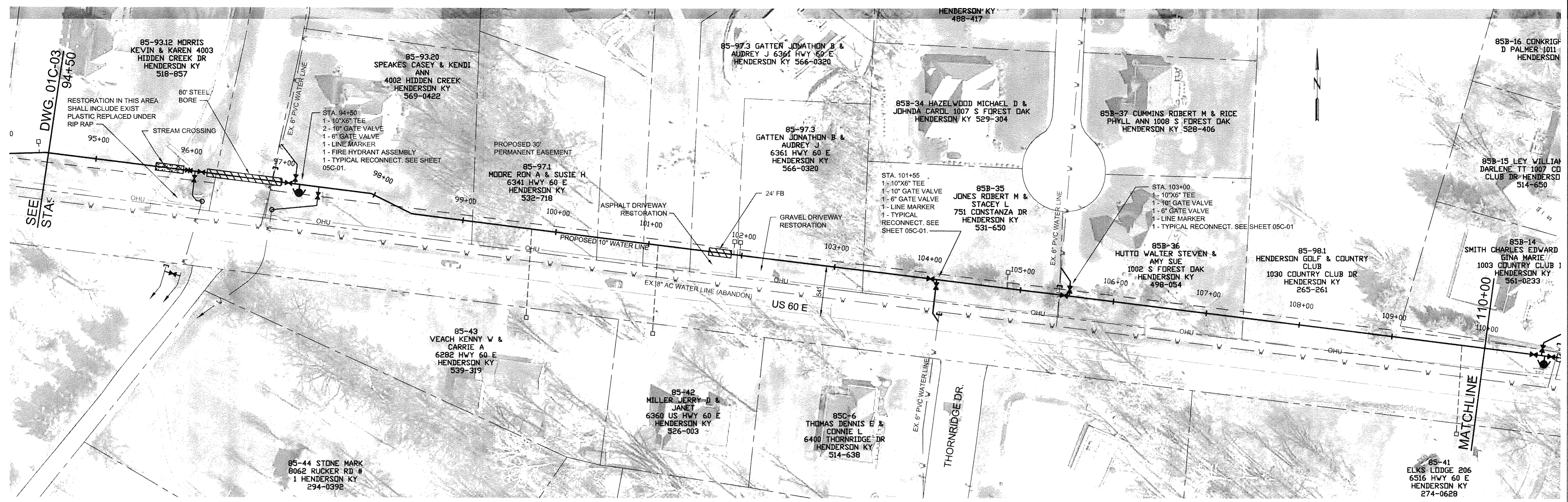
ISSUE	DATE	DESCRIPTION
A	5/23/2012	BID SET

PROJECT MANAGER	BRENT A. TIPPEY
DESIGNED	M.M. KUSNIR
DRAWN	J.R. BULLOCK
QA/QC	J.C. LEWIS
PROJECT NUMBER	156494

2012 WATER SYSTEM IMPROVEMENTS
 HENDERSON COUNTY WATER DISTRICT
 HENDERSON COUNTY, KENTUCKY
 MAY 2012

STA. 66+00 TO STA. 94+50 PACKAGE 'A'

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SCALE	1" = 50'	
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		01C-03



RECORD DRAWING

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HDR ENGINEERING, INC.

DATE 6/5/15 BY [Signature]

NOTE: THE ORIGINAL CONSTRUCTION DRAWING WITH ISSUE DATE 05/30/2012 HAD THE P.E. SEAL OF BRENT ALAN TIPPEY NUMBER 19651 AFFIXED.



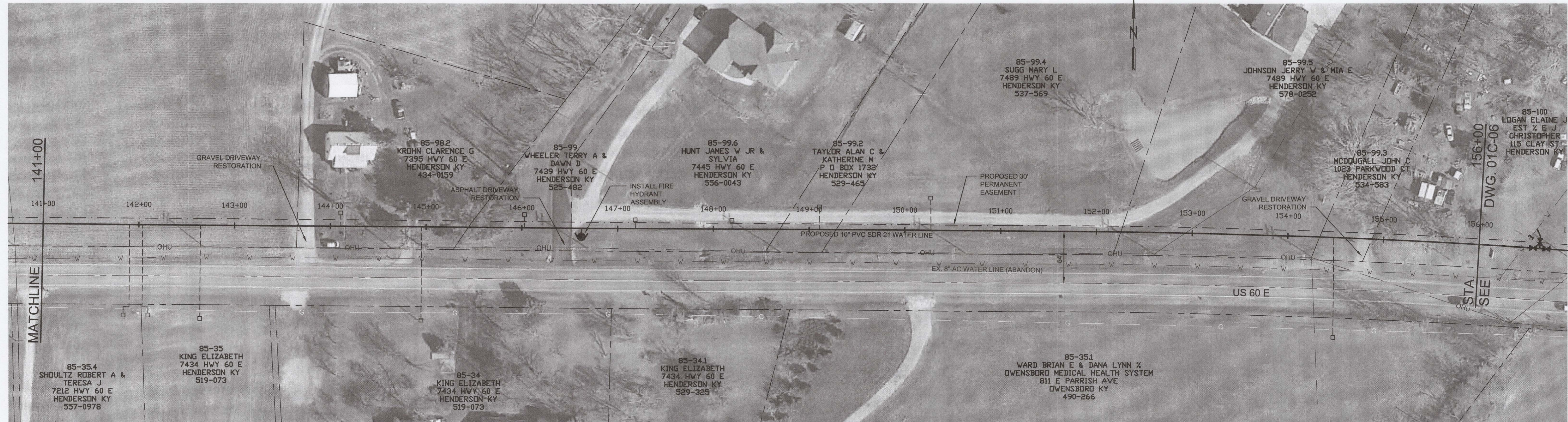
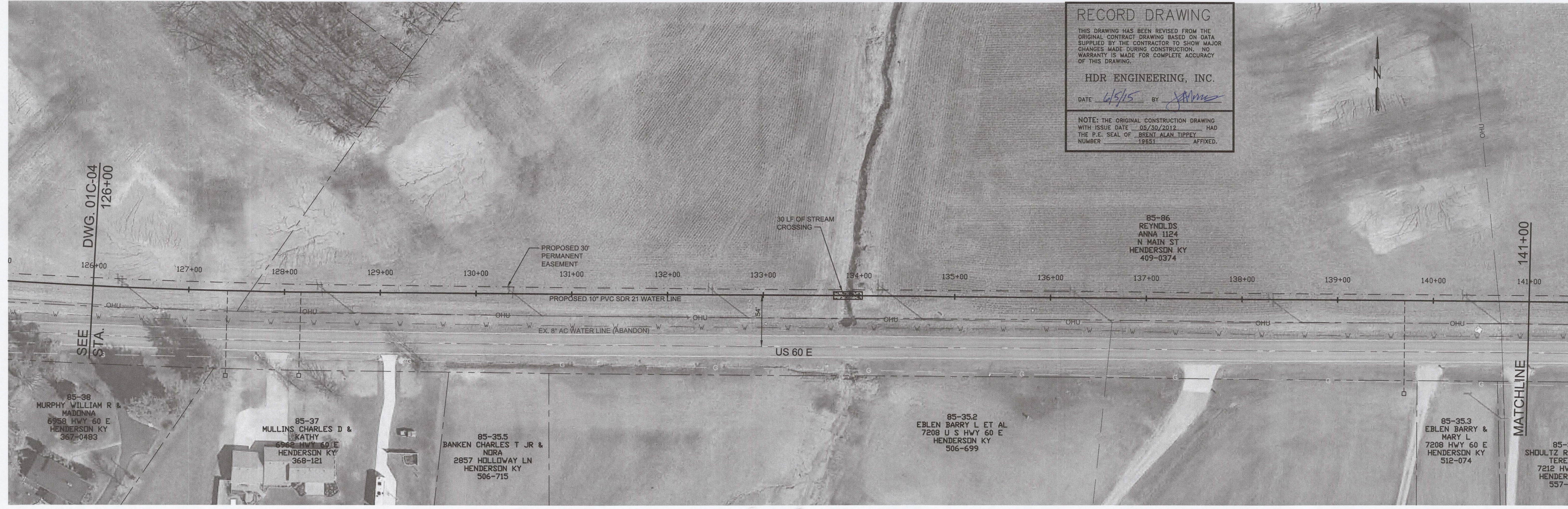
A	5/23/2012	BID SET
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	BRENT A. TIPPEY
DESIGNED	M.M. KUSNIR
DRAWN	J.R. BULLOCK
QA/QC	J.C. LEWIS
PROJECT NUMBER	156494

2012 WATER SYSTEM IMPROVEMENTS
HENDERSON COUNTY WATER DISTRICT
HENDERSON COUNTY, KENTUCKY
MAY 2012

STA. 94+50 TO STA. 126+00 PACKAGE 'A'		FILENAME	RD_01C-04.dwg	SHEET	01C-04
SCALE		1" = 50'			

RECORD DRAWING
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HDR ENGINEERING, INC.
 DATE 6/5/15 BY [Signature]
 NOTE: THE ORIGINAL CONSTRUCTION DRAWING WITH ISSUE DATE 05/30/2012 HAD THE P.E. SEAL OF BRENT ALAN TIPPEY NUMBER 18851 AFFIXED.



ISSUE	DATE	DESCRIPTION
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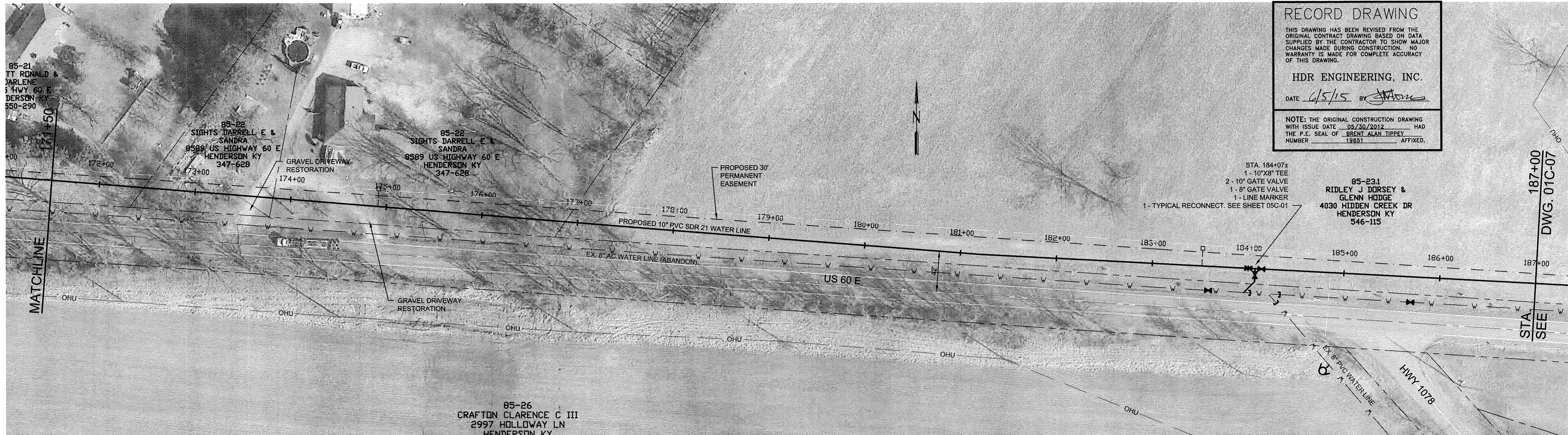
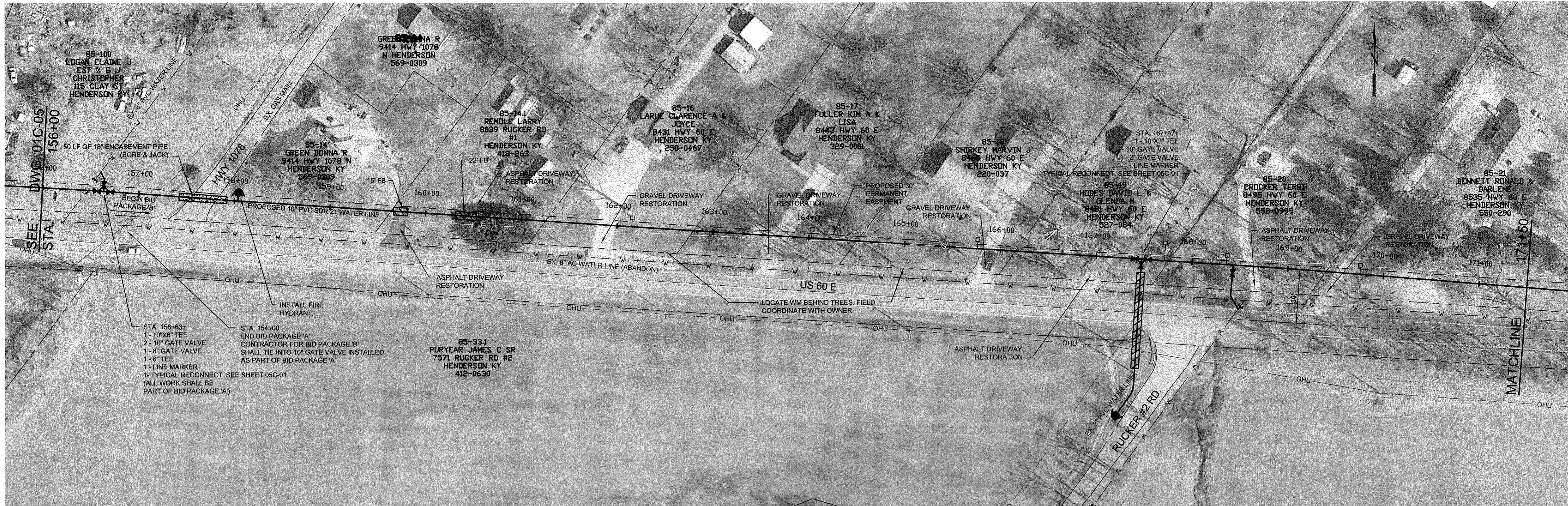
PROJECT MANAGER	BRENT A. TIPPEY
DESIGNED	M.M. KUSNIR
DRAWN	J.R. BULLOCK
QA/QC	J.C. LEWIS
PROJECT NUMBER	156494

2012 WATER SYSTEM IMPROVEMENTS
 HENDERSON COUNTY WATER DISTRICT
 HENDERSON COUNTY, KENTUCKY
 MAY 2012

STA. 126+00 TO STA. 156+00
 PACKAGE 'A'

0 50' 100'

FILENAME RD_01C-05.dwg SHEET
 SCALE 1" = 50' **01C-05**



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HDR ENGINEERING, INC.
 DATE 6/5/15 BY [Signature]
 NOTE: THE ORIGINAL CONSTRUCTION DRAWING WITH ISSUE DATE 05/30/2012 HAD THE P.E. SEAL OF BRENT ALAN TIPPEY NUMBER 18661 AFFIXED.



ISSUE	DATE	DESCRIPTION
A	5/23/2012	BID SET

PROJECT MANAGER	BRENT A. TIPPEY
DESIGNED	M.M. KUSNIR
DRAWN	J.R. BULLOCK
QA/QC	J.C. LEWIS
PROJECT NUMBER	156494

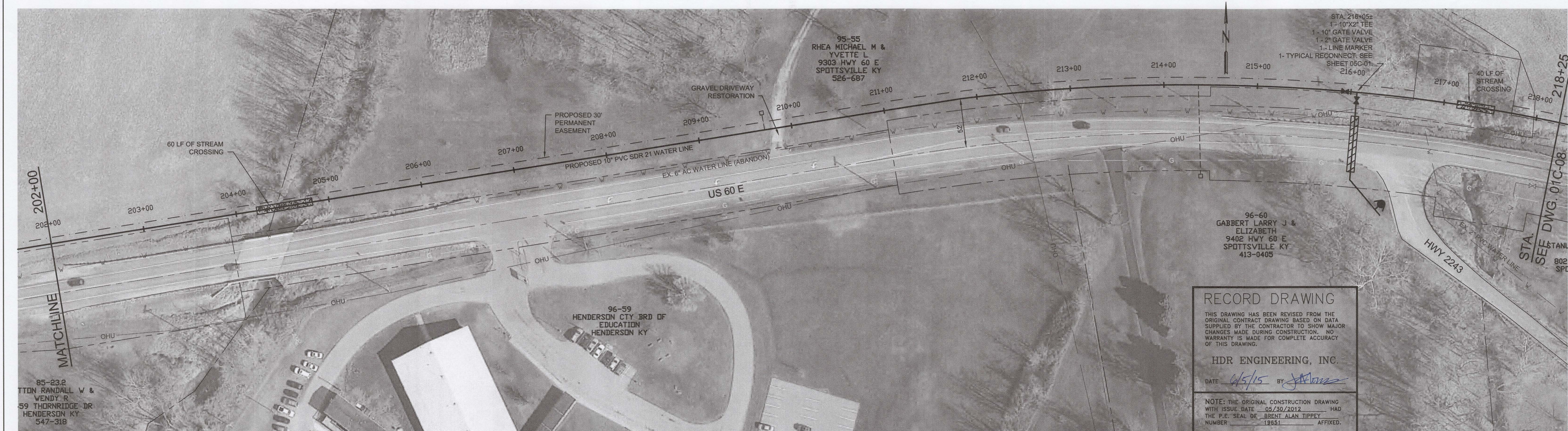
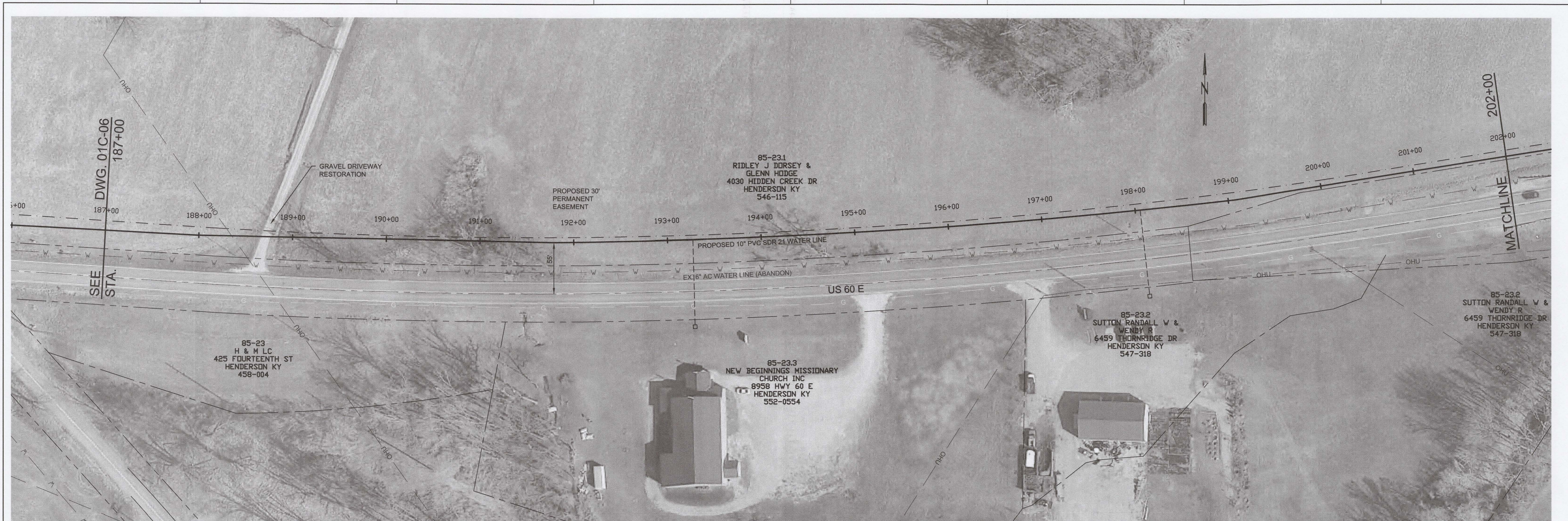
2012 WATER SYSTEM IMPROVEMENTS
 HENDERSON COUNTY WATER DISTRICT
 HENDERSON COUNTY, KENTUCKY
 MAY 2012

STA. 156+00 TO STA. 187+00
 PACKAGE 'A' & 'B'

0 50' 100'

FILENAME RD_01C-06.dwg
 SCALE 1" = 50'

SHEET
01C-06



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HDR ENGINEERING, INC.

DATE 6/5/15 BY [Signature]

NOTE: THE ORIGINAL CONSTRUCTION DRAWING WITH ISSUE DATE 05/30/2012 HAD THE P.E. SEAL OF BRENT ALAN TIPPEY NUMBER 18851 AFFIXED.



ISSUE	DATE	DESCRIPTION
A	5/23/2012	BID SET

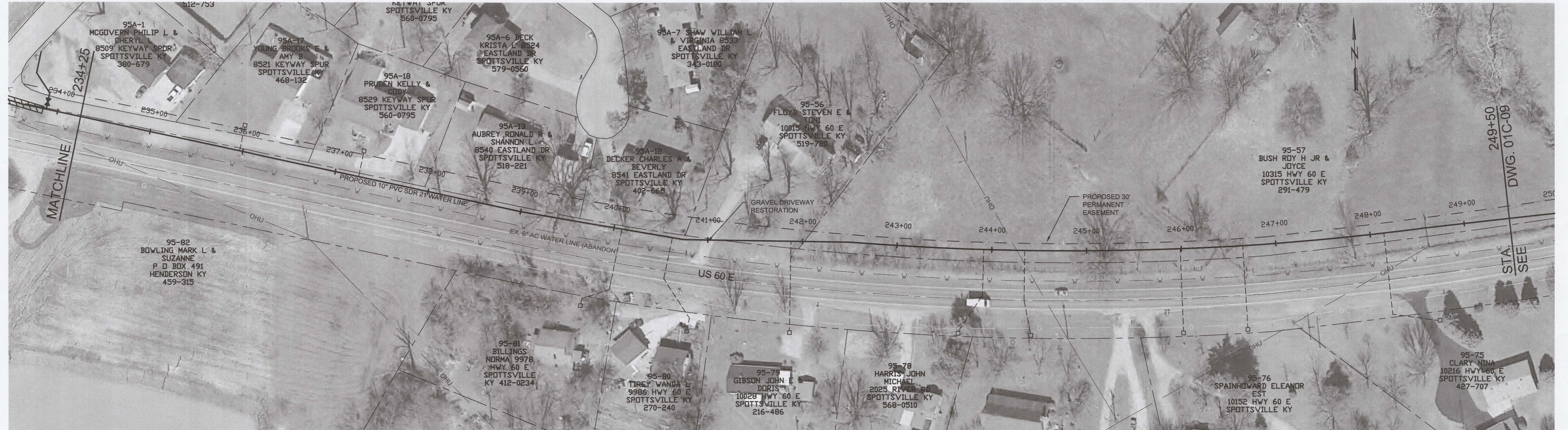
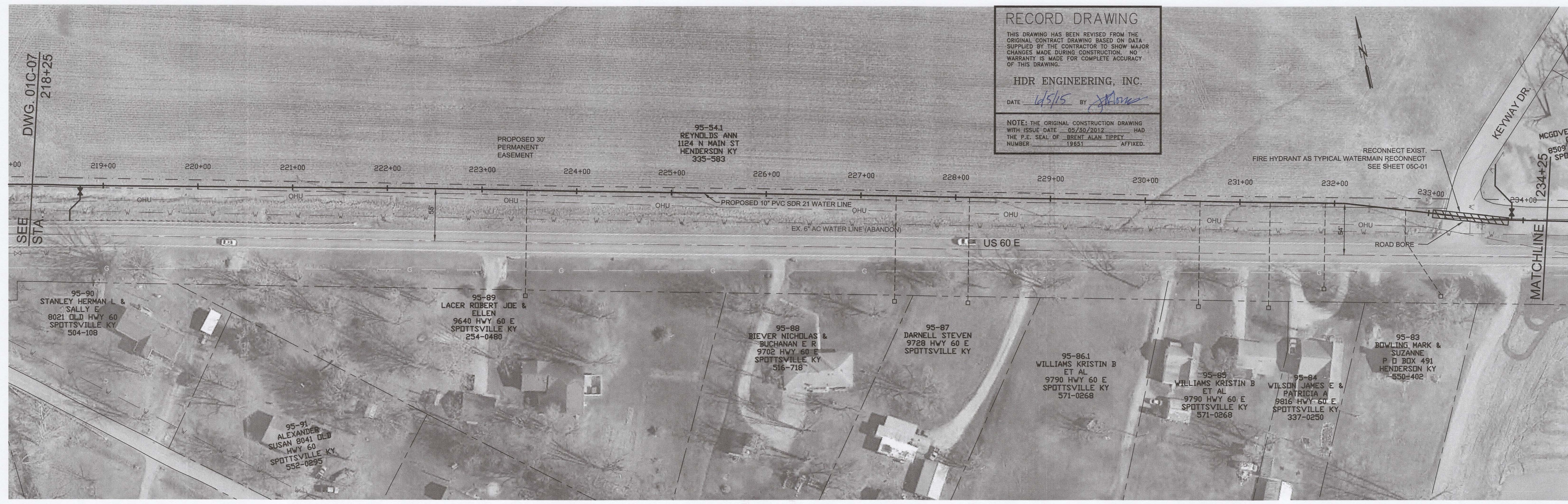
PROJECT MANAGER	BRENT A. TIPPEY
DESIGNED	M.M. KUSNIR
DRAWN	J.R. BULLOCK
QA/QC	J.C. LEWIS
PROJECT NUMBER	156494

2012 WATER SYSTEM IMPROVEMENTS
 HENDERSON COUNTY WATER DISTRICT
 HENDERSON COUNTY, KENTUCKY
 MAY 2012

STA. 187+00 TO STA. 218+25 PACKAGE 'B'

0	50'	100'	FILENAME	RD_01C-07.dwg	SHEET
			SCALE	1" = 50'	01C-07

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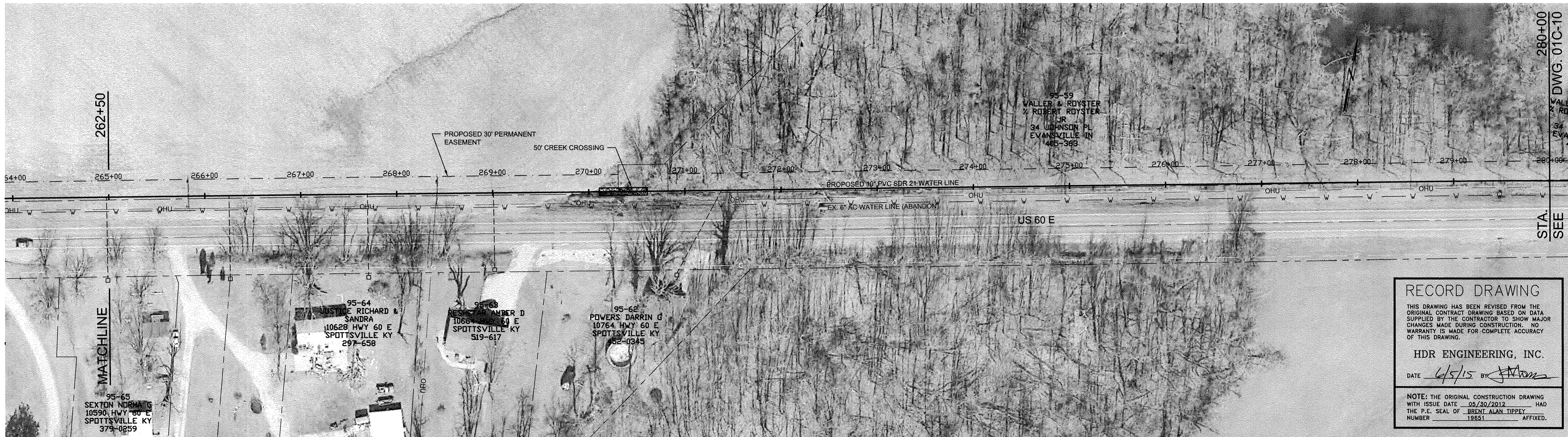
2012 WATER SYSTEM IMPROVEMENTS
 HENDERSON COUNTY WATER DISTRICT
 HENDERSON COUNTY, KENTUCKY
 MAY 2012

STA. 218+25 TO STA. 249+50 PACKAGE 'B'

0 50' 100'

FILENAME RD_01C-08.dwg SHEET 01C-08

SCALE 1" = 50'



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 HDR ENGINEERING, INC.
 DATE 6/5/15 BY [Signature]
 NOTE: THE ORIGINAL CONSTRUCTION DRAWING WITH ISSUE DATE 05/20/2012 HAD THE P.E. SEAL OF BRENT ALAN TIPPEY NUMBER 19851 AFFIXED.



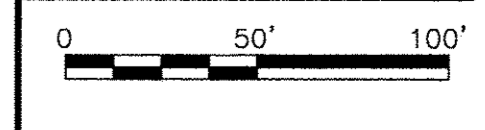
HDR Engineering, Inc.

ISSUE	DATE	DESCRIPTION
A	5/23/2012	BID SET

PROJECT MANAGER	BRENT A. TIPPEY
DESIGNED	M.M. KUSNIR
DRAWN	J.R. BULLOCK
QA/QC	J.C. LEWIS
PROJECT NUMBER	156494

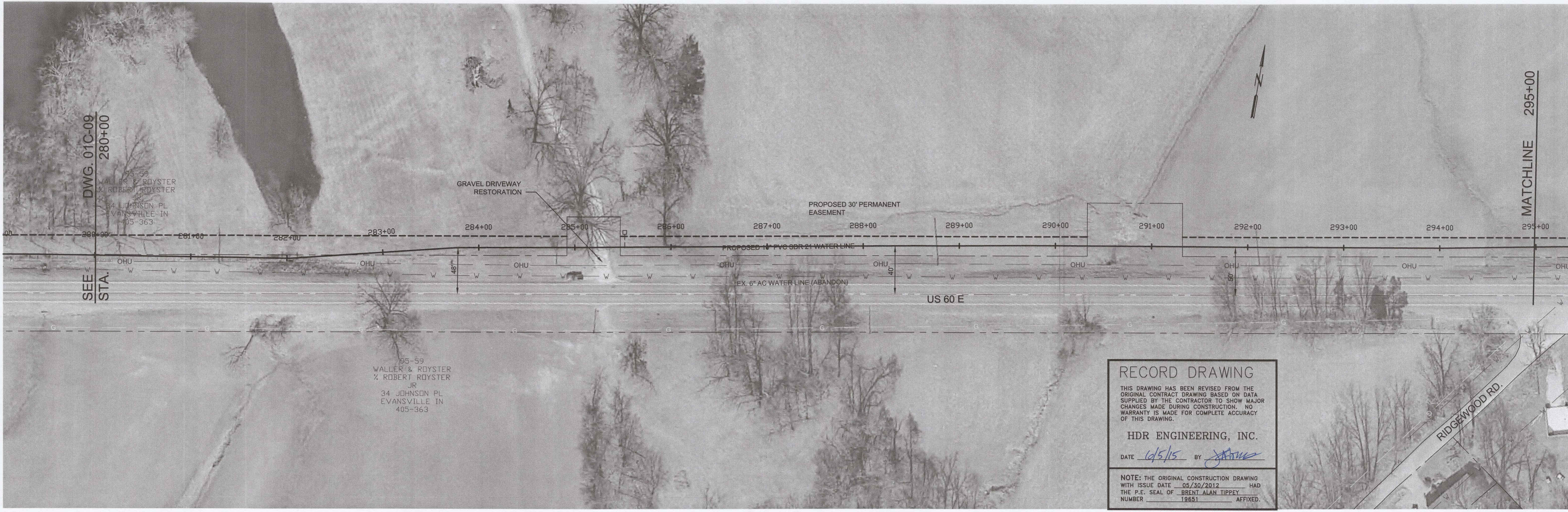
2012 WATER SYSTEM IMPROVEMENTS
 HENDERSON COUNTY WATER DISTRICT
 HENDERSON COUNTY, KENTUCKY
 MAY 2012

STA. 249+50 TO STA. 280+00
 PACKAGE 'B'



FILENAME	RD_01C-09.dwg
SCALE	1" = 50'

SHEET
01C-09



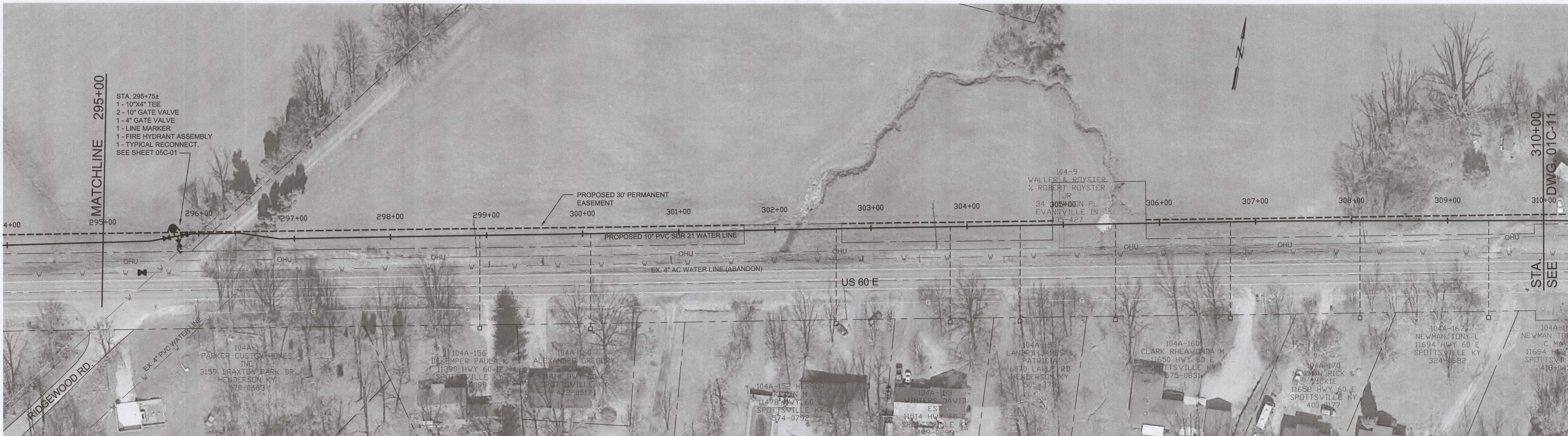
RECORD DRAWING

THIS DRAWING HAS BEEN REVISED FROM THE ORIGINAL CONTRACT DRAWING BASED ON DATA SUPPLIED BY THE CONTRACTOR TO SHOW MAJOR CHANGES MADE DURING CONSTRUCTION. NO WARRANTY IS MADE FOR COMPLETE ACCURACY OF THIS DRAWING.

HDR ENGINEERING, INC.

DATE 10/5/15 BY [Signature]

NOTE: THE ORIGINAL CONSTRUCTION DRAWING WITH ISSUE DATE 05/30/2012 HAD THE P.E. SEAL OF BRENT ALAN TIPPEY, NUMBER 19881, AFFIXED.



ISSUE	DATE	DESCRIPTION
A	5/23/2012	BID SET

PROJECT MANAGER	BRENT A. TIPPEY
DESIGNED	M.M. KUSNIR
DRAWN	J.R. BULLOCK
QA/QC	J.C. LEWIS
PROJECT NUMBER	156494

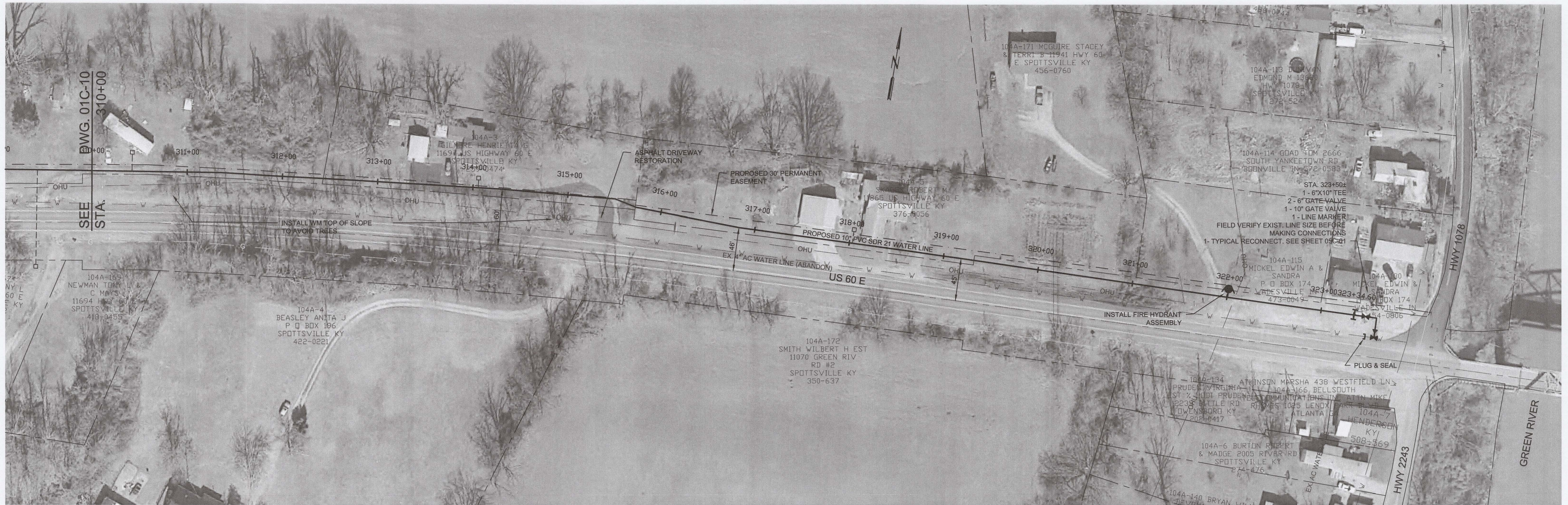
2012 WATER SYSTEM IMPROVEMENTS
 HENDERSON COUNTY WATER DISTRICT
 HENDERSON COUNTY, KENTUCKY
 MAY 2012

STA. 280+00 TO STA. 310+00
 PACKAGE 'B'

0 50' 100'

FILENAME RD_01C-10.dwg SHEET 01C-10

SCALE 1" = 50'



RECORD DRAWING

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HDR ENGINEERING, INC.

DATE 4/5/15 BY [Signature]

NOTE: THE ORIGINAL CONSTRUCTION DRAWING WITH ISSUE DATE 05/30/2012 HAD THE P.E. SEAL OF BRENT ALAN TIPPEY NUMBER 19651 AFFIXED.



ISSUE	DATE	DESCRIPTION
A	5/23/2012	BID SET

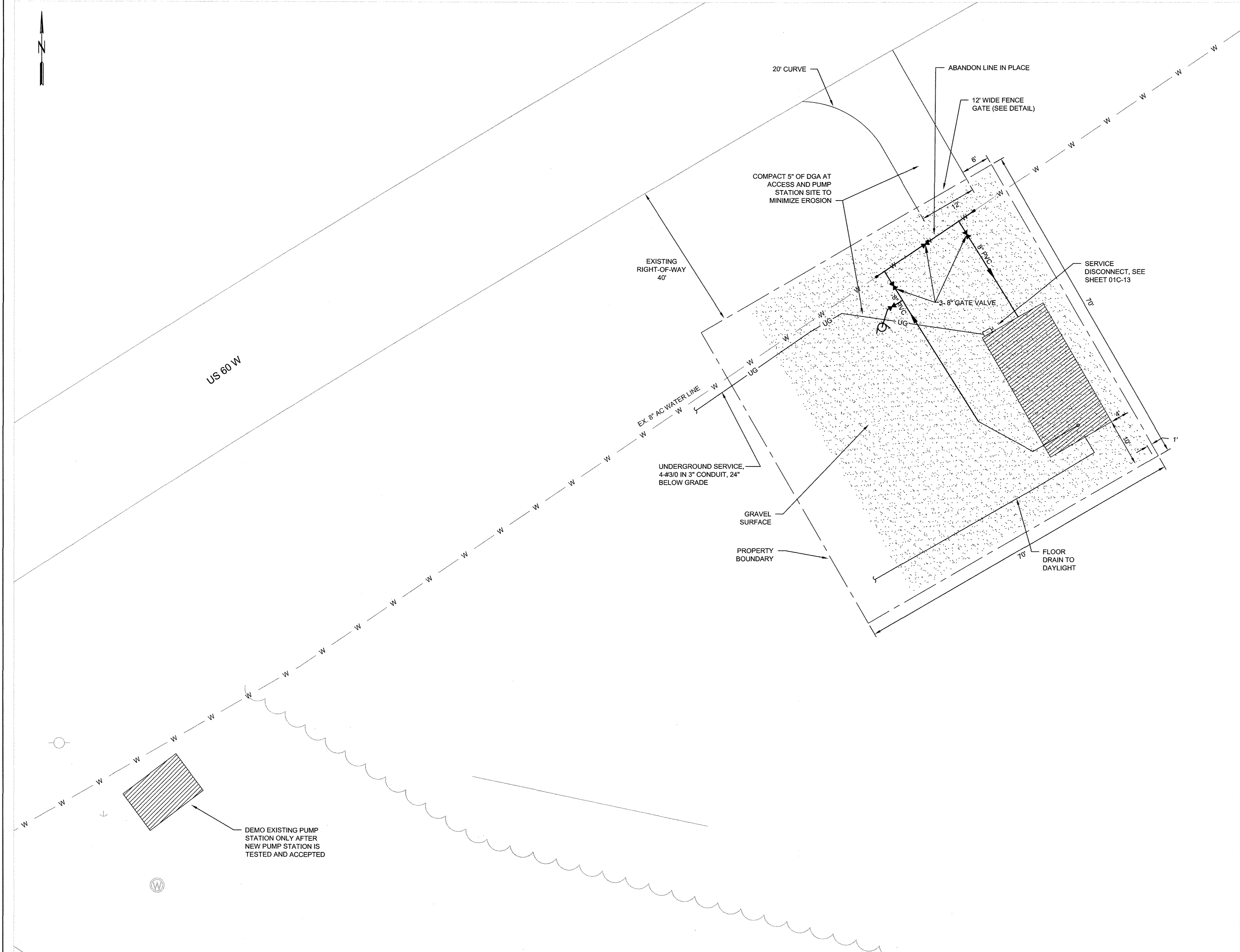
PROJECT MANAGER	BRENT A. TIPPEY
DESIGNED	M.M. KUSNIR
DRAWN	J.R. BULLOCK
QA/QC	J.C. LEWIS
PROJECT NUMBER	156494

2012 WATER SYSTEM IMPROVEMENTS
HENDERSON COUNTY WATER DISTRICT
HENDERSON COUNTY, KENTUCKY
MAY 2012

STA. 310+00 TO STA. 323+50 +/-
PACKAGE 'B'

0 50' 100'

FILENAME	RD_01C-11.dwg	SHEET
SCALE	1" = 50'	01C-11



RECORD DRAWING

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HDR ENGINEERING, INC.

DATE 6/5/15 BY [Signature]

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ISSUE	DATE	DESCRIPTION
B	3/29/2013	SITE EDITS

PROJECT MANAGER	BRENT A. TIPPEY
DESIGNED	M.M. KUSNIR
DESIGNED	R.D. GREER
DRAWN	M.M. KUSNIR
DRAWN	R.D. GREER
QA / QC	J.C. LEWIS
QA / QC	R.L. ANDERSON
PROJECT NUMBER	156494

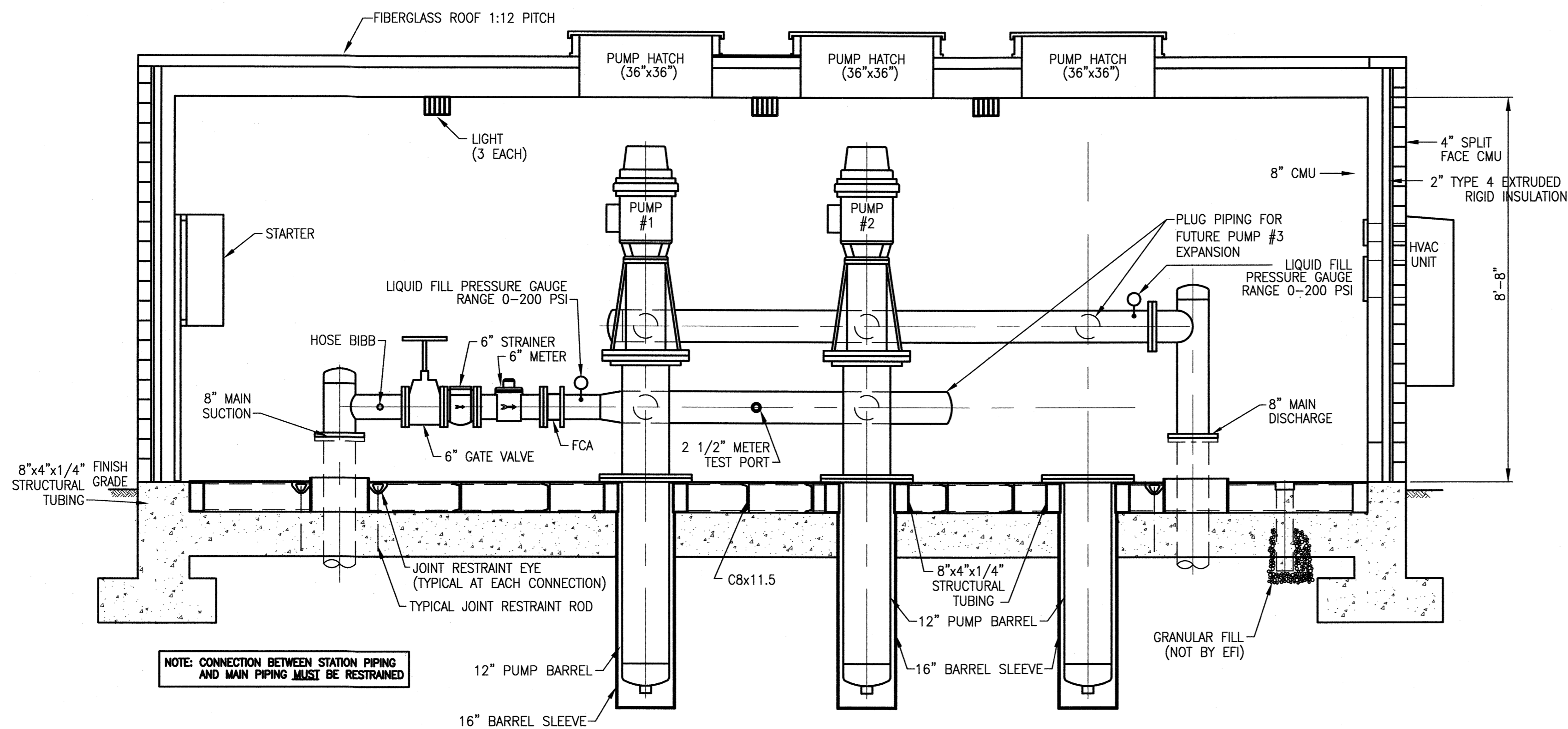
2012 WATER SYSTEM IMPROVEMENTS
HENDERSON COUNTY WATER DISTRICT
HENDERSON COUNTY, KENTUCKY
MAY 2012

US60W PUMP STATION RELOCATION
SITE PLAN
PACKAGE 'C'

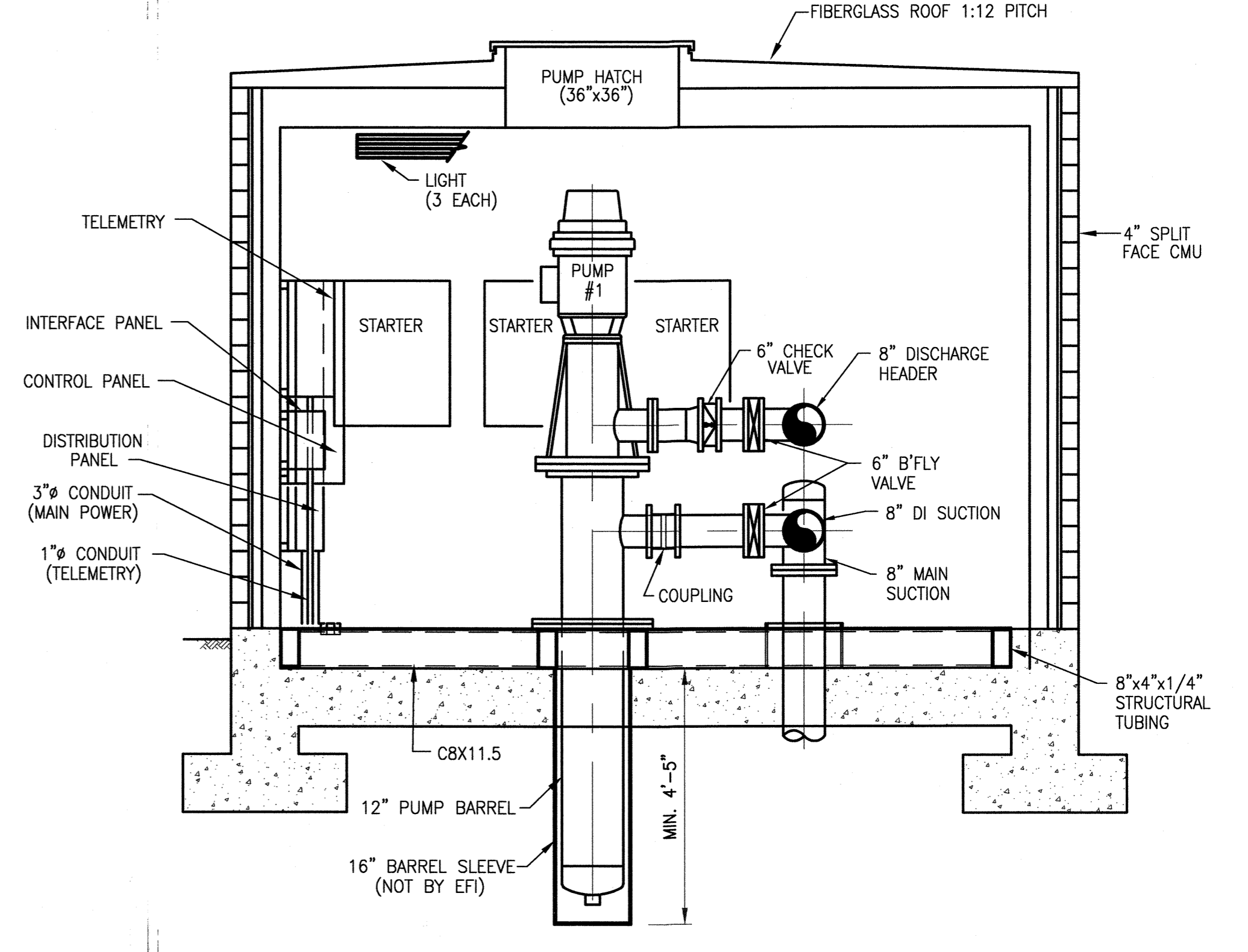
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SCALE 1"=10'

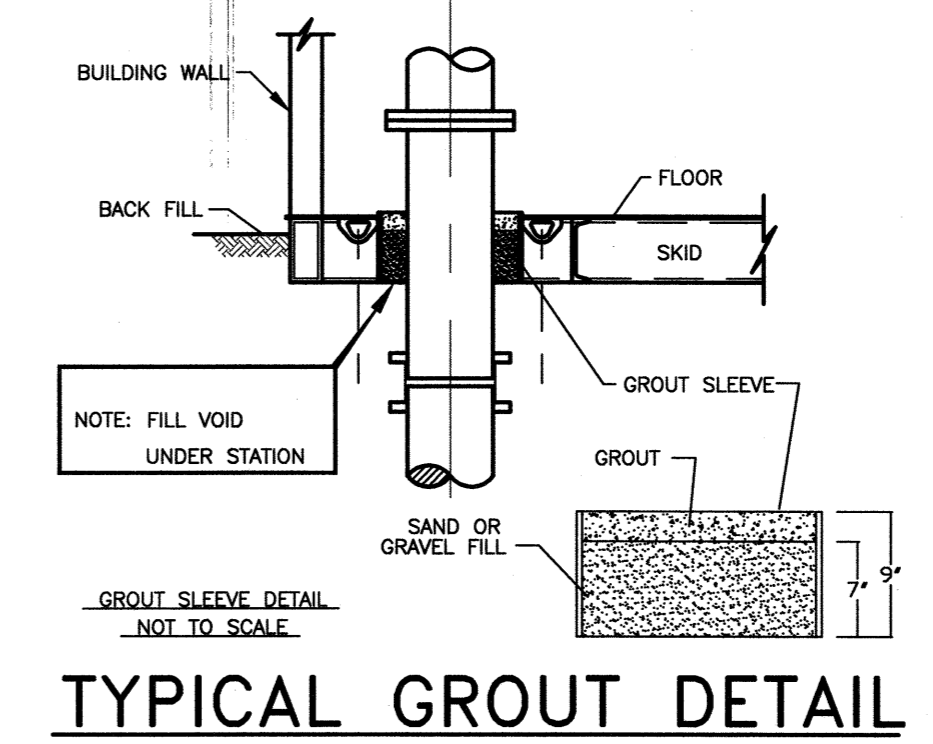
FILENAME RD_01C-12.dwg SHEET **01C-12**



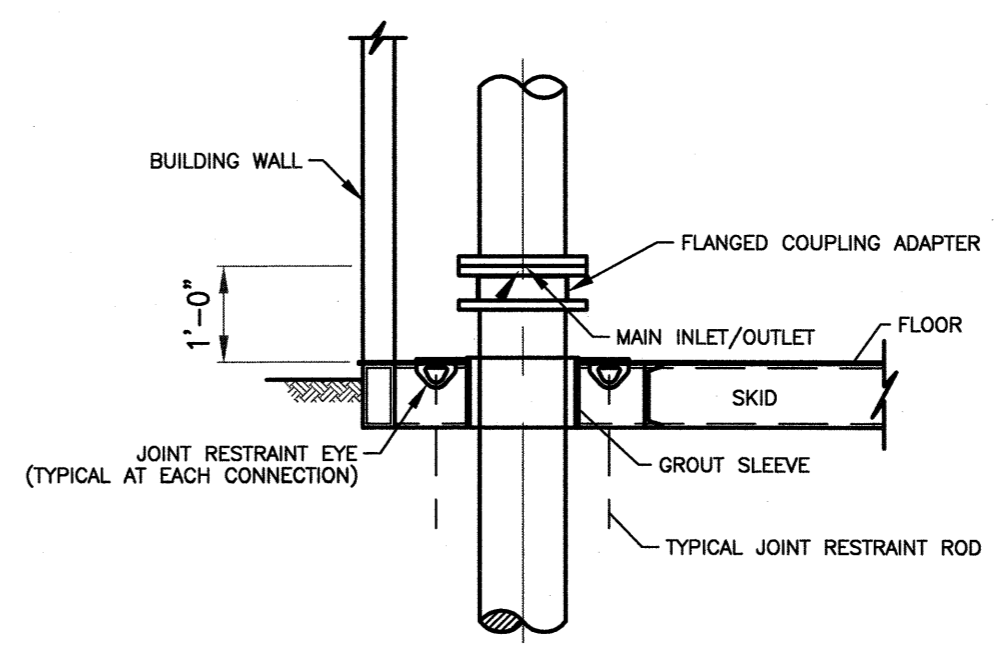
SECTION P1.1
SCALE: 1/2"=1'-0"



SECTION P1.2
SCALE: 1/2"=1'-0"



TYPICAL GROUT DETAIL



DESIGN CRITERIA

PUMP DATA

VERTICAL, MULTI-STAGE TURBINE
TWO PUMPS EACH HAVING A CAPACITY OF 300 GPM AT 225 FEET TDH

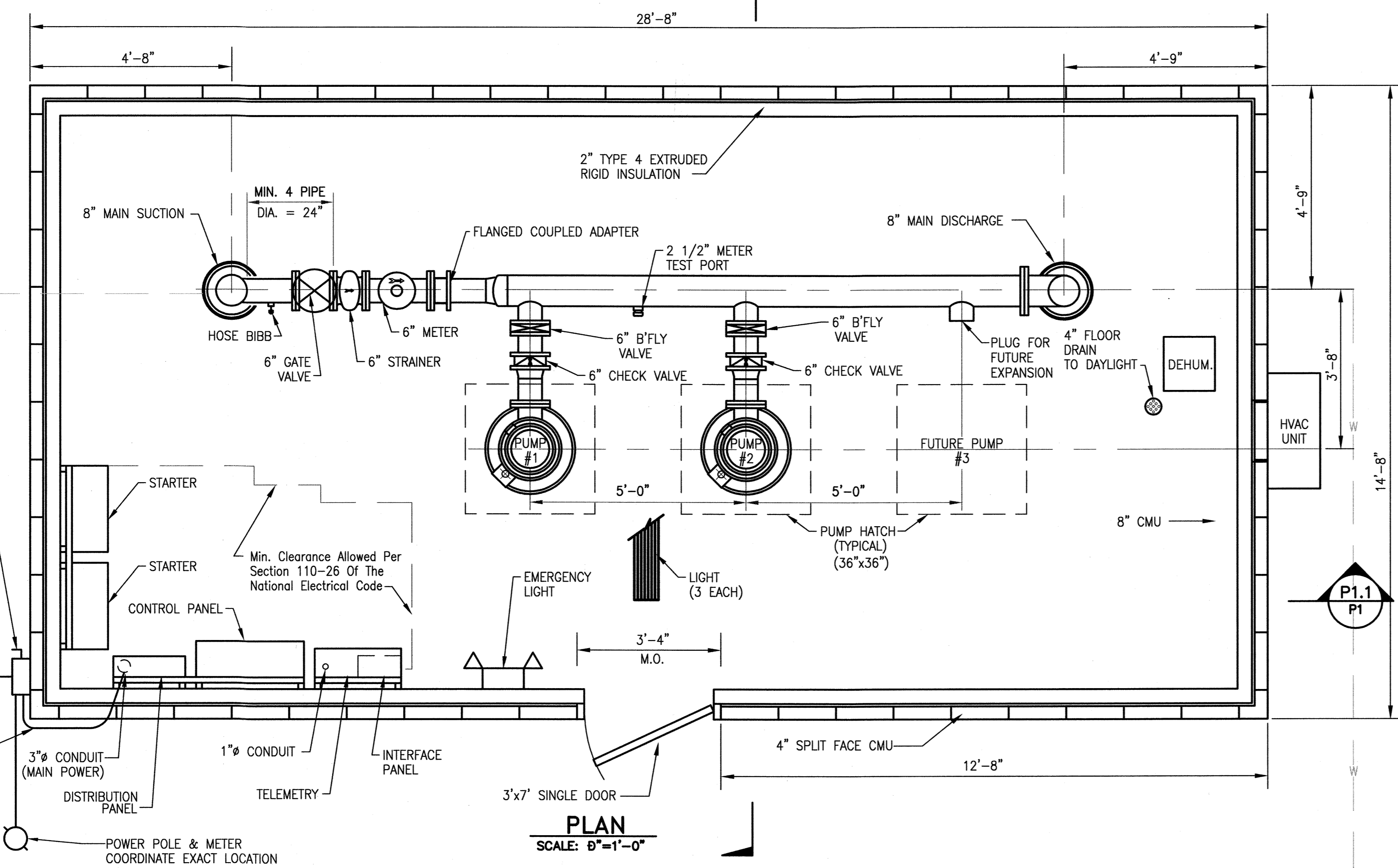
RECORD DRAWING

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HDR ENGINEERING, INC.

DATE 6/5/15 BY [Signature]

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PLAN
SCALE: 8"=1'-0"

- 200 AMP, NEMA 3R, FUSED, SERVICE RATED DISCONNECT SWITCH
- #4 BARE COPPER GROUND
- 3/4" X 10' COPPER CLAD STEEL GROUND ROD
- 3" CONDUIT WITH 4-#3/0, 1-#4 GROUND
- 3" CONDUIT (MAIN POWER)
- 1" CONDUIT
- INTERFACE PANEL
- TELEMETRY
- DISTRIBUTION PANEL
- POWER POLE & METER COORDINATE EXACT LOCATION



ISSUE	DATE	DESCRIPTION
A	5/23/2012	BID SET

PROJECT MANAGER	BRENT A. TIPPEY
DESIGNED	E.M. BIDDLE
DESIGNED	R.D. GREER
DRAWN	E.M. BIDDLE
DRAWN	R.D. GREER
QA / QC	J.C. LEWIS
QA / QC	R.L. ANDERSON
PROJECT NUMBER	156485

2012 WATER SYSTEM IMPROVEMENTS
HENDERSON COUNTY WATER DISTRICT
HENDERSON COUNTY, KENTUCKY
MAY 2012

US60W PUMP STATION PLAN AND SECTION PACKAGE 'C'

0 50' 100'

FILENAME P2 SHEET
SCALE 1/2"=1'-0" **01C-13**

1

2

3

4

5

6

7

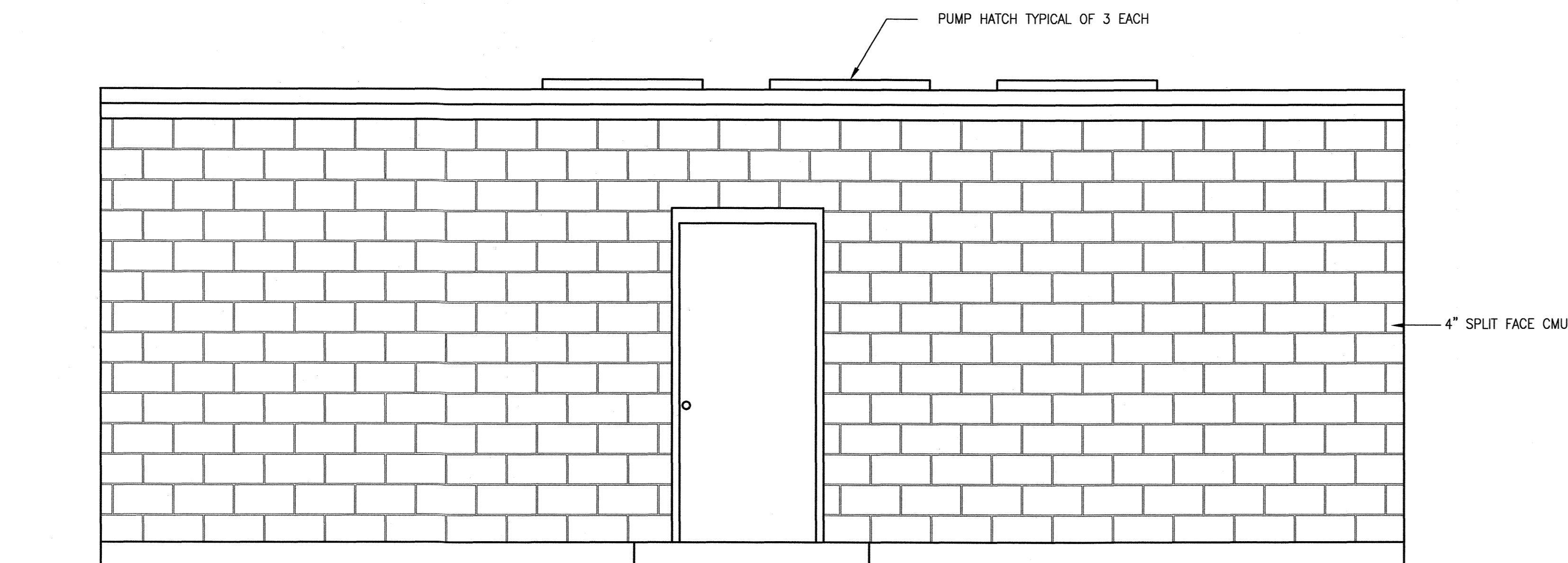
8

D

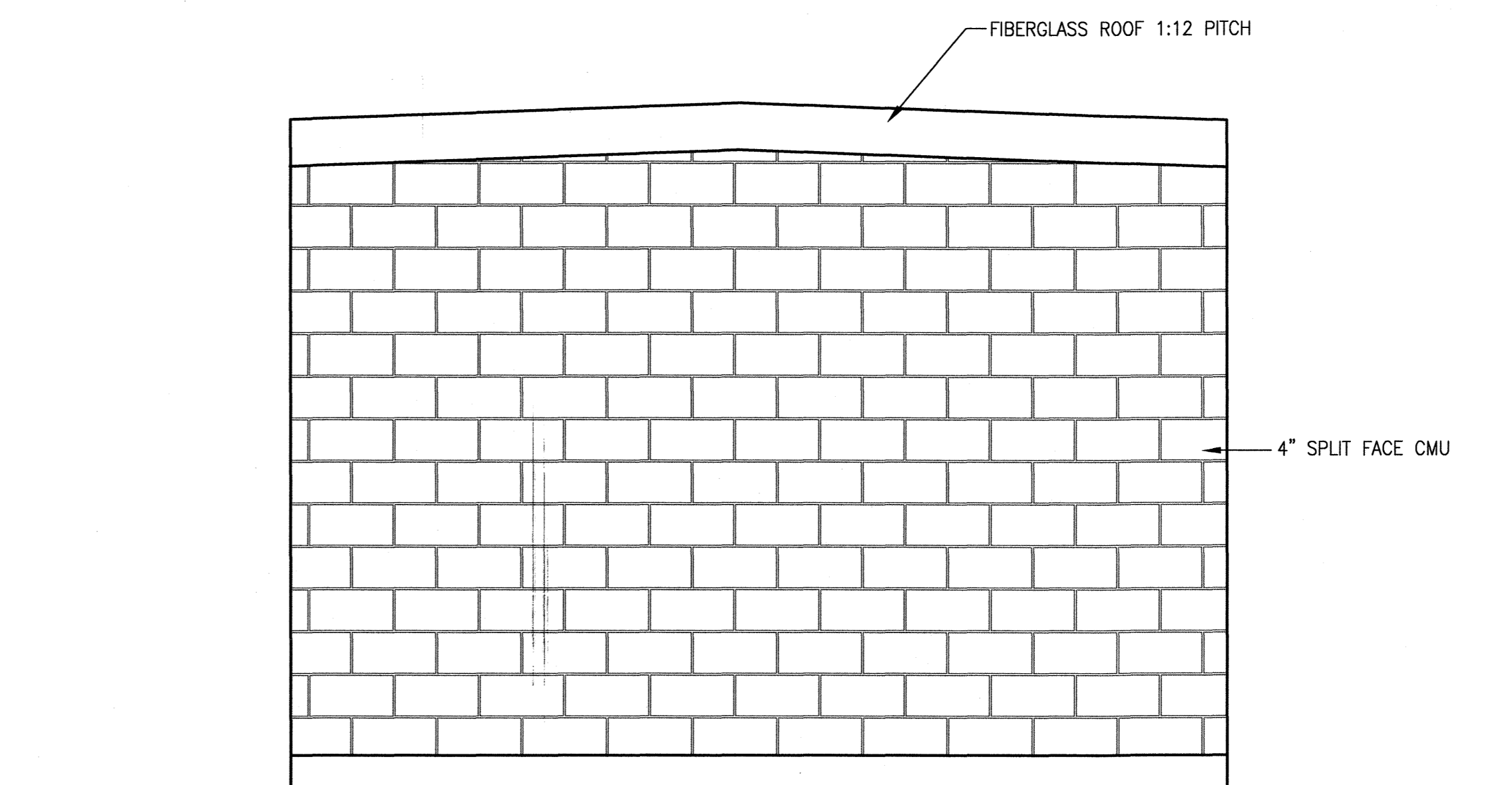
C

B

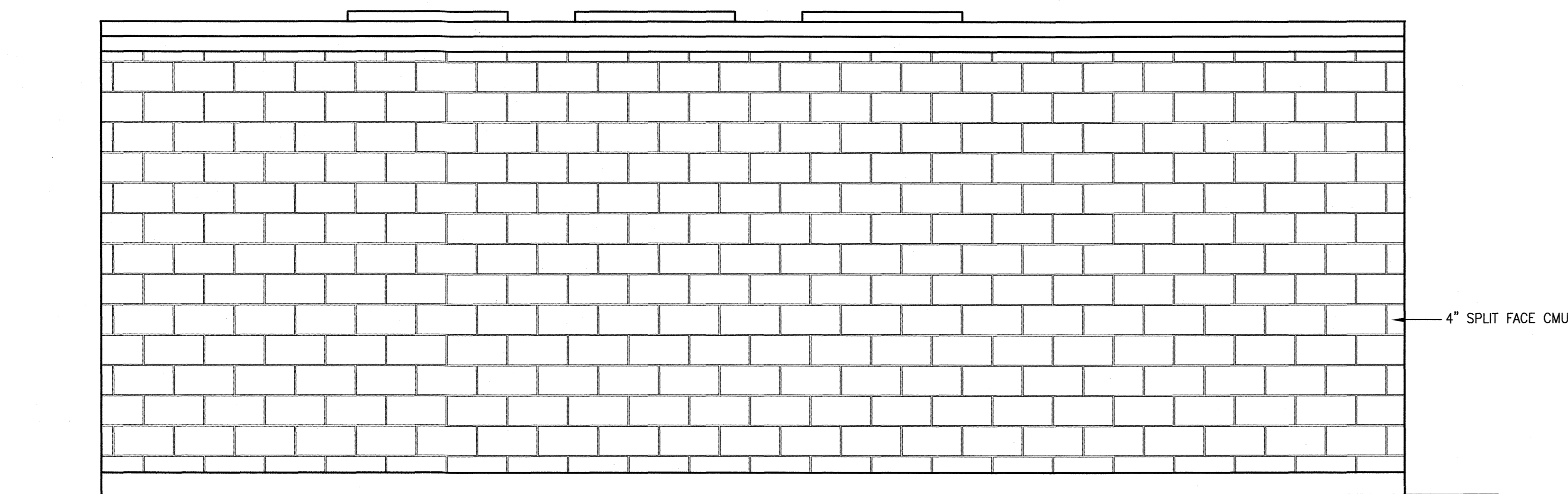
A



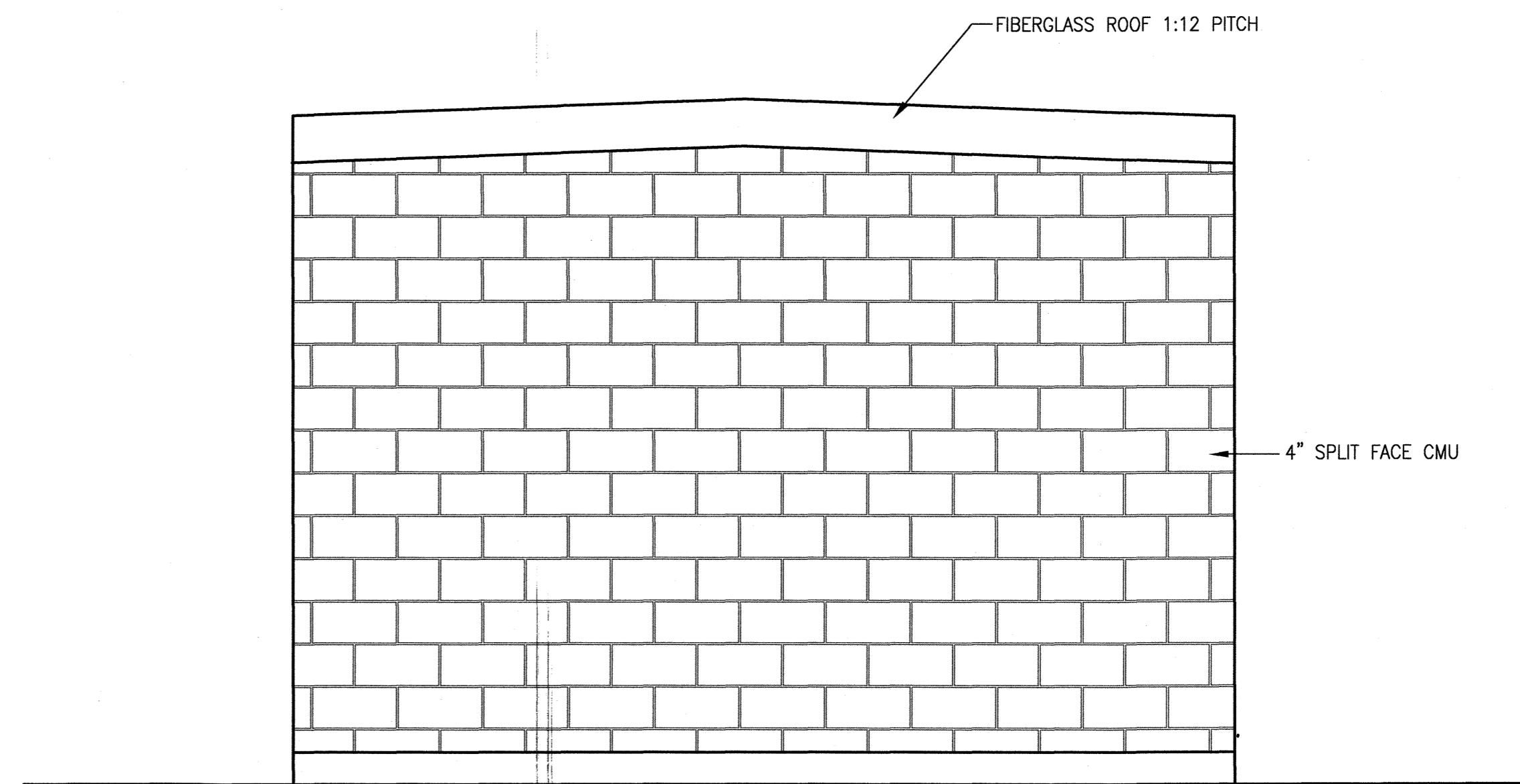
NORTH ELEVATION
SCALE: 1/2"=1'-0"



EAST ELEVATION
SCALE: 1/2"=1'-0"



SOUTH ELEVATION
SCALE: 1/2"=1'-0"



WEST ELEVATION
SCALE: 1/2"=1'-0"

RECORD DRAWING
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HDR ENGINEERING, INC.
DATE 6/5/15 BY [Signature]
NOTE: THE ORIGINAL CONSTRUCTION DRAWING WITH ISSUE DATE 05/30/2012 HAD THE P.E. SEAL OF BRENT ALAN TIPPEY NUMBER 18851 AFFIXED.



ISSUE	DATE	DESCRIPTION
A	5/23/2012	BID SET

PROJECT MANAGER	BRENT A. TIPPEY
DESIGNED	E.M. BIDDLE
DESIGNED	R.D. GREER
DRAWN	E.M. BIDDLE
DRAWN	R.D. GREER
QA / QC	J.C. LEWIS
QA / QC	R.L. ANDERSON
PROJECT NUMBER	156485

2012 WATER SYSTEM IMPROVEMENTS
HENDERSON COUNTY WATER DISTRICT
HENDERSON COUNTY, KENTUCKY
MAY 2012

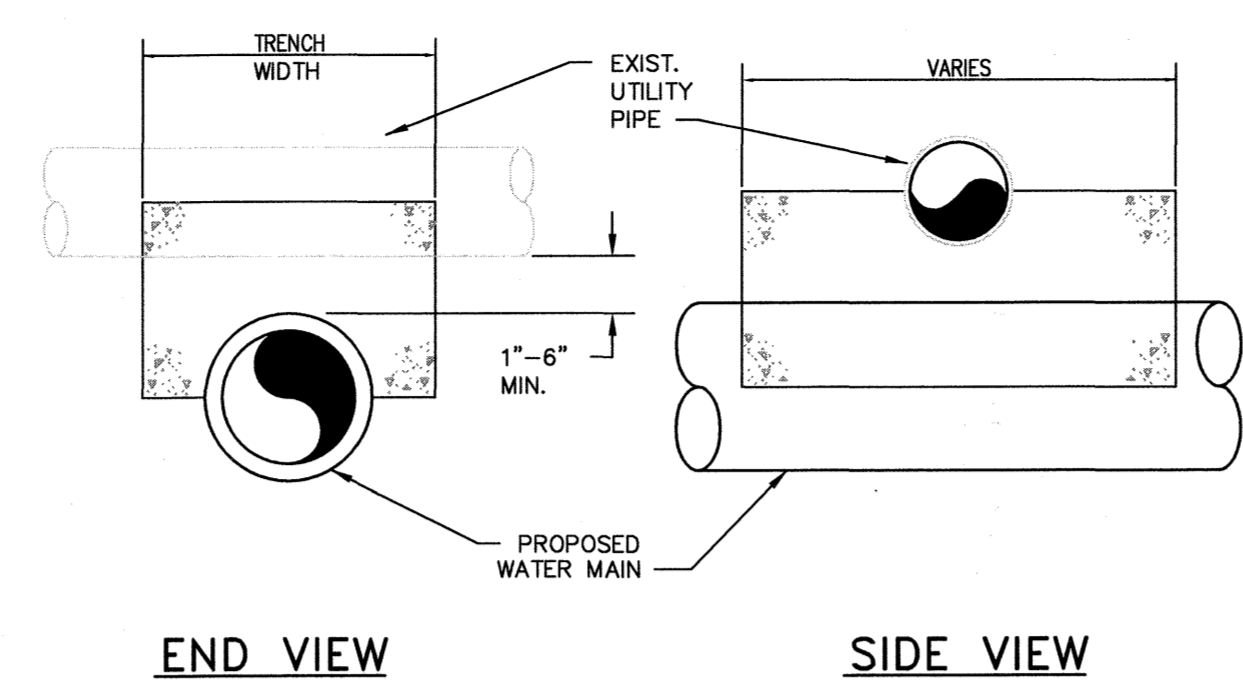
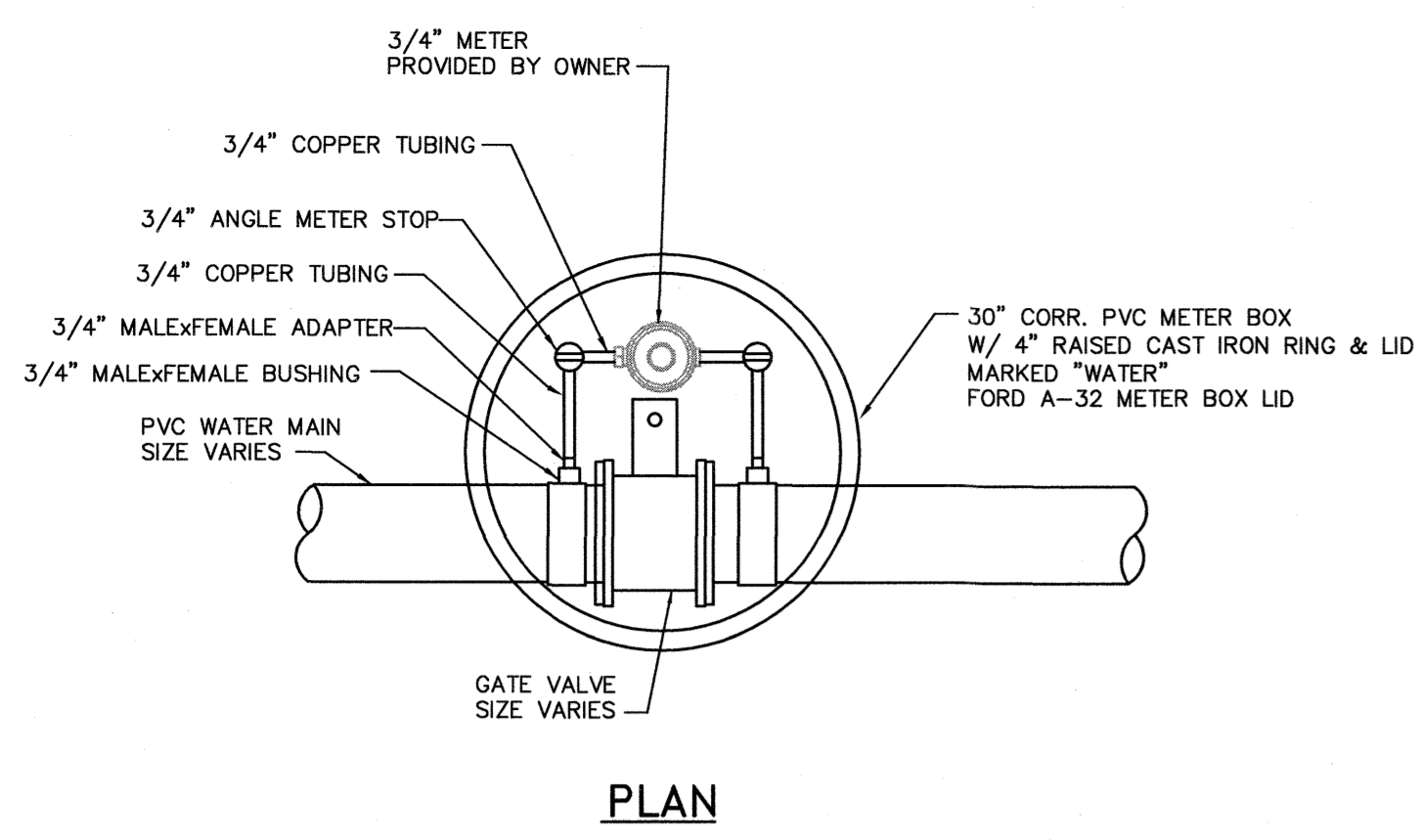
PROCESS US60W PUMP STATION ELEVATIONS PACKAGE 'C'

0 50' 100'

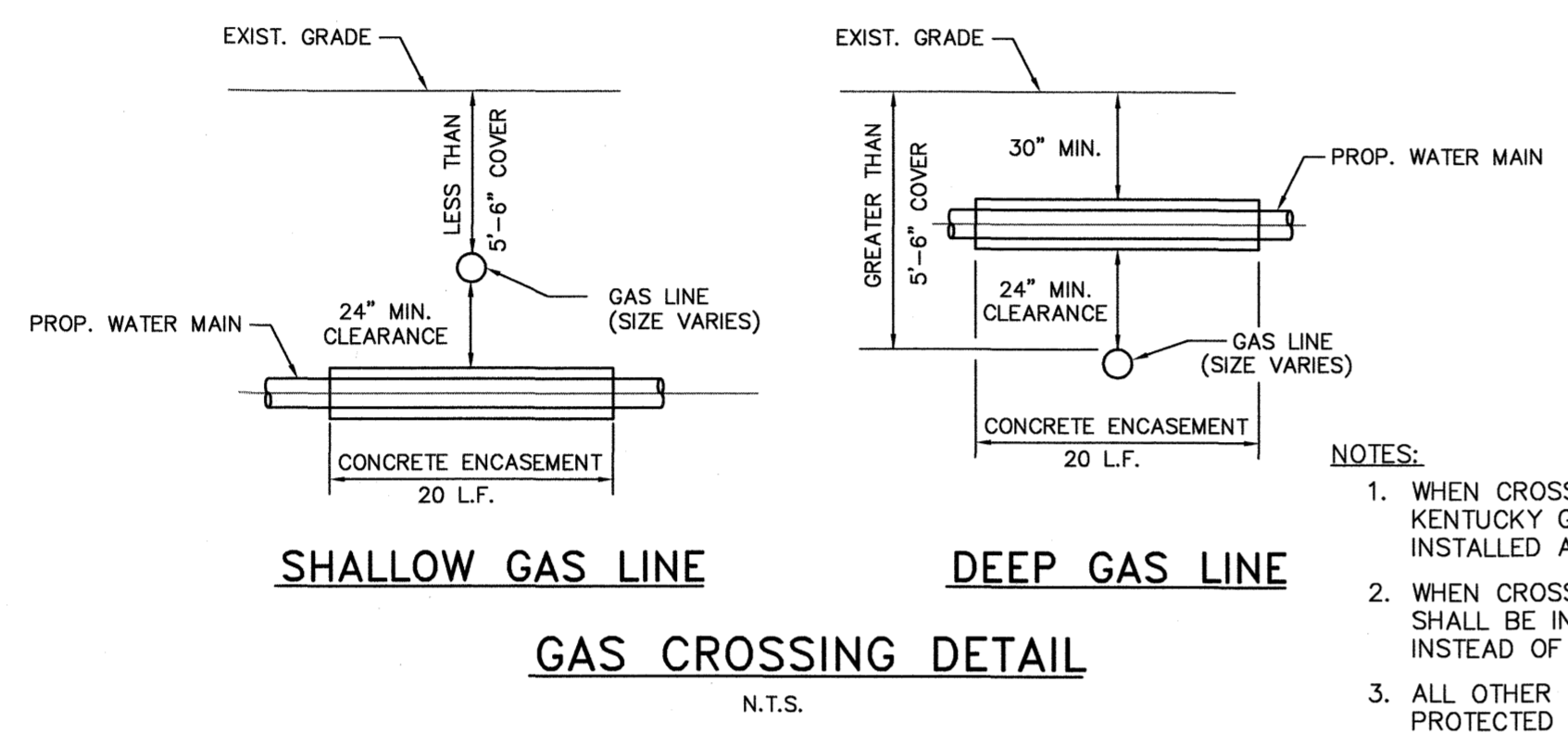
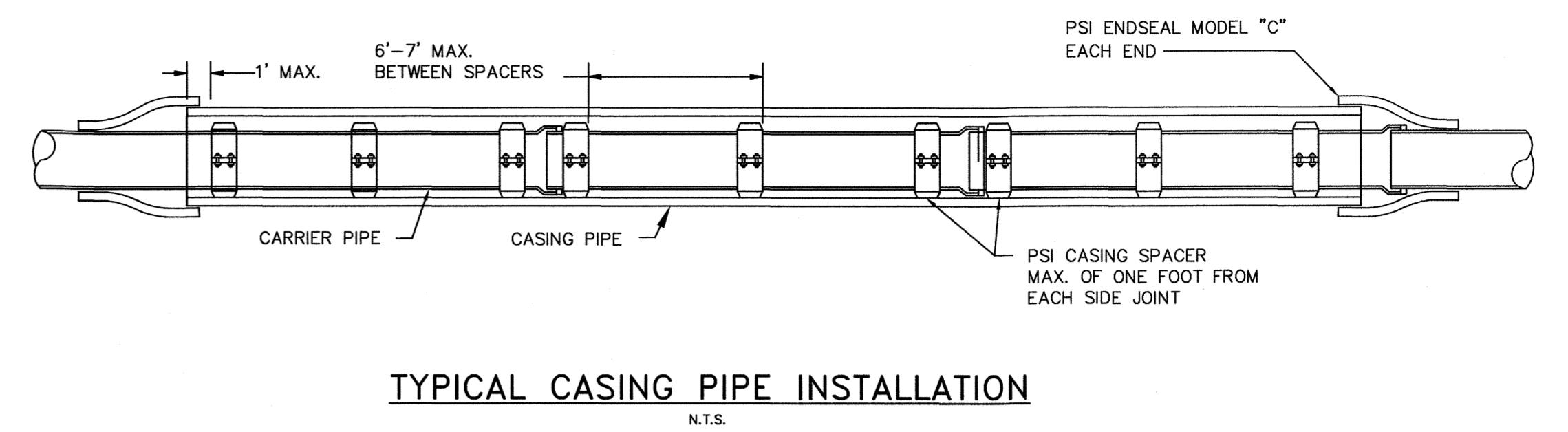
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FILENAME: P3

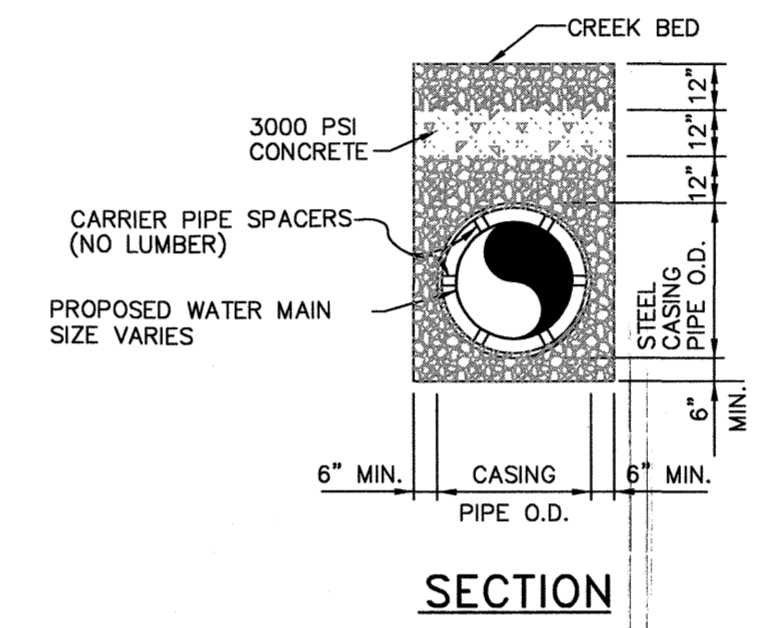
SHEET: **01C-14**



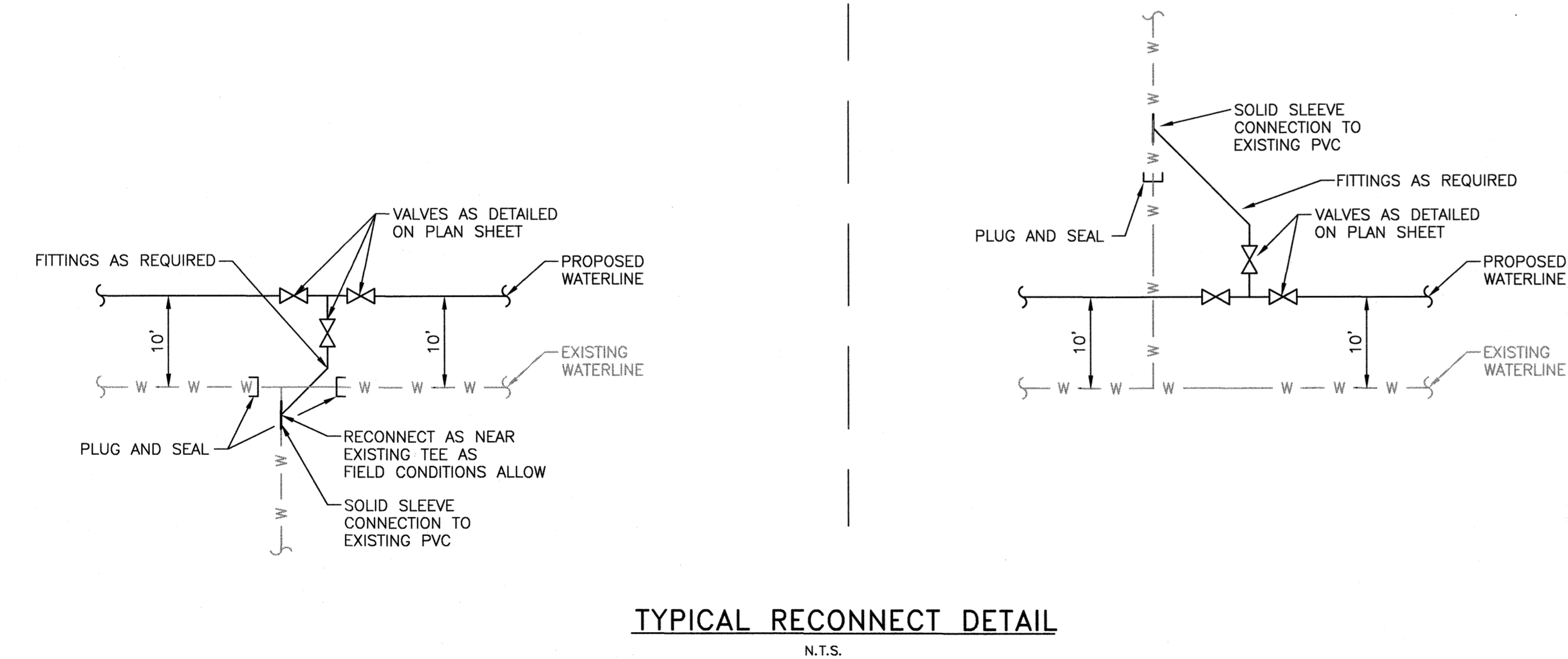
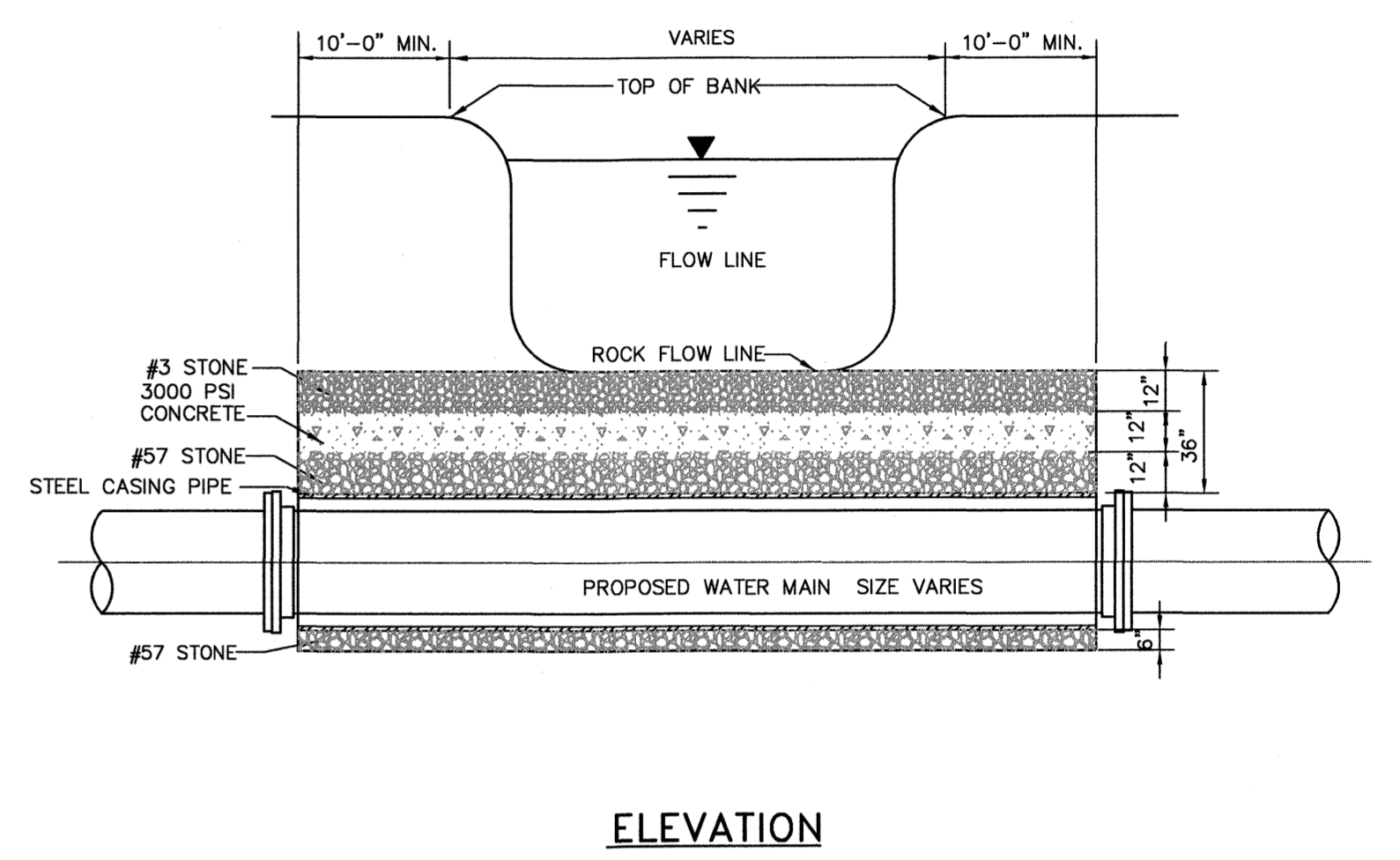
UTILITY CROSSING CONCRETE CAP
N.T.S.



- NOTES:**
1. WHEN CROSSING TEXAS GAS, COUNTRY MARK, AND WESTERN KENTUCKY GAS FACILITIES, CONCRETE ENCASEMENT SHALL BE INSTALLED AS SHOWN ABOVE.
 2. WHEN CROSSING BP GAS FACILITIES, STEEL ENCASEMENT PIPE SHALL BE INSTALLED FOR THE FULL WIDTH OF THE EASEMENT INSTEAD OF CONCRETE ENCASEMENT.
 3. ALL OTHER UTILITIES CROSSING SHALL HAVE THE WATER MAIN PROTECTED WITH CONCRETE CAP PER THE UTILITY CROSSING DETAIL THIS DWG.



CREEK CROSSING DETAIL SOLID ROCK
N.T.S.



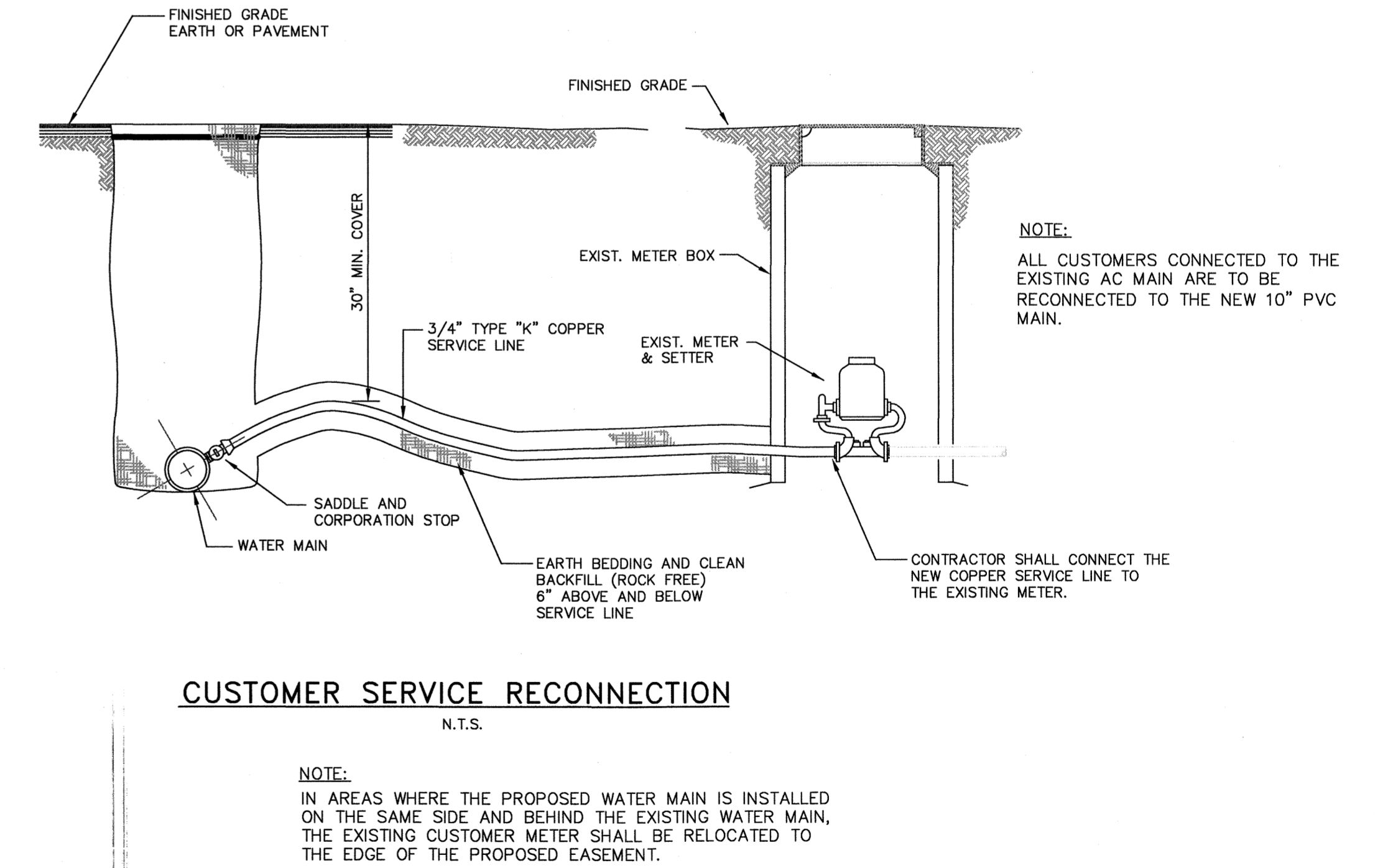
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HDR ENGINEERING, INC.

DATE 6/5/15 BY [Signature]

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ISSUE	DATE	DESCRIPTION
A	5/23/2012	BID SET

PROJECT MANAGER	BRENT A. TIPPEY
DESIGNED	M.M. KUSNIR
DRAWN	M.M. KUSNIR
QA/QC	J.C. LEWIS
PROJECT NUMBER	156494

2012 WATER SYSTEM IMPROVEMENTS
HENDERSON COUNTY WATER DISTRICT
HENDERSON COUNTY, KENTUCKY
MAY 2012

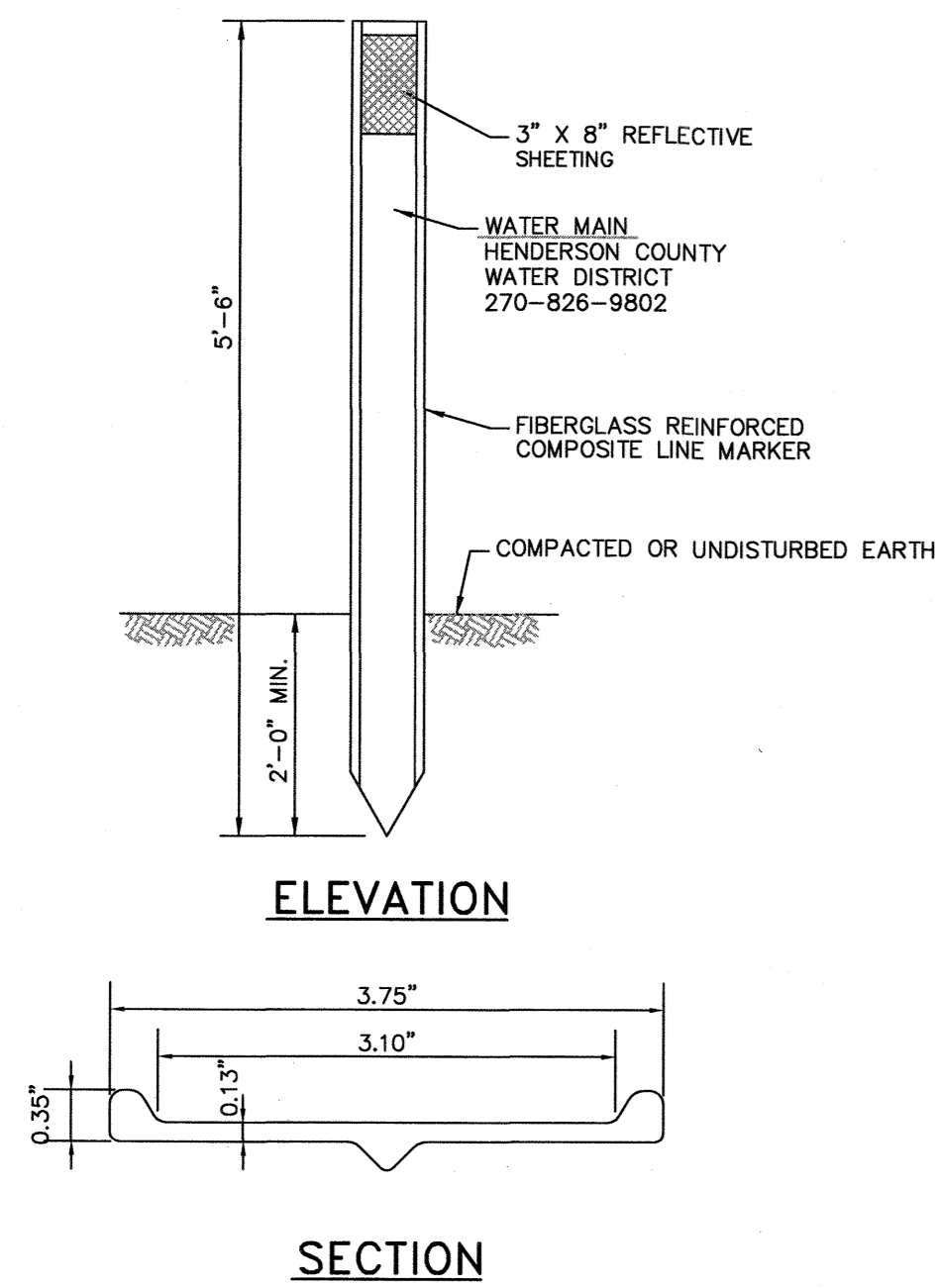
STANDARD DETAILS

0 50' 100'

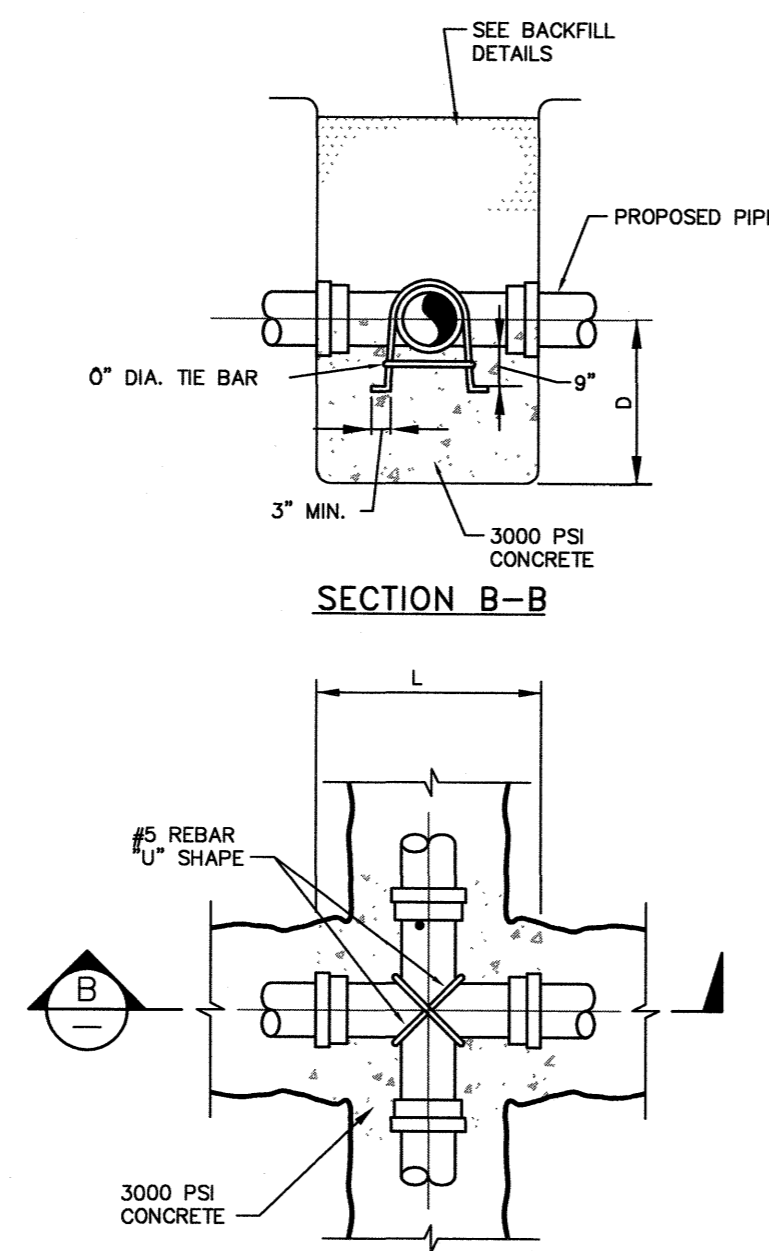
FILENAME RD_05C-01.dwg

SCALE NTS

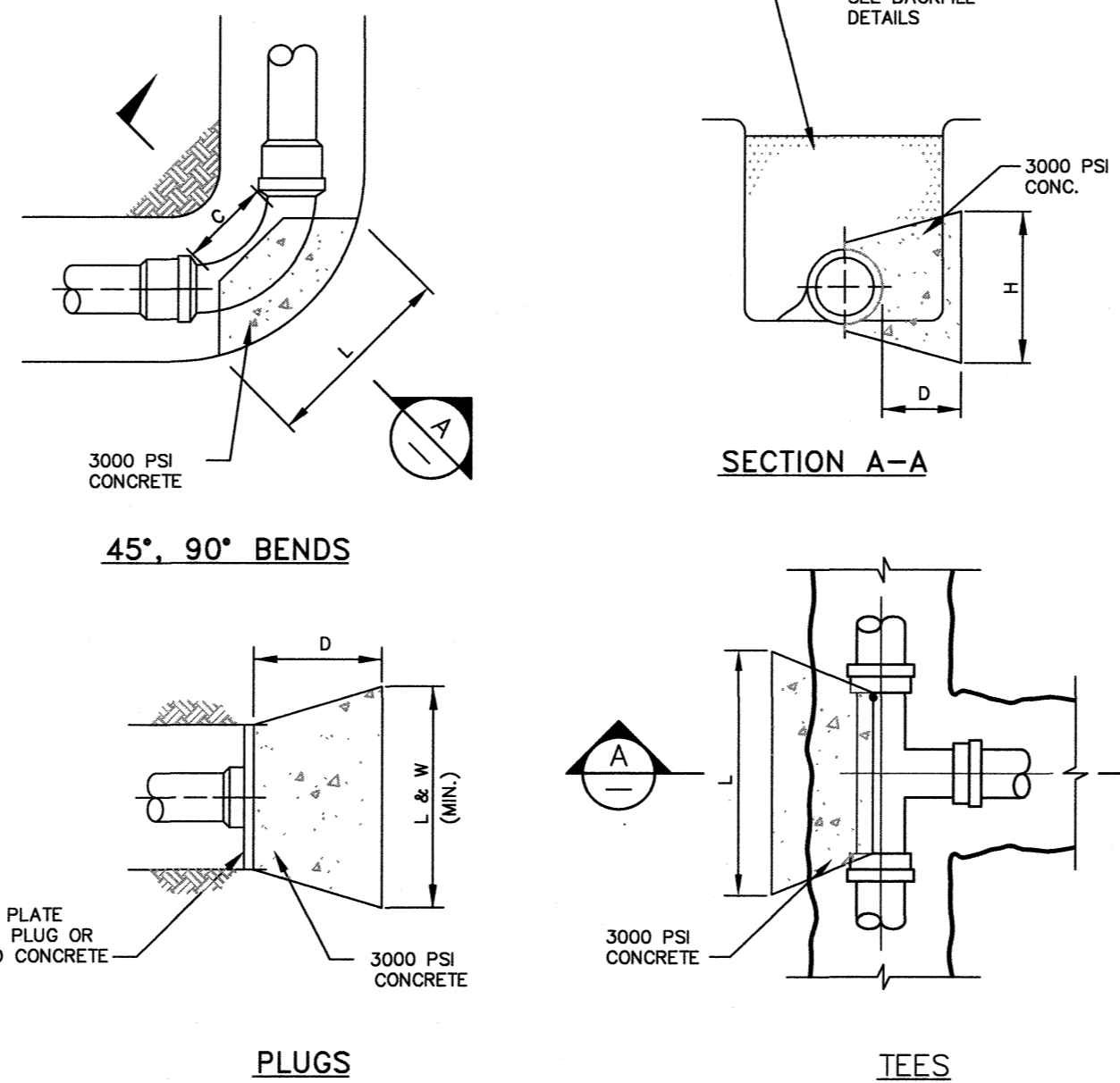
SHEET **05C-01**



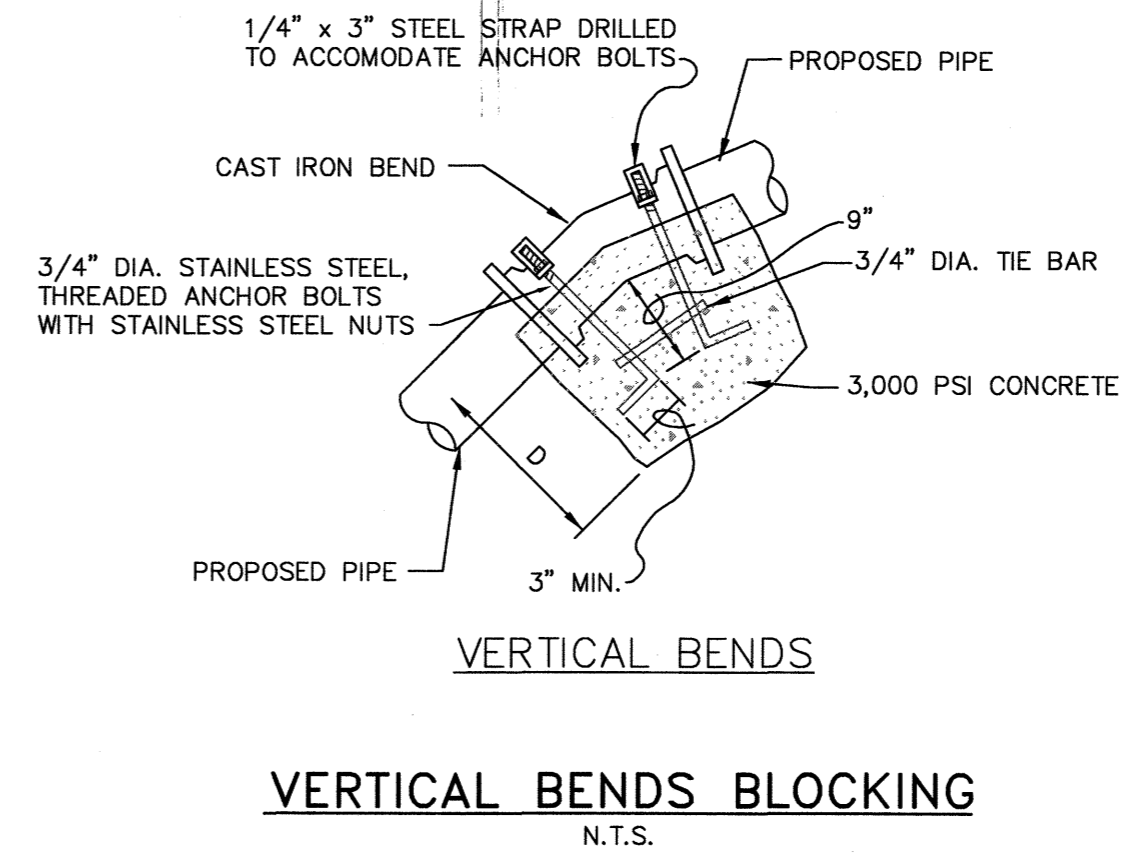
FIBERGLASS LINE MARKER
N.T.S.



CROSS ANCHORING
N.T.S.



CONCRETE THRUST BLOCKS
N.T.S.



VERTICAL BENDS BLOCKING
N.T.S.

PLUGS		3"	4"	6"	8"	10"	12"
SIZE		3"	4"	6"	8"	10"	12"
D		7"	9"	12"	16"	20"	23"
L & W		14"	17"	24"	32"	39"	45"

TEES		3"	4"	6"	8"	10"	12"
SIZE		3"	4"	6"	8"	10"	12"
D		5"	7"	9"	11"	14"	17"
L		20"	22"	28"	36"	44"	52"
H		7"	10"	15"	20"	25"	30"
C (Max.)		11"	13"	16"	18"	22"	24"

90-Ells (Quarter Bends)		3"	4"	6"	8"	10"	12"
SIZE		3"	4"	6"	8"	10"	12"
D		7"	8"	12"	17"	20"	25"
L		24"	28"	40"	52"	62"	74"
H		11"	16"	20"	28"	32"	38"
C (Max.)		11"	13"	16"	18"	22"	24"

45-Ells (Eighth Bends)		3"	4"	6"	8"	10"	12"
SIZE		3"	4"	6"	8"	10"	12"
D		5"	6"	9"	13"	16"	19"
L		15"	20"	26"	36"	44"	52"
H		9"	12"	15"	20"	25"	30"
C (Max.)		6"	8"	10"	11"	13"	15"

22.5-Ells (Sixteenth Bends)		3"	4"	6"	8"	10"	12"
SIZE		3"	4"	6"	8"	10"	12"
D		3"	4"	5"	7"	9"	11"
L		12"	16"	20"	24"	30"	36"
H		6"	8"	11"	16"	20"	22"
C (Max.)		6"	8"	10"	11"	13"	15"

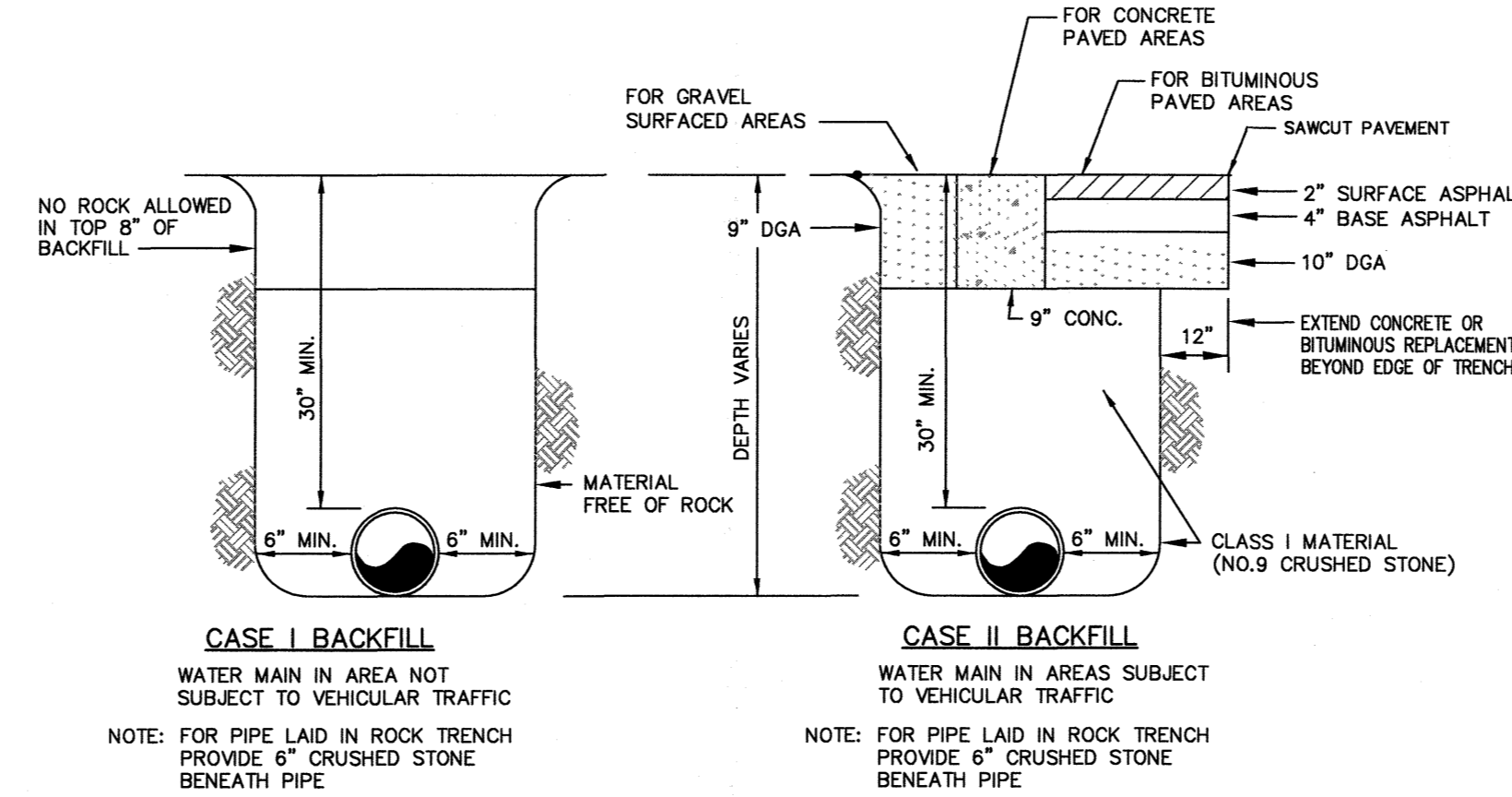
11.25-Ells (Thirty-Second Bends)		3"	4"	6"	8"	10"	12"
SIZE		3"	4"	6"	8"	10"	12"
D		3"	4"	5"	6"	7"	8"
L		12"	16"	20"	22"	26"	30"
H		6"	8"	7"	9"	12"	15"
C (Max.)		6"	8"	10"	11"	13"	15"

Crosses		3"	4"	6"	8"	10"	12"
SIZE		3"	4"	6" <td>8" <td>10" <td>12"</td> </td></td>	8" <td>10" <td>12"</td> </td>	10" <td>12"</td>	12"
D		15"	15"	15"	15"	18"	18"
L		18"	20"	23"	25"	29"	31"

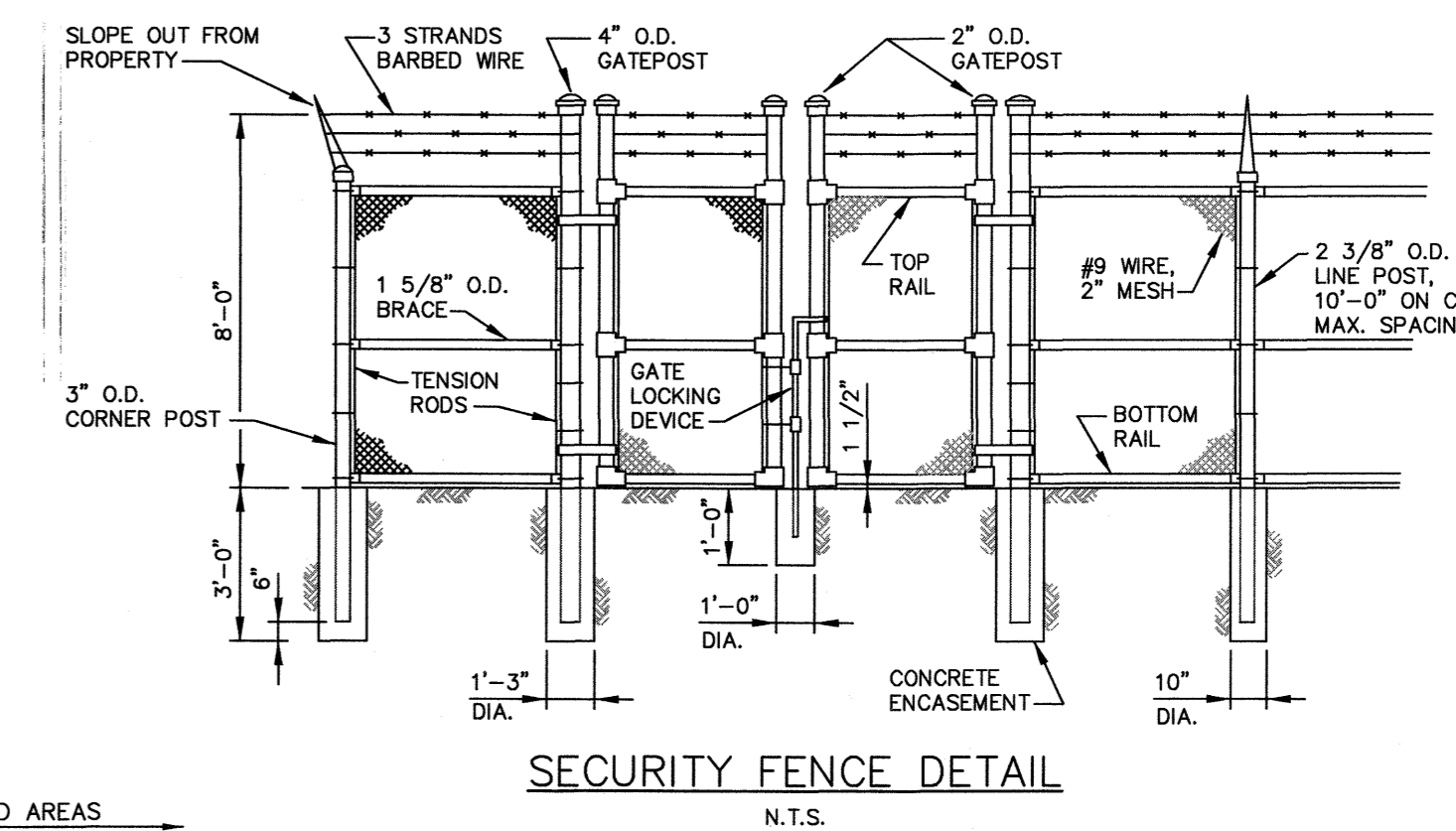
Vertical Bends (45-Ell or less)		3"	4"	6"	8"	10"	12"
SIZE		3"	4" <td>6" <td>8" <td>10" <td>12"</td> </td></td></td>	6" <td>8" <td>10" <td>12"</td> </td></td>	8" <td>10" <td>12"</td> </td>	10" <td>12"</td>	12"
D		18"	18"	24"	30"	36"	42"
Volume (Cu. Ft.)		13	19	38	66	99	139

NOTES: 1. TABLES ARE BASED ON A SOIL BEARING CAPACITY OF 2000 POUNDS/SQUARE FOOT (PSF)
 2. IF SOIL BEARING CAPACITY IS LESS THAN 2000 PSF, OR PIPE IS LAID IN FILL, CONSULT ENGINEER.
 3. ALL FIGURES ARE MINIMUM UNLESS OTHERWISE STATED.
 4. BLOCKS MUST BE PLACED AGAINST UNDISTURBED EARTH.

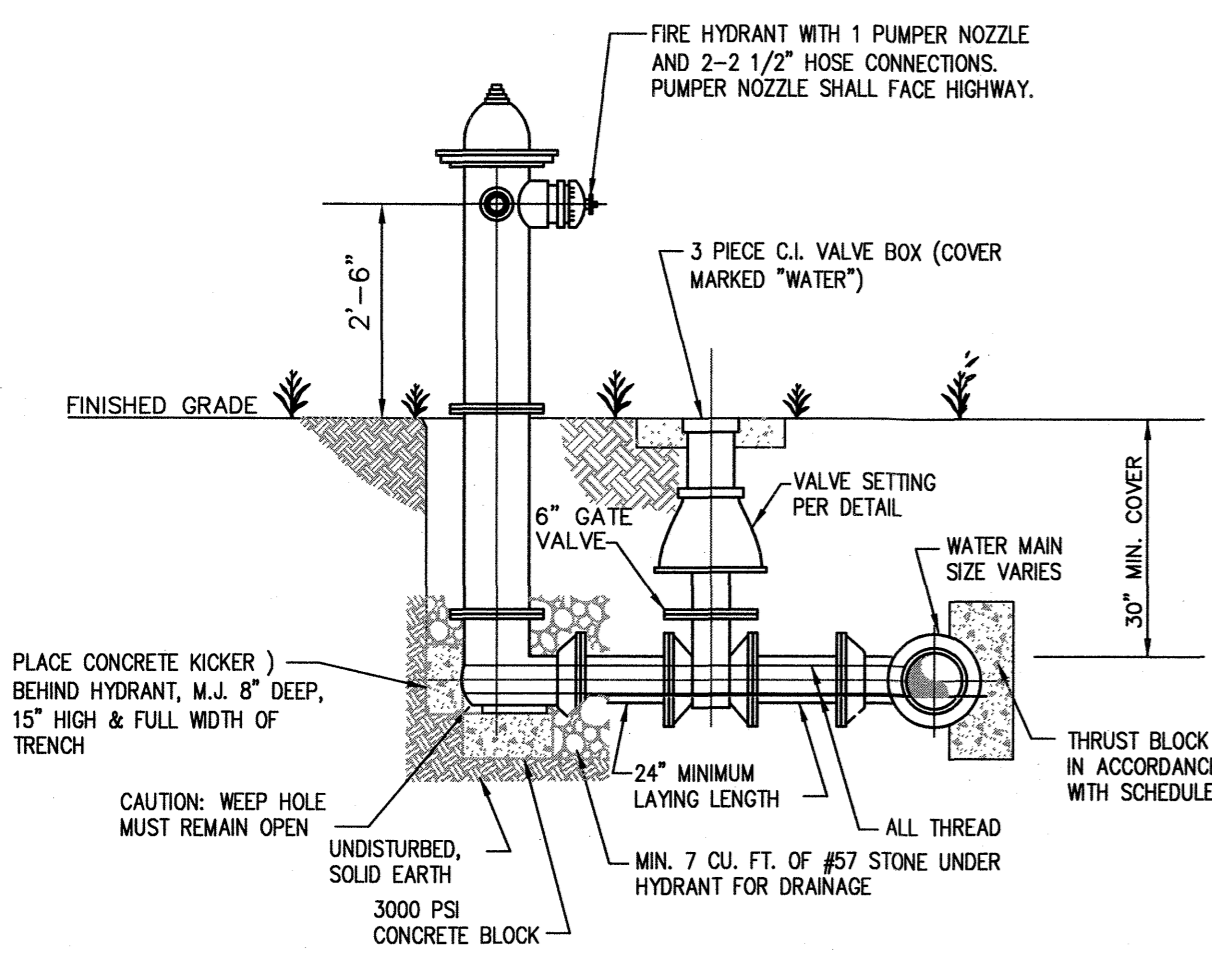
THRUST BLOCK SCHEDULE
(FOR PRESSURE CLASS 200 PIPE)
SDR 21, DR 18



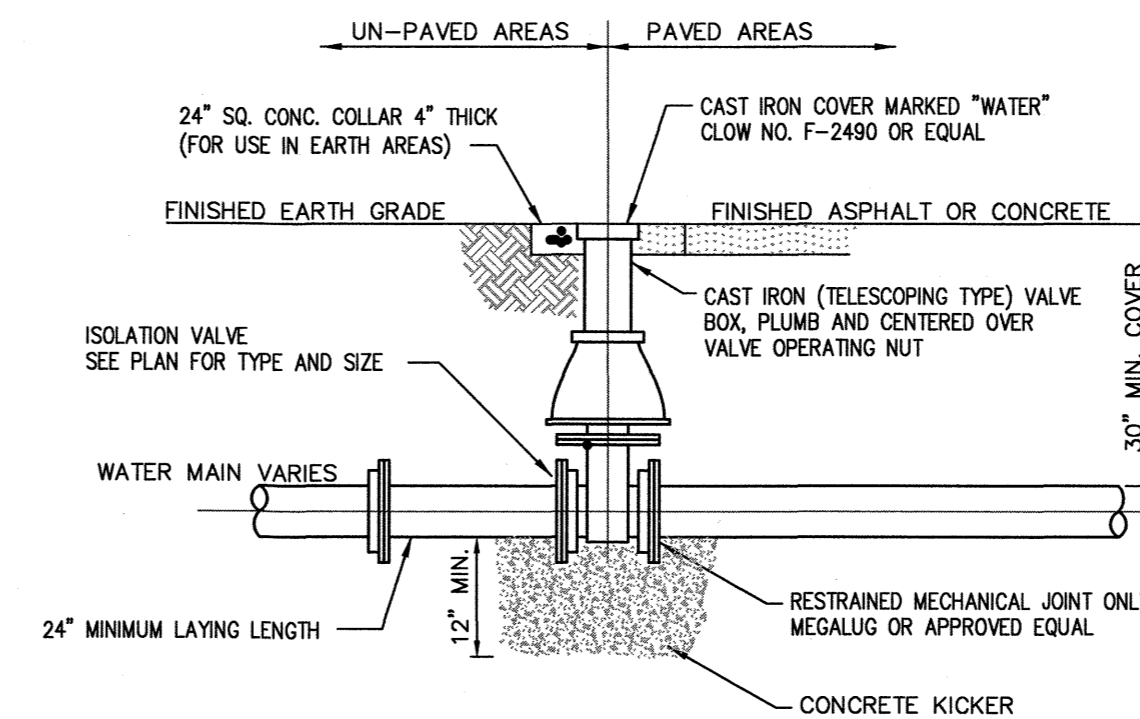
WATER MAIN INSTALLATION TRENCHING AND BACKFILLING DETAILS
N.T.S.



SECURITY FENCE DETAIL
N.T.S.



FIRE HYDRANT ASSEMBLY
N.T.S.



VALVE INSTALLATION
N.T.S.

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HDR ENGINEERING, INC.
 DATE 4/15 BY [Signature]
 NOTE: THE ORIGINAL CONSTRUCTION DRAWING WITH ISSUE DATE 05/30/2012 HAD THE P.E. SEAL OF BRENT ALAN TIPPEY NUMBER 19651 AFFIXED.

	PROJECT MANAGER BRENT A. TIPPEY DESIGNED M.M. KUSNIR DRAWN M.M. KUSNIR QA/QC J.C. LEWIS	<p align="center">2012 WATER SYSTEM IMPROVEMENTS HENDERSON COUNTY WATER DISTRICT HENDERSON COUNTY, KENTUCKY MAY 2012</p>	<p align="center">CIVIL STANDARD DETAILS</p>
	A 5/23/2012 BID SET ISSUE DATE DESCRIPTION		