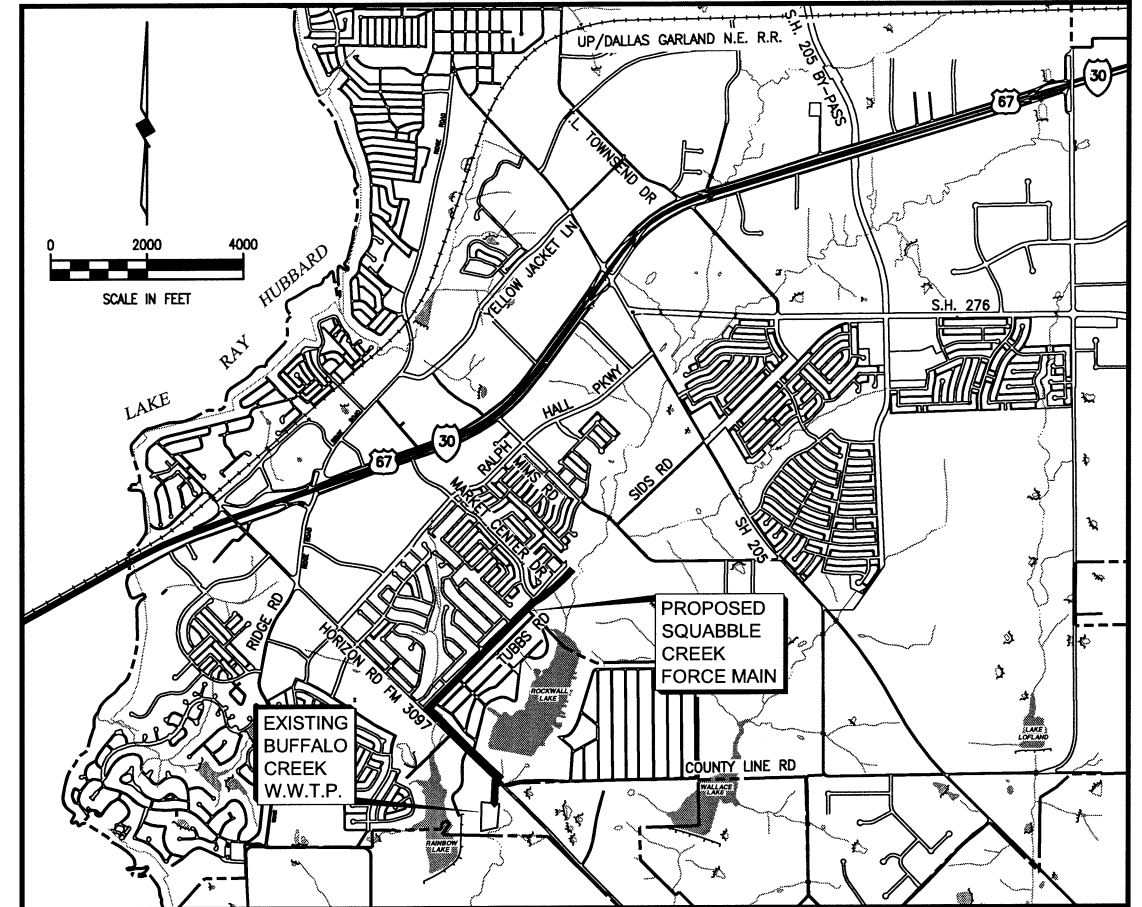


CITY OF ROCKWALL, TEXAS

CONSTRUCTION PLANS FOR: SQUABBLE CREEK TO BUFFALO CREEK WASTEWATER TRANSFER SECTION III

SQUABBLE CREEK FORCE MAIN



LOCATION MAP

COUNCIL MEMBERS

- BILL CECIL, MAYOR
- DAVID SWEET, MAYOR PRO-TEM
- MATT SCOTT
- CLIFF SEVIER
- GLEN FERRIS
- MARK RUSSO
- MARGO NIELSEN



CITY MANAGER

JULIE COUCH

ASSISTANT CITY MANAGER

RICHARD CROWLEY

CITY ENGINEER

CHUCK TODD, P.E.

BIRKHOFF, HENDRICKS & CARTER, L.L.P.

PROFESSIONAL ENGINEERS
Texas Firm 526
Dallas, Texas

April, 2010



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4/2/10

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-	COVER SHEET AND LOCATION MAP
1	GENERAL NOTES
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3	PLAN-PROFILE STA. 5+00 TO STA. 10+00
4	PLAN-PROFILE STA. 10+00 TO STA. 15+00
5	PLAN-PROFILE STA. 15+00 TO STA. 20+00
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16	DETAILS
17	JUNCTION BOX DETAILS

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BY PAC DATE 06/13/2011

LEGEND OF SYMBOLS

	ASPHALT PAVEMENT (H.M.A.C.)
	RIGHT OF WAY, PROPERTY, PROPOSED EASEMENT OR SUB-DIVISION LINE
	PERMANENT EASEMENT
	SLOPE OR TOP BANK
	CREEK OR DITCH
	BURIED TELEPHONE CABLE
	TREES, BUSH OR BRUSH
	BARBED WIRE FENCE
	PIPE RAIL FENCE
	WOOD FENCE
	WROUGHT IRON FENCE
	CHAIN LINK FENCE
	CONCRETE PAVEMENT

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BY PAC DATE 06/13/2011

EXISTING UTILITY OWNERS

NORTH TEXAS MUNICIPAL WATER DISTRICT	BRUCE COLE	(972) 442-5405	
CITY OF ROCKWALL - ENGINEERING	CHUCK TODD	(972) 771-7746	CITY ENGINEER
CITY OF ROCKWALL - WATER & WASTEWATER	KENT SPERLING	(972) 771-7730	
AQUATEXAS	-	(877) 987-2782	
COMCAST	-	(800) 252-1133	
SOUTHWESTERN BELL TELEPHONE	-	(800) 395-0440 (800) 545-8005	
TCI CABLE	-	(214) 328 5000	
TEXAS ONE CALL SYSTEM	-	(800) 245-4545	
TEXAS EXCAVATION SAFETY SYSTEM	-	(800) 344-8377	
ONCOR	RICHARD BREWSTER	(214) 486-4245	
ATMOS ENERGY	LINE LOCATE EMERGENCY BEN CURTIS RONNEY LINTON	(800) 344-8377 (800) 817-8090 (800) 344-8377 (469) 261-2023	PROJECT MANAGER
LEVEL 3 FIBER OPTIC	-	(877) 366-8344	
METRO MEDIA FIBER OPTIC	-	(972) 771-7746	DIG/EMERGENCY

GENERAL PROJECT NOTES

- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE MEASURES FOR PREVENTING STORM WATER RUNOFF FROM ENTERING THE TRENCH DURING CONSTRUCTION.
- CONTRACTOR SHALL SECURE EXCAVATION AT THE END OF EACH DAY. THE OWNER MAY REQUIRE THAT NO TRENCHES BE LEFT OPEN OVERNIGHT IN STREETS OR POPULATED AREAS.
- TOPSOIL SHALL BE STOCKPILED AND REPLACED TO A MINIMUM DEPTH OF 12 INCHES AND DISC HARROWED TO A MINIMUM DEPTH OF 4 INCHES.
- FINISHED GROUND SHALL HAVE NO MORE ROCKS OVER 1 INCH THAN SURROUNDING UNDISTURBED GROUND.
- RESTORE GROUND TO ORIGINAL GRADE AND PREVENT PONDING OF STORM WATER RUNOFF ON ALL GROUND DISTURBED BY CONSTRUCTION ACTIVITIES.
- CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT OF ALL POWER AND TELEPHONE POLES AND GUY WIRES WITHIN 15 FEET OF PROPOSED SANITARY SEWER AND SHALL REPAIR DAMAGED POLES AND GUY WIRES OR RELOCATE POLES AND GUY WIRES AS REQUIRED BY THE UTILITY OWNER AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR MUST CONTACT & COORDINATE ALL WORK AND FEES W/ UTILITY OWNER AT NO ADDITIONAL COST TO THE OWNER.
- TRIMMING OF TREES SHALL BE ACCOMPLISHED USING A SAW OR PRUNING SHEARS. ALL CUT LIMBS OVER 1 INCH IN DIAMETER SHALL BE PAINTED WITH TREE WOUND PAINT IMMEDIATELY AFTER TREE TRIMMING.
- CONTRACTOR SHALL REPLACE ANY TREES REMOVED OR DESTROYED WITHOUT THE OWNER'S PERMISSION OR SHALL PAY FAIR MARKET VALUE (AS DETERMINED BY THE OWNER) TO THE OWNER.
- ANY FENCES DAMAGED OR REMOVED BY CONSTRUCTION ACTIVITIES SHALL BE REPLACED AT THE SAME LOCATION WITH A FENCE OF EQUAL OR SUPERIOR QUALITY.
- TEMPORARY FENCING SHALL BE REQUIRED WHERE INDICATED ON THE DRAWINGS, WHERE THERE IS LIVESTOCK, AND WHERE DAMAGED OR REMOVED FENCES ARE NOT TO BE REPLACED BY END OF SAME WORK DAY, OR AS DIRECTED BY OWNER. CONTRACTOR TO VERIFY PRESENCE OF LIVESTOCK WITH LANDOWNER PRIOR TO ENTERING PROPERTY.
- CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO ORDERING PIPE AND SUFFICIENTLY IN ADVANCE OF THE CONSTRUCTION SO THAT IF IT IS NECESSARY TO CHANGE OR MOVE THE UTILITY, THE PROGRESS OF THE WORK WILL NOT BE DELAYED, & ALL COSTS INCURRED FOR UTILITY CONFLICTS WILL BE AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING SERVICE LINES CROSSED OR EXPOSED BY HIS CONSTRUCTION OPERATIONS. WHERE EXISTING SERVICE LINES ARE CUT, BROKEN OR DAMAGED THE CONTRACTOR SHALL IMMEDIATELY REPLACE THE SERVICE LINES IN KIND WITH LIKE OR BETTER MATERIALS.
- CONTRACTOR SHALL PROVIDE A STORM WATER POLLUTION PREVENTION PLAN AND PROVIDE ALL APPURTENANCES TO COMPLY WITH THE LATEST TCEQ STORM WATER POLLUTION PREVENTION REGULATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR FILING A NOTICE OF INTENT (NOI) AT THE START OF CONSTRUCTION WITH THE TCEQ AND A NOTICE OF TERMINATION (NOT) AT THE END, ALSO WITH THE TCEQ.
- CONTRACTOR SHALL PROVIDE ADEQUATE MEASURES FOR DEWATERING AS NECESSARY.
- CONTRACTOR SHALL REMOVE FENCES AS REQUIRED FOR CONSTRUCTION. BARBED WIRE, WROUGHT IRON, CHAIN AND CHAIN LINK FENCES SHALL BE REPLACED OR RECONSTRUCTED. NEW MATERIALS SHALL MATCH EXISTING FENCES. ALL WOOD FENCES SHALL BE REPLACED WITH NEW CEDAR WITH THE POSTS MATCHING THE EXISTING POSTS. ANY FENCING REMOVED SHALL BE REPLACED IN KIND WITH LIKE OR BETTER MATERIALS, AND BE PAINTED OR STAINED TO MATCH EXISTING FENCE.
- CONTRACTOR SHALL PROTECT ALL UNDERGROUND IRRIGATION SYSTEMS (KNOWN AND UNKNOWN). ALL DAMAGE SHALL BE REPAIRED BY IRRIGATOR LICENSED IN THE STATE OF TEXAS.
- CONTRACTOR SHALL SUBMIT A WRITTEN PLAN AND SCHEDULE 14 DAYS IN ADVANCE OF CONSTRUCTION ACTIVITIES REQUIRING REPLACEMENT OR SUPPORT OF EXISTING SANITARY SEWER PIPE, WATER PIPE OR STORM DRAIN PIPE. THE PLAN SHALL DESCRIBE IN DETAIL THE METHOD FOR REPLACING OR SUPPORTING EXISTING PIPE AND ASSOCIATED SCHEDULE. (I.E. SHUTDOWN/TIE-IN)
- CONTRACTOR SHALL PROVIDE THE OWNER AS-BUILT ELEVATIONS OF MANHOLE COVERS AND ELEVATION OR HEIGHT TO GRADE RINGS.
- FOLLOWING INSTALLATION ACROSS WATERWAYS, WATERWAY BOTTOM AND BANKS SHALL BE RESTORED TO THEIR ORIGINAL CONFIGURATION AND REVEGETATED.
- THE CONTRACTOR SHALL EMPLOY ADEQUATE METHODS TO MINIMIZE TURBIDITY IN WATERWAYS DURING ALL PHASES OF THE PROJECT. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS AND REGULATIONS CONCERNING WATER POLLUTION AND CONTROL OF EROSION.
- CONTRACTOR SHALL CLEAN THE RIGHT-OF-WAY OF ANY AND ALL TRASH.
- NO FIRES WILL BE ALLOWED. BRUSH AND CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE SITE.
- LIFT STATION GATE SHALL BE KEPT CLOSED TO CONTROL ACCESS TO THE PROJECT SITE.
- ANY EXISTING UTILITY DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED IMMEDIATELY WITH LIKE OR BETTER MATERIALS.
- CONTRACTOR SHALL NOT DAMAGE EXISTING TREES LARGER THAN 3 INCHES IN DIAMETER (MEASURED 4 FT. ABOVE THE GROUND) THAT ARE MORE THAN TWELVE FEET FROM CENTERLINE OF NEW INTERCEPTOR. THE CONTRACTOR MUST OBTAIN APPROVAL FROM THE OWNER'S REPRESENTATIVE BEFORE ANY TREES MORE THAN 10-FT FROM CENTERLINE OF INTERCEPTOR CAN BE REMOVED OR TRIMMED.
- CONTRACTOR SHALL BE REQUIRED TO INSTALL TEMPORARY TEST PLUGS FOR HYDROSTATIC TESTING AS NECESSARY AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR, AT HIS DISCRETION, MAY TUNNEL UNDER EXISTING UTILITIES OR ROADWAYS OTHER THAN THOSE CROSSINGS SPECIFICALLY SHOWN ON THE DRAWINGS, AT NO ADDITIONAL COST TO THE OWNER.
- IT SHALL BE THE COMPLETE RESPONSIBILITY OF THE CONTRACTOR TO REBUILD THE CONCRETE OR ASPHALT PAVEMENT REPLACEMENT SECTIONS TO THE SAME LINE AND GRADE AS WAS EXISTING PRIOR TO PIPELINE CONSTRUCTION. SEE NOTE ON TEMP. ASPHALT RAMPS.
- ALL NEW TREES REQUESTED BY THE OWNER SHALL BE PLANTED BY A NURSERYMAN LICENSED IN THE STATE OF TEXAS.
- SURVEY POINTS INDICATED AS "CONTROL POINT" (IRON ROD SETS, "X" IN CONC, AND 60D NAILS POINT") SHALL BE USED FOR HORIZONTAL AND VERTICAL SURVEY CONTROL FOR THE PROJECT.
- THE CONTRACTOR SHALL RESTORE AT HIS OWN EXPENSE, TEMPORARY ROADS AND CONSTRUCTION WORK AREAS.
- IN ACCORDANCE WITH TEXAS STATE LAW, AT LEAST 2 DAYS PRIOR TO BEGINNING EXCAVATION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING A TEXAS REGISTERED NOTIFICATION CENTER (I.E. TEXAS ONE CALL, DIG TESS, ETC.). IN ORDER TO HAVE EXISTING UTILITIES LOCATED. DIGTESS: 1-800-344-8377.
- BLASTING WILL NOT BE ALLOWED.
- CONSTRUCTION SURVEYING IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR INCLUDING BUT NOT LIMITED TO LIMITS OF PERMANENT EASEMENT, TEMPORARY EASEMENT, CENTERLINE, ETC. THE CONTRACTOR SHALL VERIFY ALL CONTROL MONUMENTATION PRIOR TO BEGINNING CONSTRUCTION.
- CLEARING AND GRUBBING MAY BEGIN NO SOONER THAN TWO WEEKS PRIOR TO PIPE TRENCHING OPERATIONS. PIPE STRINGING SHALL BE NO MORE THAN TWO WEEKS PRIOR TO PIPE LAYING. BACKFILL, CLEAN-UP, AND SURFACE RESTORATION SHALL BE COMPLETED NO MORE THAN TWO WEEKS AFTER PIPE LAYING AND NO MORE THAN 500 FEET FROM PIPE LAYING OPERATIONS. THE SITE SHALL BE KEPT CLEAN OF TRASH AT ALL TIMES. FAILURE TO COMPLY WITH THESE REQUIREMENTS MAY RESULT IN WITHHOLDING SOME OR ALL PAYMENT TO THE CONTRACTOR.
- CONTRACTOR SHALL MAINTAIN AT LEAST ONE LANE OF TRAFFIC ON ALL ROADS AT ALL TIMES, AND CONSTRUCT TEMPORARY BYPASS, IF NECESSARY, IF THE ROADWAY MUST BE CLOSED TO FACILITATE CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE OWNER AND THE RIGHT-OF-WAY OWNER FOR THE ROADWAY FOR APPROVAL NO LESS THAN 14 DAYS IN ADVANCE OF THE PROPOSED ROADWAY CLOSURE. ANY COMMENTS RECEIVED ON THE PLAN BY THE OWNER OR RIGHT-OF-WAY OWNER SHALL BE INCORPORATED INTO THE PLAN. THE PLAN SHALL BE PREPARED SPECIFICALLY FOR THIS PROJECT AND SHALL BE SEALED AND SIGNED BY AN ENGINEER LICENSED IN THE STATE OF TEXAS. THE COST TO PREPARE THE TRAFFIC CONTROL PLAN, WHEN REQUIRED, SHALL BE MADE INCIDENTAL TO THE PROJECT. IF AT ANYTIME DURING CONSTRUCTION THE CONTRACTOR'S PROPOSED PLAN OF OPERATION FOR HANDLING TRAFFIC DOES NOT PROVIDE FOR THE SAFE, COMFORTABLE MOVEMENT OF TRAFFIC, THE CONTRACTOR SHALL IMMEDIATELY CHANGE HIS OPERATIONS TO CORRECT THE UNSATISFACTORY CONDITIONS.
- CONTRACTOR SHALL PROVIDE APPROPRIATE SIGNAGE, BARRICADES, FLAGMEN, ETC. REQUIRED TO MAINTAIN SAFE TRAFFIC FLOW AT ALL TIMES FOR ANY WORK ACTIVITY ON OR ADJACENT TO ANY CITY, COUNTY OR TXDOT ROADWAY. ALL TRAFFIC CONTROL MEASURES SHALL BE IN ACCORDANCE WITH TXDOT'S MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- CONTRACTOR'S OPERATIONS MUST STAY WITHIN THE PERMANENT AND TEMPORARY EASEMENTS AND CONTRACTOR'S WORK AREA DESIGNATED ON THE PLAN SHEETS. ANY DAMAGE OUTSIDE THESE OPERATIONS SHALL BE REPAIRED AND/OR REPLACED AT THE CONTRACTOR'S EXPENSE. ACCESS ROUTES OR OPERATIONS WHICH FALL OUTSIDE THE DESIGNATED AREAS WILL ONLY BE ALLOWED WITH PRIOR LANDOWNER CONSENT. CONTRACTOR SHALL PROVIDE THE OWNER WITH A COPY OF ANY AGREEMENTS MADE BETWEEN THE LANDOWNER AND THE CONTRACTOR.
- THE CONTRACTOR SHALL PROVIDE A VIDEO TAPE TO THE OWNER DOCUMENTING THE CONDITION OF THE PIPELINE ROUTE, INCLUDING THE PERMANENT EASEMENT, TEMPORARY EASEMENT AND SURROUNDING AREA PRIOR TO THE START OF ANY CONSTRUCTION. VIDEO TO BE PROVIDED PRIOR TO FIRST PAYMENT TO CONTRACTOR.
- PROVIDE ACCESS FOR LANDOWNERS AT EXISTING ROADS AND DRIVES AT ALL TIMES.
- WHEN NEW INTERCEPTOR CONSTRUCTION CROSSES UNDER EXISTING PIPELINES, CONTRACTOR SHALL BACKFILL EXISTING PIPELINE WITH CRUSHED CONCRETE FROM TOP OF PIPE ZONE OF NEW WATERLINE TO ONE FOOT ABOVE EXISTING PIPELINE.
- WHERE NEW FORCE MAIN CROSSES EXISTING SANITARY SEWER PIPE, CONTRACTOR SHALL CENTER ONE JOINT OF NEW PIPE OVER EXISTING SEWER PIPE SUCH THAT ENDS OF THE NEW PIPE JOINT ARE EQUIDISTANT AND AT LEAST NINE FEET HORIZONTALLY FROM THE CENTERLINE OF THE SEWER PIPE.
- WHERE IT IS NECESSARY FOR LANDOWNERS TO MOVE TRAILERS, SHEDS, OR OTHER FACILITIES OR IMPROVEMENTS, OR WHEN THE CONTRACTOR INTENDS TO MOVE SUCH FACILITIES OR IMPROVEMENTS, CONTRACTOR SHALL NOTIFY THE LAND OWNER AND THE OWNER NO LESS THAN 14 DAYS PRIOR TO MOVING THE FACILITIES OR IMPROVEMENTS.
- WHERE NOT OTHERWISE NOTED BY GRADING PLAN RESTORE GROUND TO ORIGINAL GRADE AND PREVENT PONDING OF STORM WATER RUNOFF ON ALL GROUND DISTURBED BY CONSTRUCTION ACTIVITIES.
- CONTRACTOR SHALL PROTECT ALL TREES, LANDSCAPING AND STRUCTURES LOCATED WITHIN THE TEMPORARY AND PERMANENT EASEMENTS. TREES, LANDSCAPING AND STRUCTURES NOT INDICATED FOR REMOVAL OR TRANSPLANT ON THE PLANS SHALL NOT BE REMOVED OR TRANSPLANTED WITHOUT RECEIVING WRITTEN APPROVAL FROM THE OWNER.
- FORCE MAIN PIPE SHALL BE P.V.C., AWWA C905, DR21 (GREEN).
- DUCTILE IRON FITTINGS SHALL BE CERAMIC EPOXY LINED.
- CONTRACTOR SHALL PROVIDE GREEN EMS MARKER PADS AT ALL BENDS & CHANGES IN HORIZONTAL ALIGNMENT & EVERY 250 L.F. ALONG THE LENGTH OF THE FORCE MAIN.
- CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS & PROPERTIES AT ALL TIMES (NO PAY ITEM).

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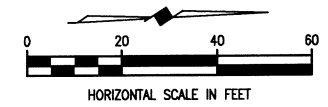
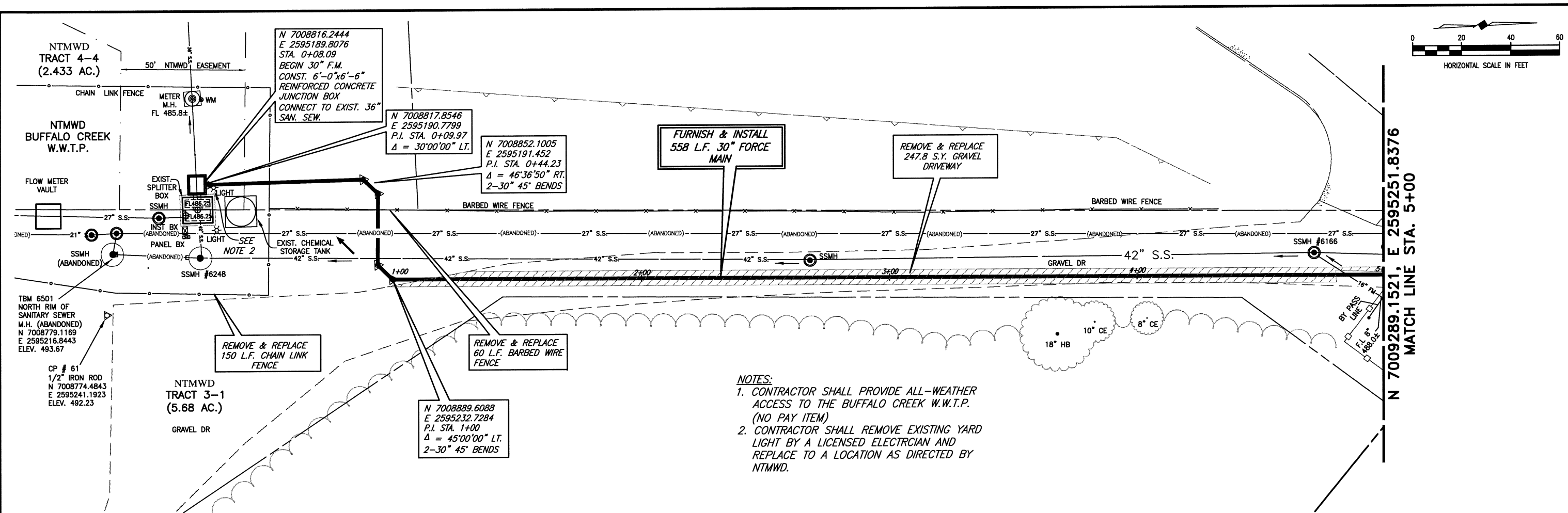
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CITY OF ROCKWALL, TEXAS
 SQUABBLE CREEK FORCE MAIN
GENERAL NOTES

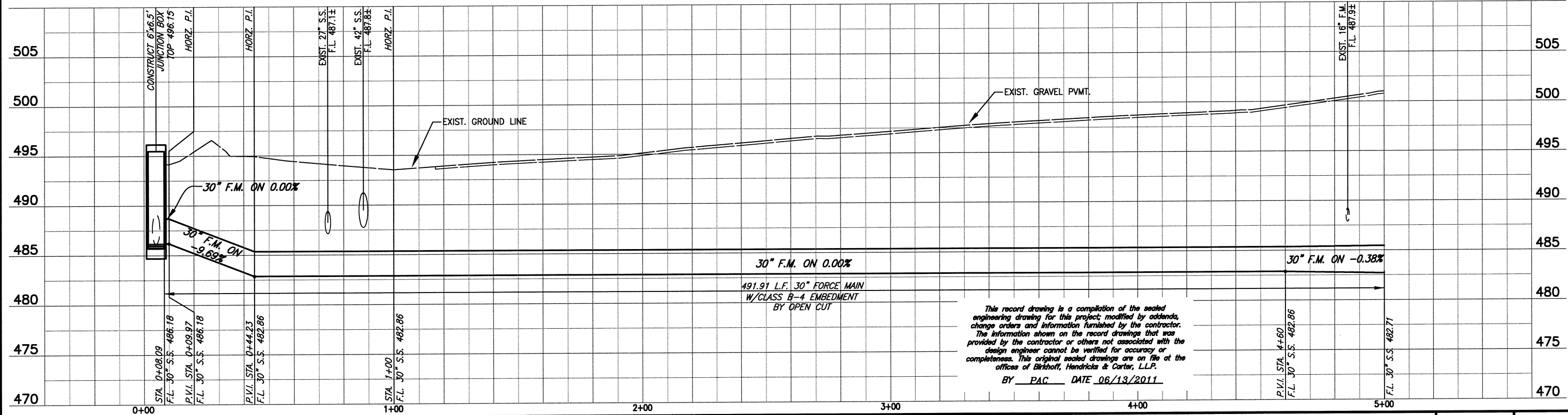
BHC
 PROJECT NO.
 2007-110
 SHEET NO.
 1
 April, 2010

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- NOTES:**
1. CONTRACTOR SHALL PROVIDE ALL-WEATHER ACCESS TO THE BUFFALO CREEK W.W.T.P. (NO PAY ITEM)
 2. CONTRACTOR SHALL REMOVE EXISTING YARD LIGHT BY A LICENSED ELECTRICIAN AND REPLACE TO A LOCATION AS DIRECTED BY NTMWD.



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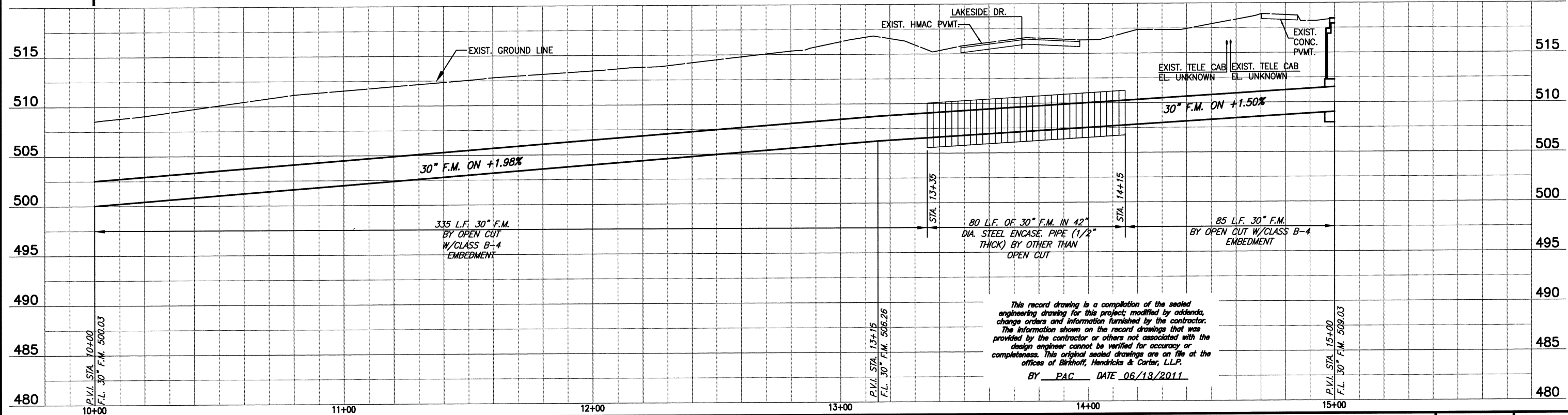
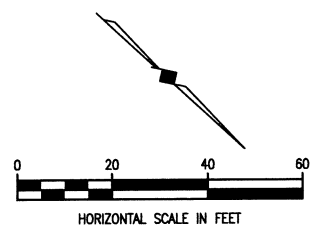
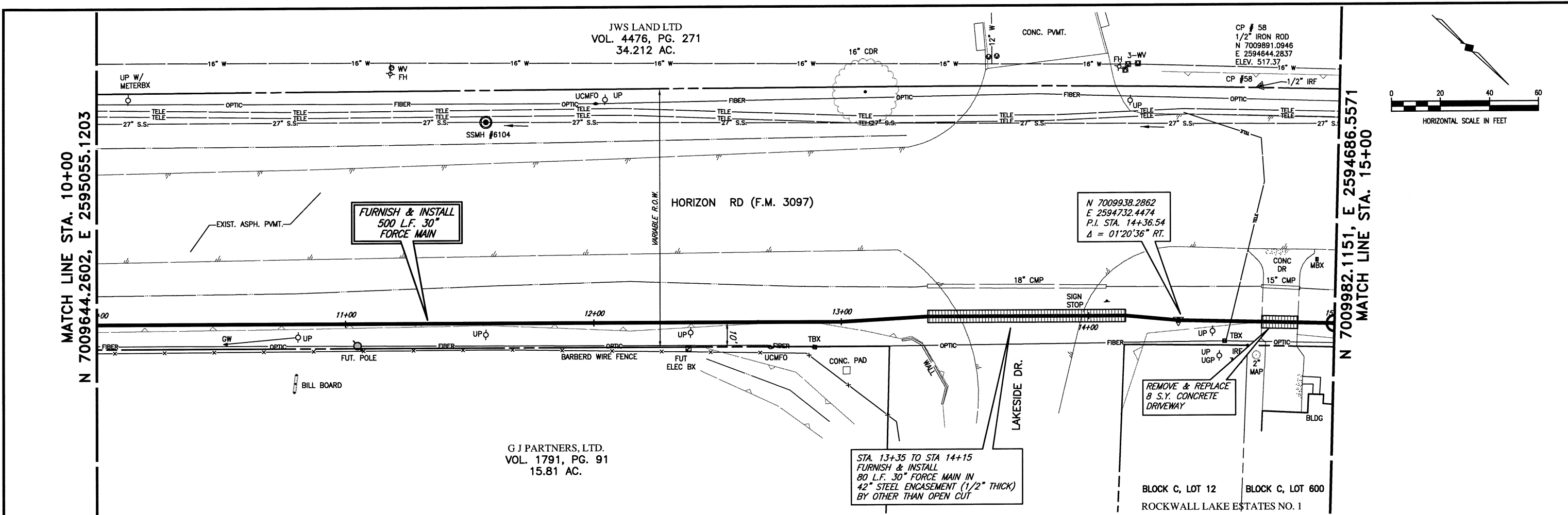


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 8/16/10

CITY OF ROCKWALL, TEXAS
 SQUABBLE CREEK FORCE MAIN
 PLAN AND PROFILE
 STA. 0+08.09 TO STA. 5+00

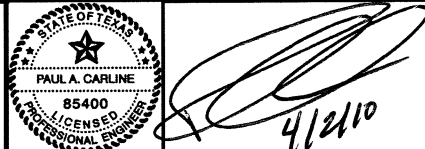
BHC PROJECT NO. 2007-110
 May, 2010
 SHEET NO. **2**

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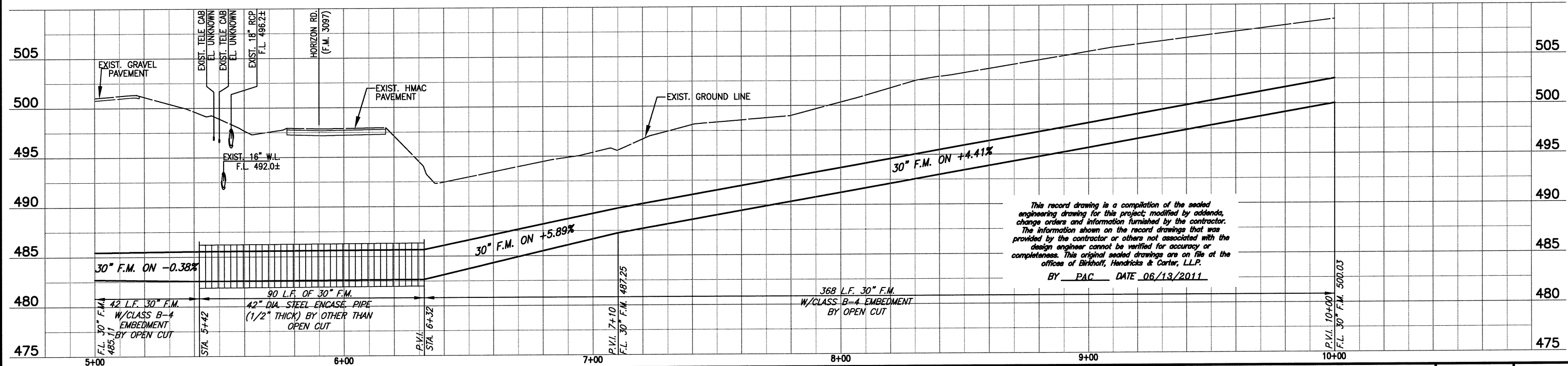
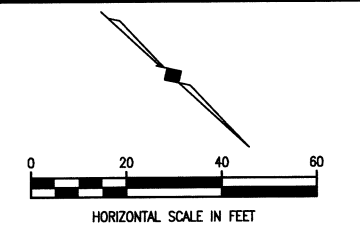
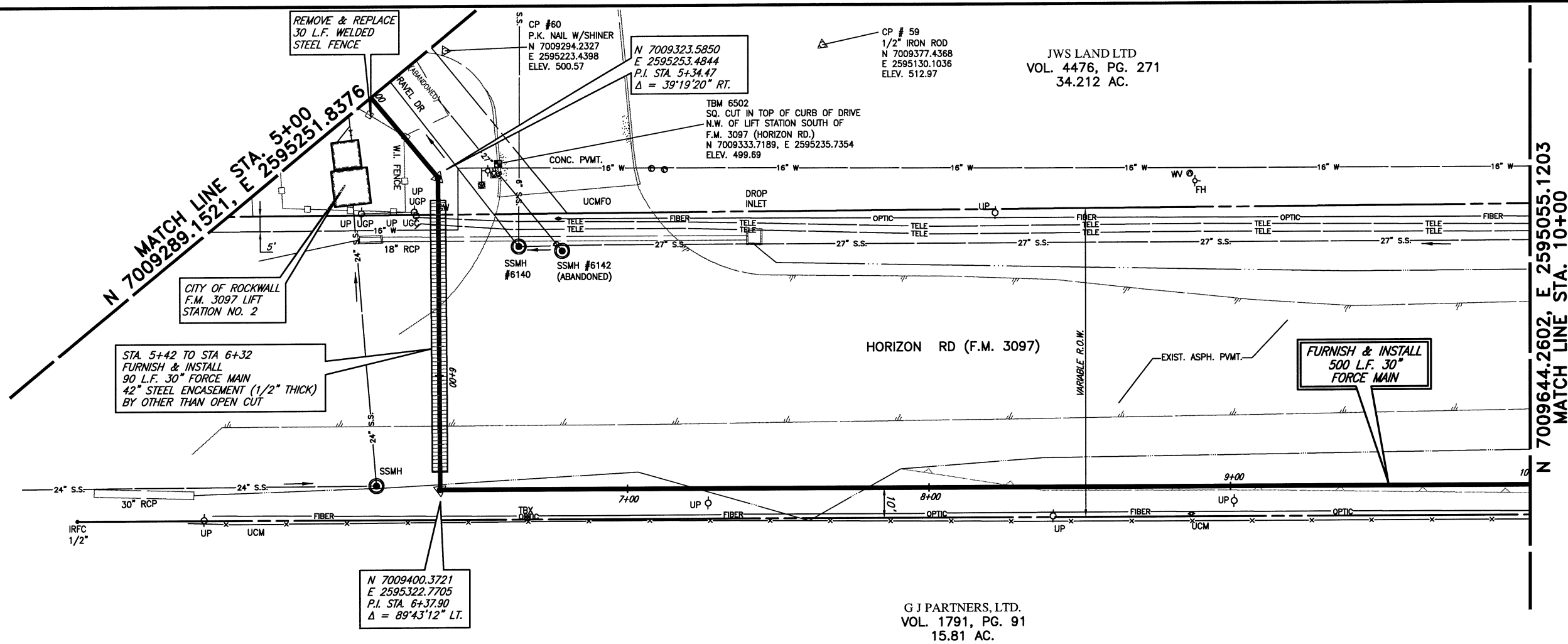


CITY OF ROCKWALL, TEXAS
 SQUABBLE CREEK FORCE MAIN
 PLAN AND PROFILE
 STA. 10+00 TO STA. 15+00

BHC
 PROJECT NO.
 2007-110
 April, 2010

SHEET NO.
4

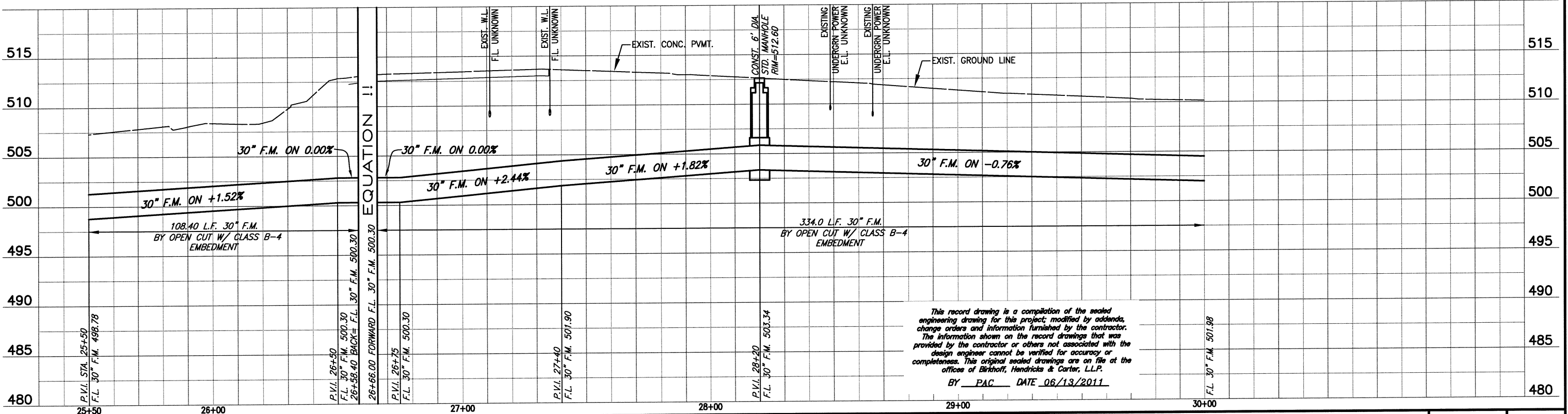
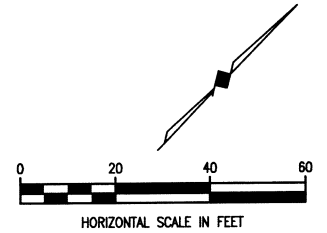
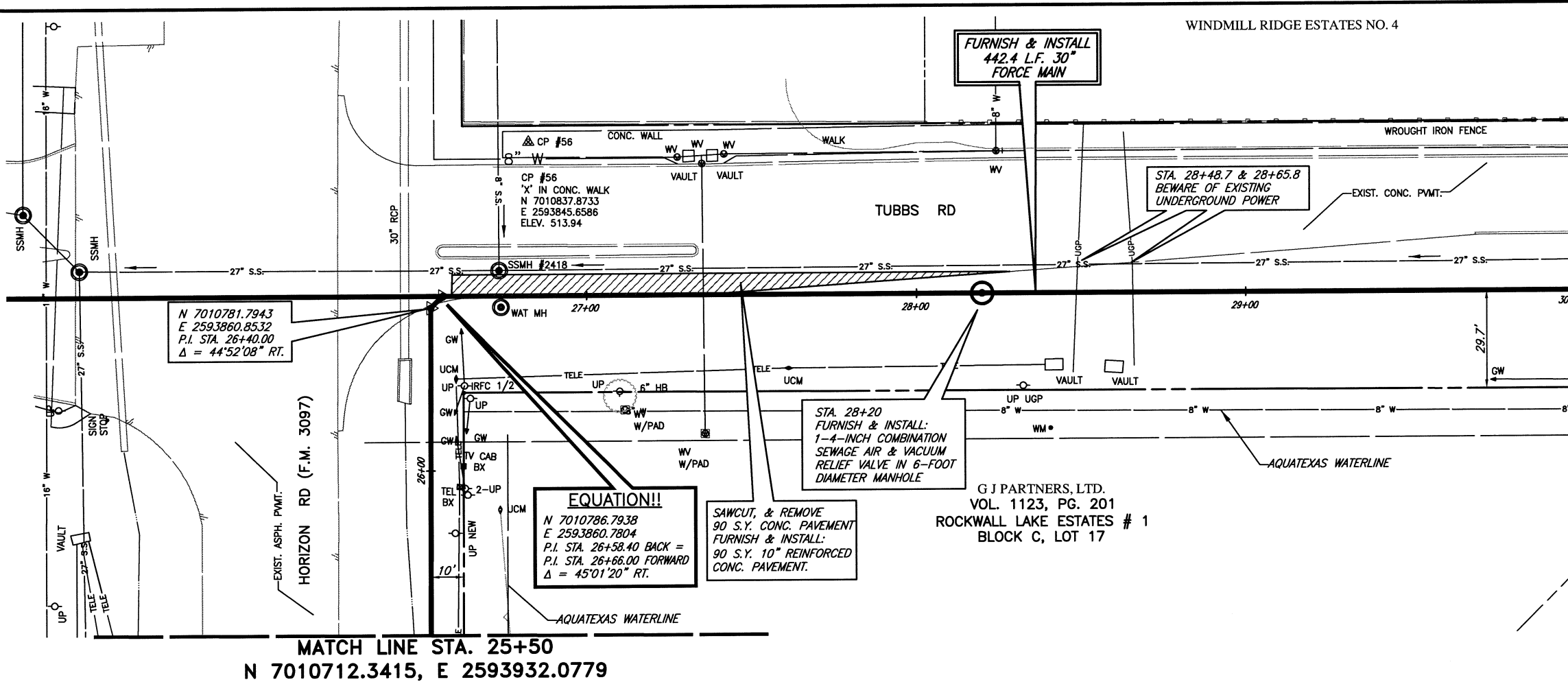
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BIRKHOFF, HENDRICKS & CARTER, L.L.P. PROFESSIONAL ENGINEERS Texas Firm F526 11910 Greenville Ave., Suite 600 Dallas, Texas (214) 361-7900			CITY OF ROCKWALL, TEXAS SQUABBLE CREEK FORCE MAIN PLAN AND PROFILE STA. 5+00 TO STA. 10+00	BHC PROJECT NO. 2007-110 April, 2010	SHEET NO. 3
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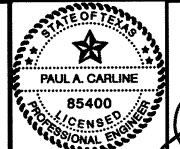
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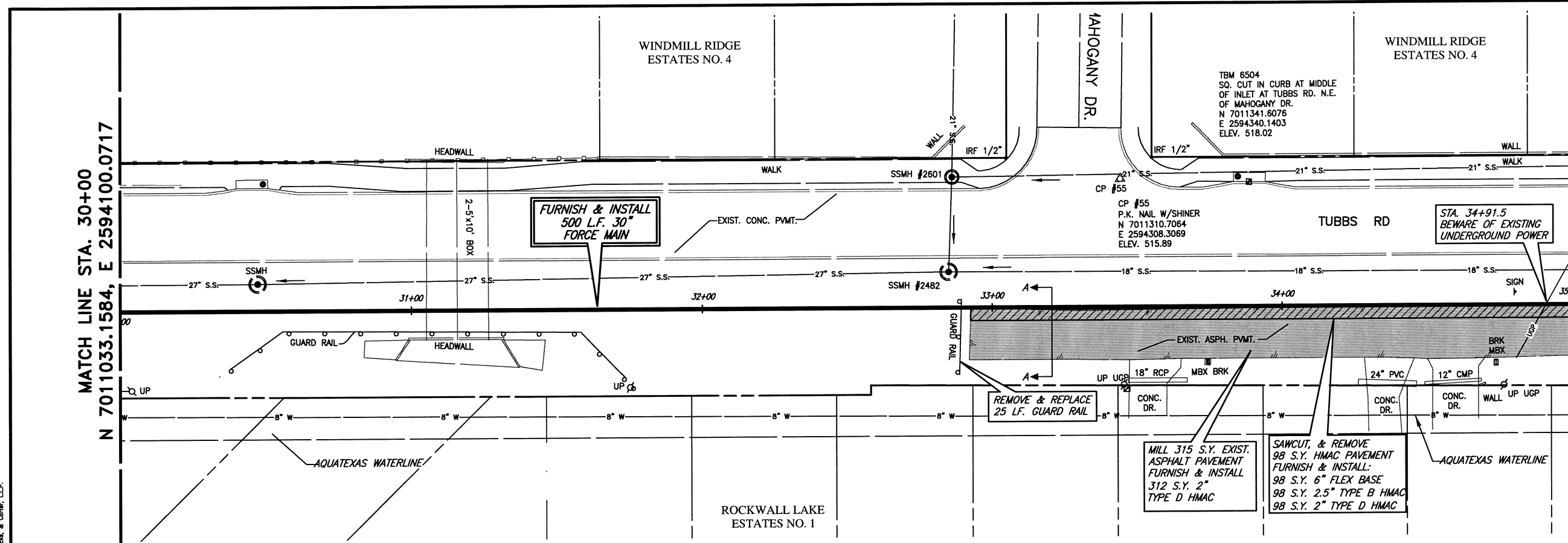


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CITY OF ROCKWALL, TEXAS
 SQUABBLE CREEK FORCE MAIN
PLAN AND PROFILE
 STA. 25+50 TO STA. 30+00

BHC PROJECT NO. 2007-110
 April, 2010
 SHEET NO. **7**

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SECTION A-A NOTES:

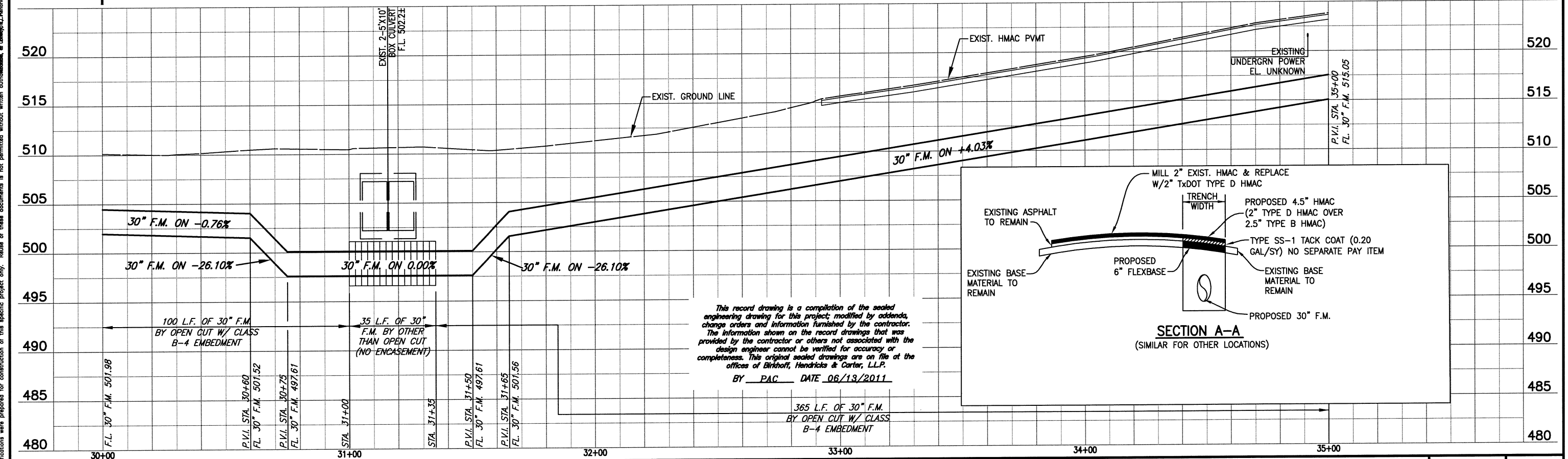
- 1) ALL TYPE D HMAC SHALL BE INSTALLED AT THE SAME TIME.
- 2) SEAL ALL CRACKS IN EXISTING HMAC AFTER MILLING & FURNISH & INSTALL 0.20 GAL/S.Y. MC-30 OVER MILLED HMAC PRIOR TO PLACING TYPE B HMAC AND OVER TYPE B HMAC PRIOR TO PLACING TYPE D HMAC (NO PAY ITEM).

LEGEND

- REMOVE EXISTING HMAC & REPLACE W/6" FLEX BASE & 4.5" HMAC
- MILL 2" & REPLACE 2" HMAC

MATCH LINE STA. 30+00
N 7011033.1584, E 2594100.0717

MATCH LINE STA. 35+00
N 7011391.8231, E 2594448.4389



30+00	FL. 30" F.M. 501.98	P.V.I. STA. 30+60 FL. 30" F.M. 501.52	P.V.I. STA. 30+75 FL. 30" F.M. 497.61	STA. 31+00	STA. 31+35	P.V.I. STA. 31+50 FL. 30" F.M. 497.61	P.V.I. STA. 31+65 FL. 30" F.M. 501.56	32+00	33+00	34+00	35+00
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Dallas, Texas (214) 361-7900

PAUL A. CARLINE
85400
LICENSED PROFESSIONAL ENGINEER

4/2/10

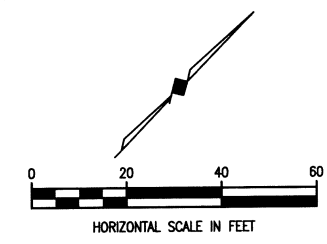
CITY OF ROCKWALL, TEXAS
SQUABBLE CREEK FORCE MAIN
PLAN AND PROFILE
STA. 30+00 TO STA. 35+00

BHC PROJECT NO. 2007-110	SHEET NO. 8
April, 2010	

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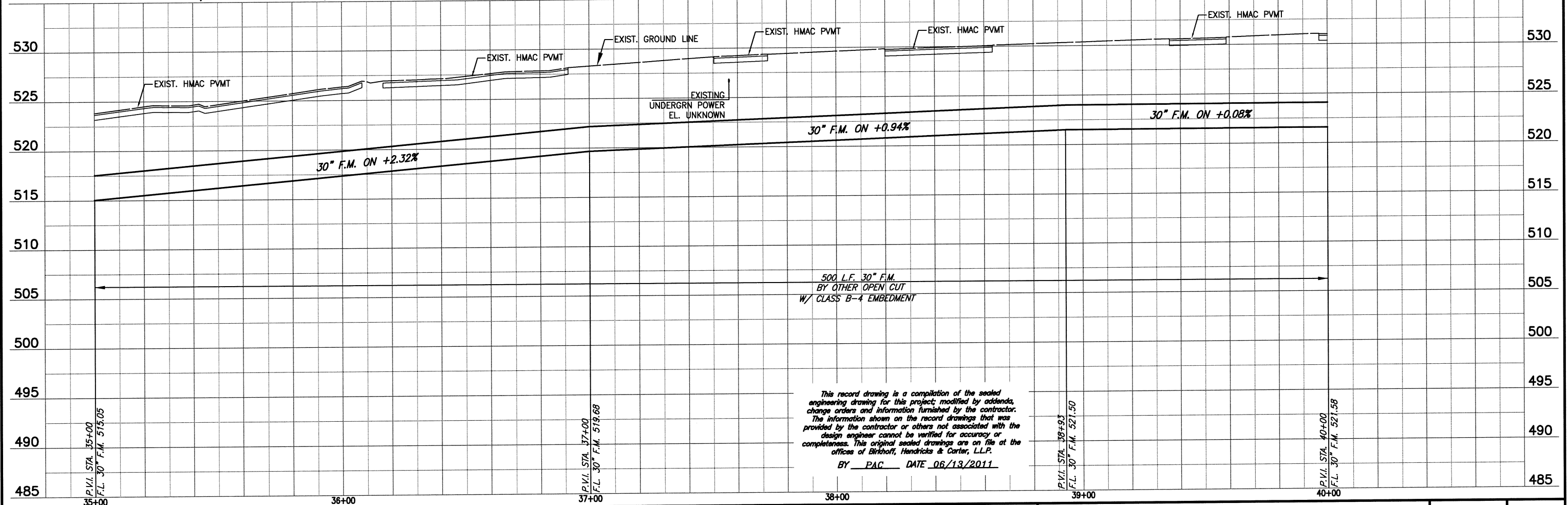
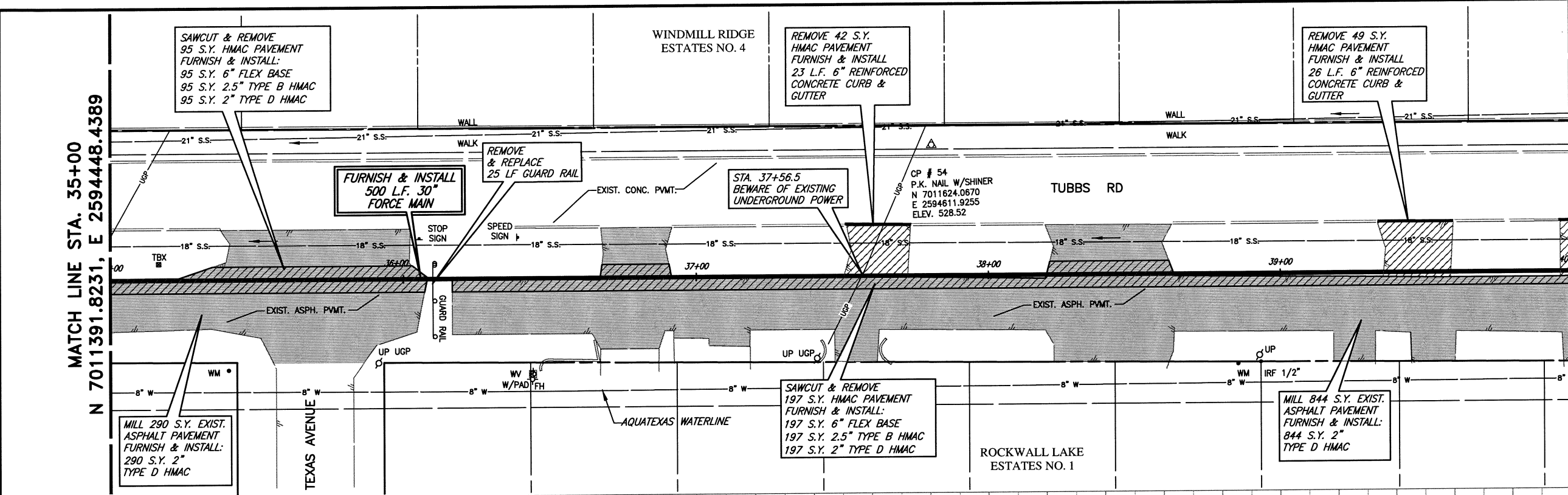
MATCH LINE STA. 35+00
N 7011391.8231, E 2594448.4389

MATCH LINE STA. 40+00
N 7011750.4877, E 2594796.8060



LEGEND

- REMOVE EXISTING HMAc & REPLACE W/6" FLEX BASE & 4.5" HMAc
- MILL 2" & REPLACE 2" HMAc
- REMOVE EXISTING HMAc



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 BY PAC DATE 06/13/2011

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 PROFESSIONAL ENGINEERS
 Texas Firm F526
 11910 Greenville Ave., Suite 600
 Dallas, Texas (214) 361-7900



Handwritten signature and date: 4/2/10

CITY OF ROCKWALL, TEXAS
 SQUABBLE CREEK FORCE MAIN
 PLAN AND PROFILE
 STA. 35+00 TO STA. 40+00

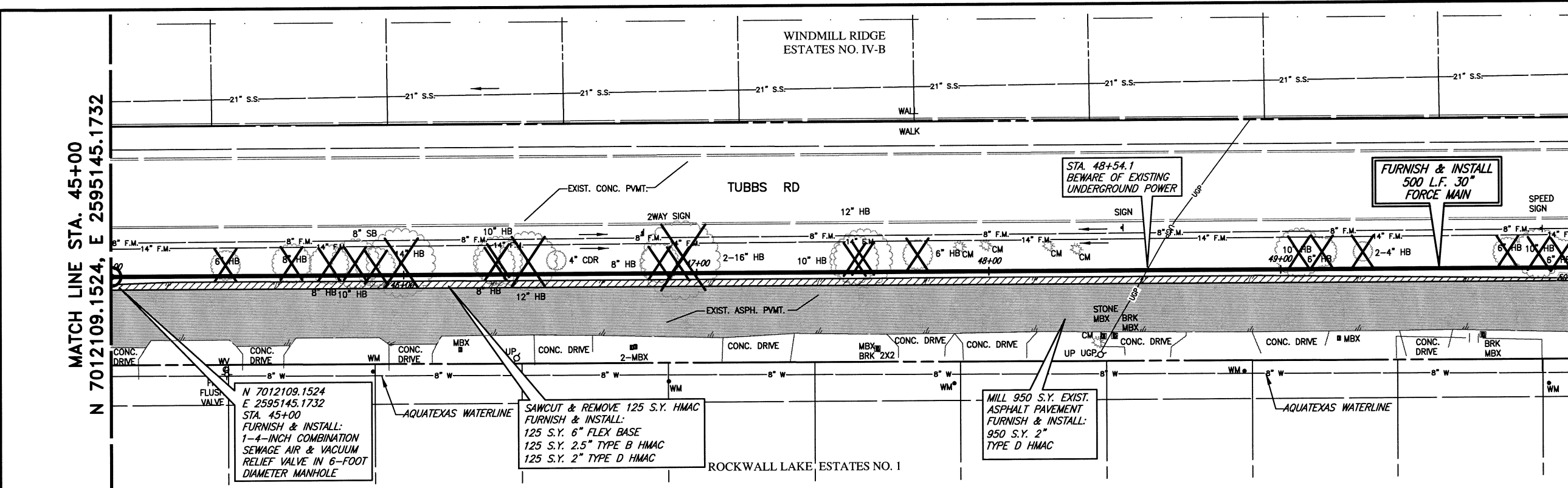
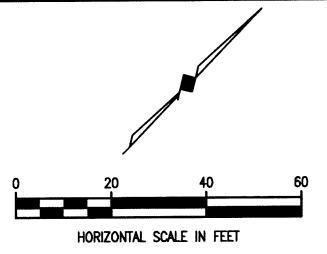
BHC
 PROJECT NO.
 2007-110
 April, 2010

SHEET NO.
9

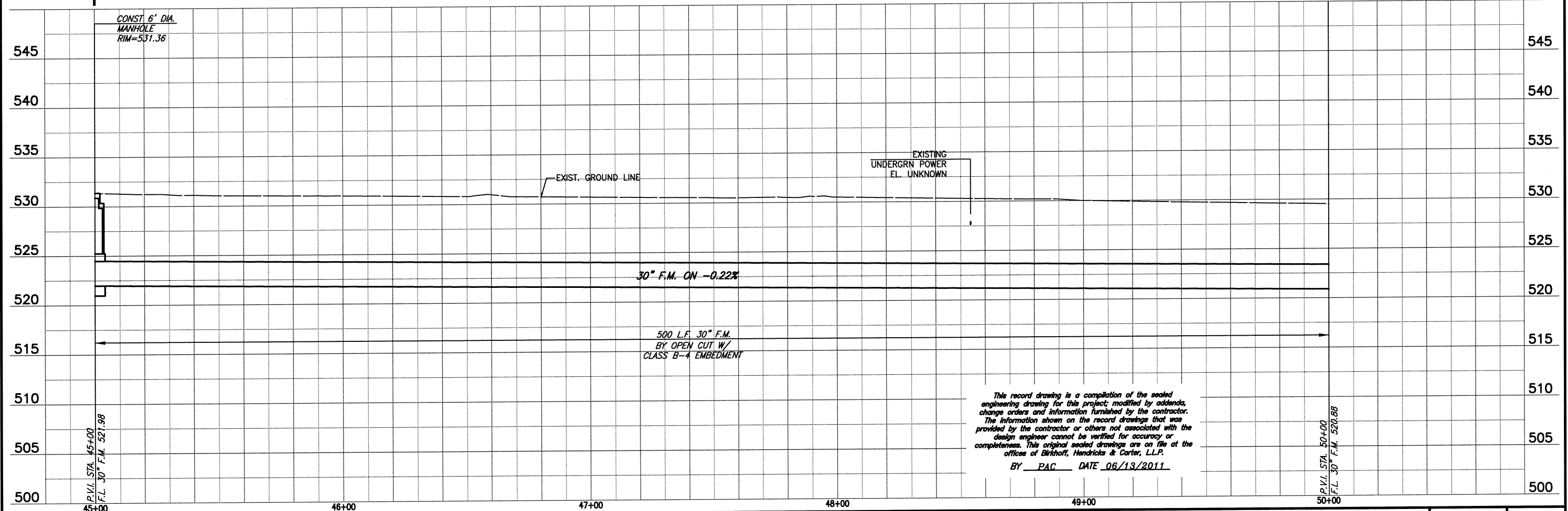
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MATCH LINE STA. 45+00
N 7012109.1524, E 2595145.1732

N 7012467.8171, E 2595493.5403
MATCH LINE STA. 50+00



- LEGEND**
- REMOVE EXISTING HMAC & REPLACE W/6" FLEX BASE & 4.5" HMAC
 - MILL 2" & REPLACE 2" HMAC
 - PROPOSED TREE REMOVAL



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P.V.I. STA. 50+00
F.L. 30" F.M. 520.88

P.V.I. STA. 45+00
F.L. 30" F.M. 521.98

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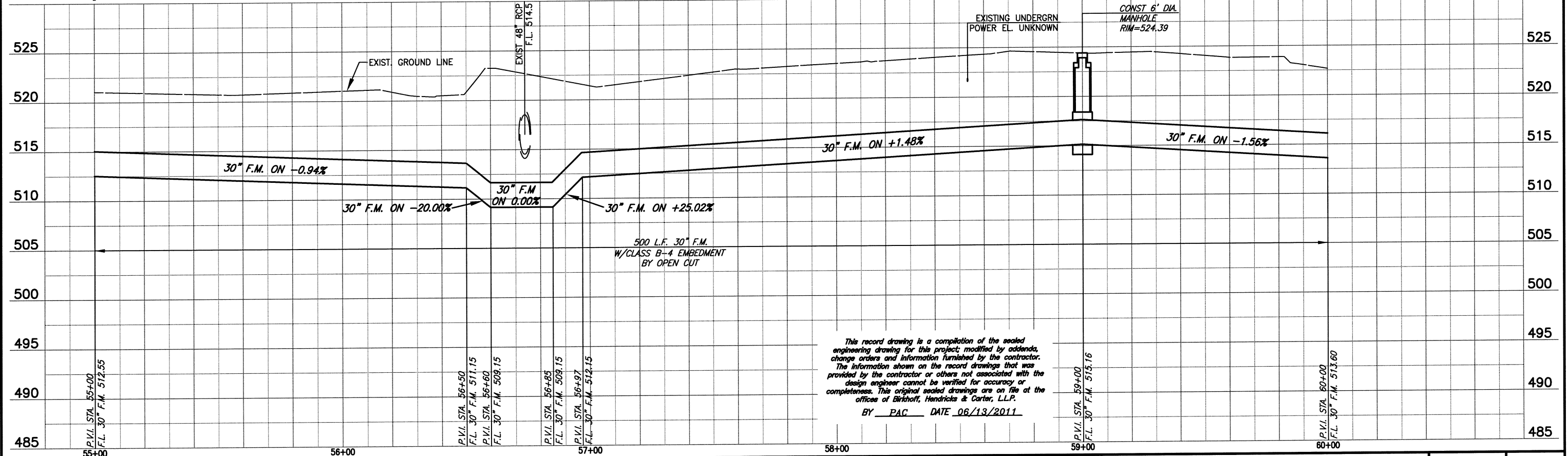
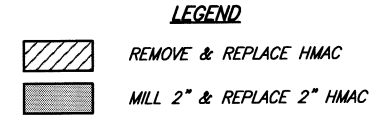
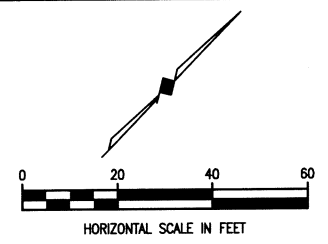
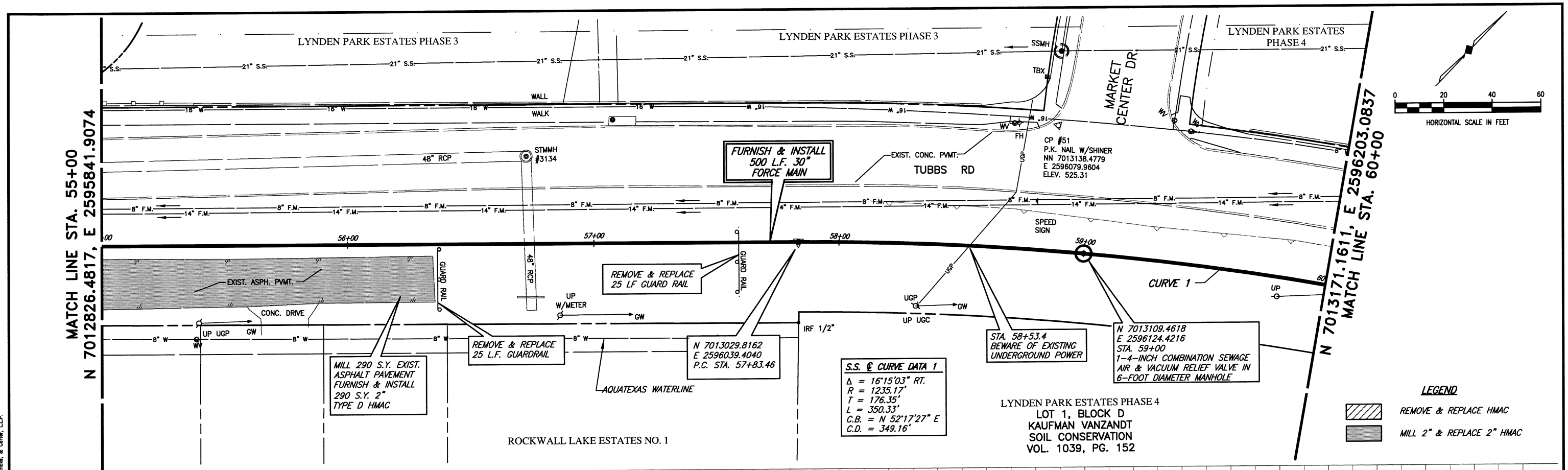


[Signature]
4/12/10

CITY OF ROCKWALL, TEXAS
SQUABBLE CREEK FORCE MAIN
PLAN AND PROFILE
STA. 45+00 TO STA. 50+00

BHC
PROJECT NO.
2007-110
April, 2010
SHEET NO.
11

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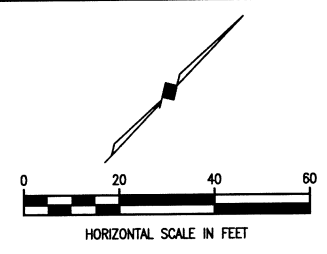
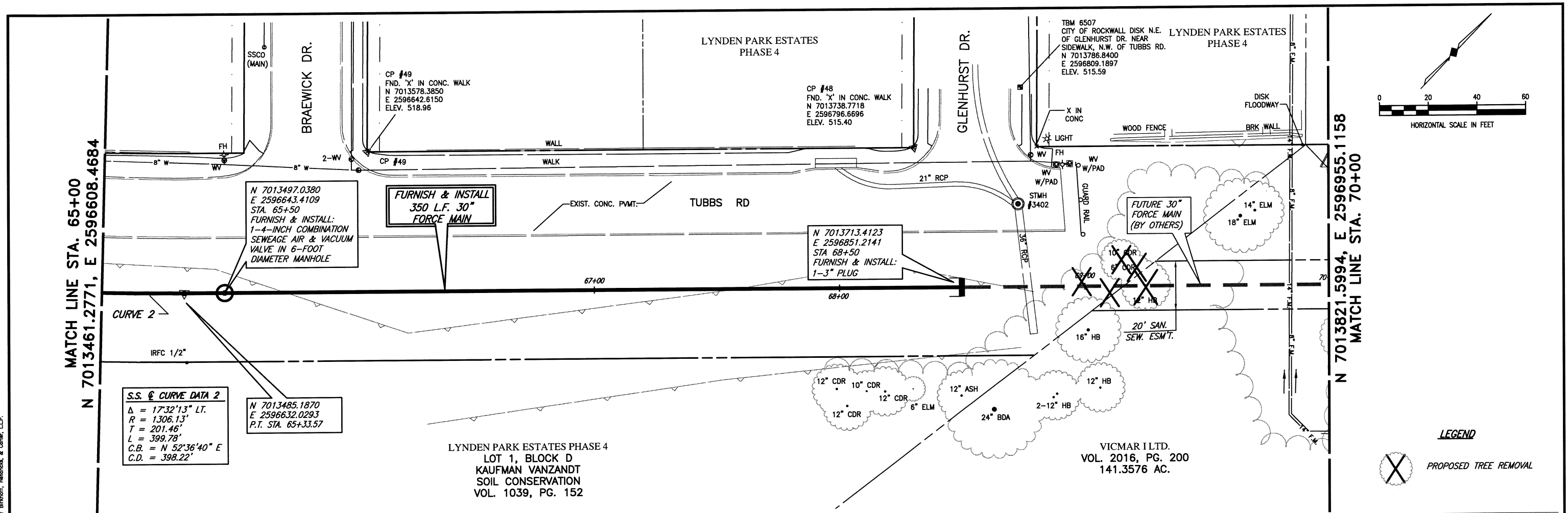


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BY PAC DATE 06/13/2011

<p>BIRKHOFF, HENDRICKS & CARTER, L.L.P. PROFESSIONAL ENGINEERS Texas Firm F526 11910 Greenville Ave., Suite 600 Dallas, Texas (214) 361-7900</p>		<p>CITY OF ROCKWALL, TEXAS SQUABBLE CREEK FORCE MAIN PLAN AND PROFILE STA. 55+00 TO STA. 60+00</p>	<p>BHC PROJECT NO. 2007-110 April, 2010</p>	<p>SHEET NO. 13</p>
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S.S. & CURVE DATA 2
 $\Delta = 17^{\circ}32'13''$ LT.
 $R = 1306.13'$
 $T = 201.46'$
 $L = 399.78'$
 $C.B. = N 52^{\circ}36'40'' E$
 $C.D. = 398.22'$

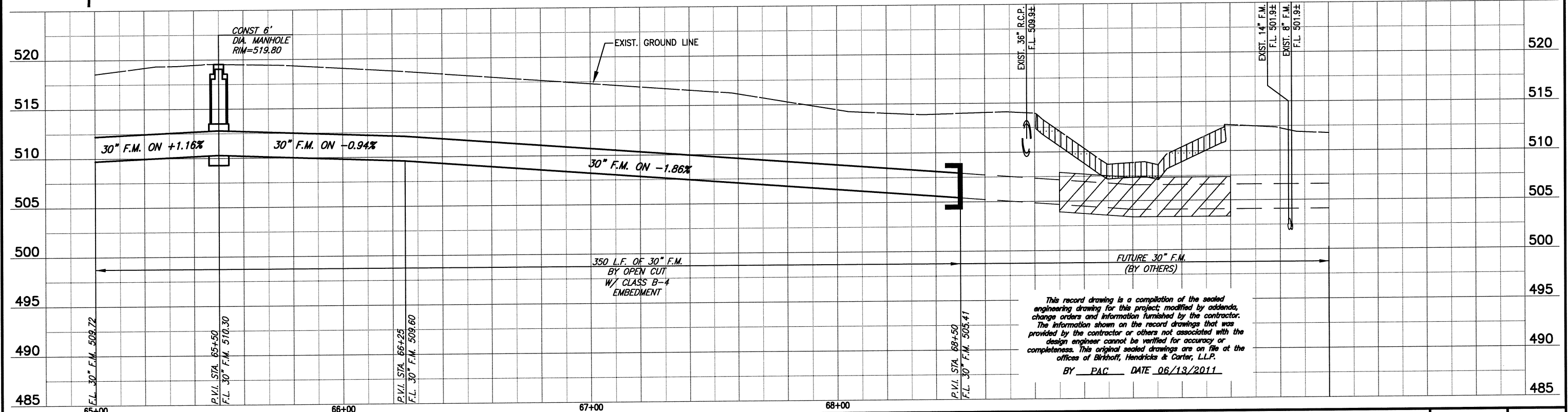
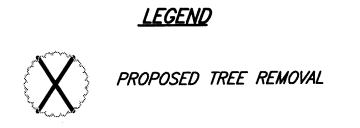
N 7013485.1870
 E 2596632.0293
 P.T. STA. 65+33.57

**FURNISH & INSTALL
 350 L.F. 30"
 FORCE MAIN**

N 7013713.4123
 E 2596851.2141
 STA. 68+50
 FURNISH & INSTALL:
 1-3" PLUG

**FUTURE 30"
 FORCE MAIN
 (BY OTHERS)**

VICMAR ILTD.
 VOL. 2016, PG. 200
 141.3576 AC.



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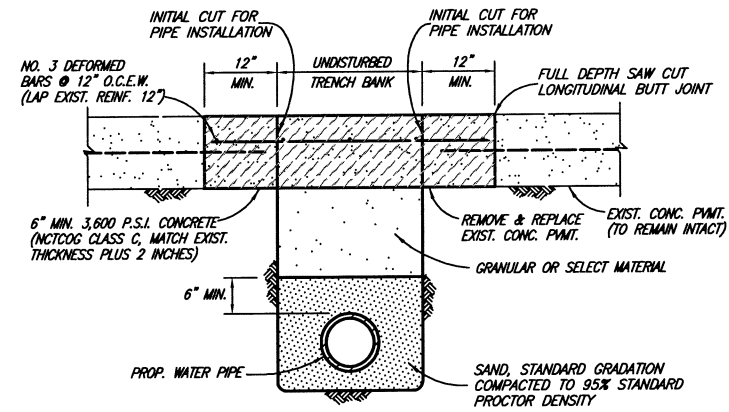
Handwritten signature and date: 4/2/10

CITY OF ROCKWALL, TEXAS
 SQUABLE CREEK FORCE MAIN
PLAN AND PROFILE
 STA. 65+00 TO STA. 68+50

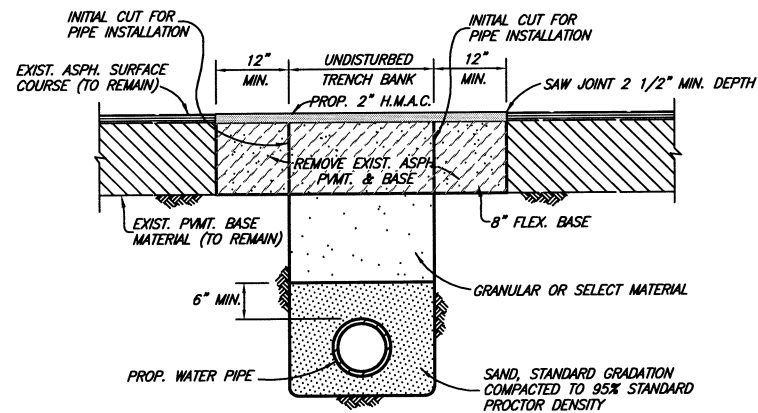
BHC
 PROJECT NO.
 2007-110
 April, 2010

SHEET NO.
15

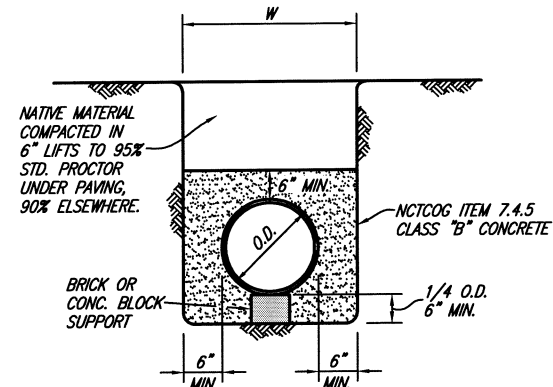
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CONCRETE STREET OR DRIVEWAY REPAIR

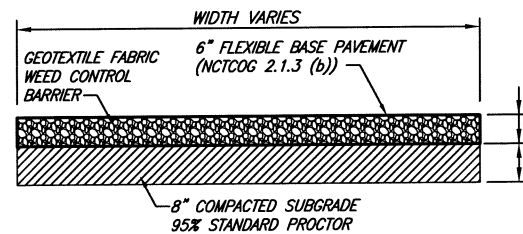


ASPHALT STREET OR DRIVEWAY REPAIR

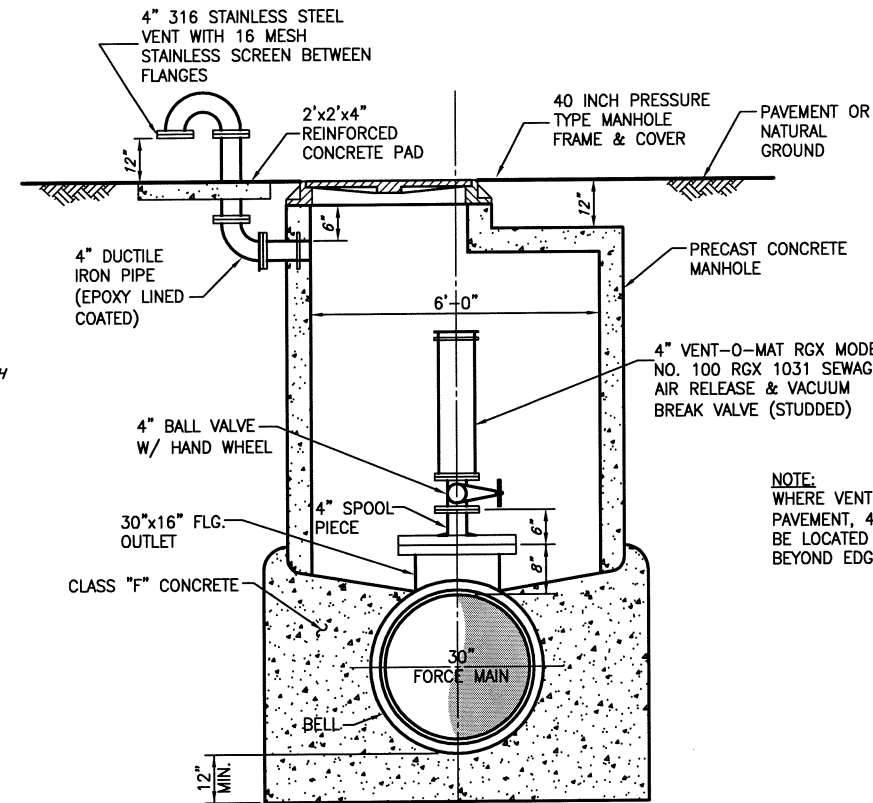


CLASS G EMBEDMENT

CONCRETE ENCASEMENT



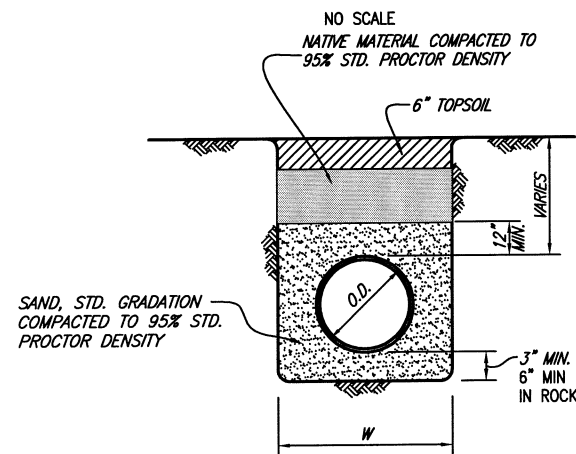
GRAVEL DRIVE REPAIR



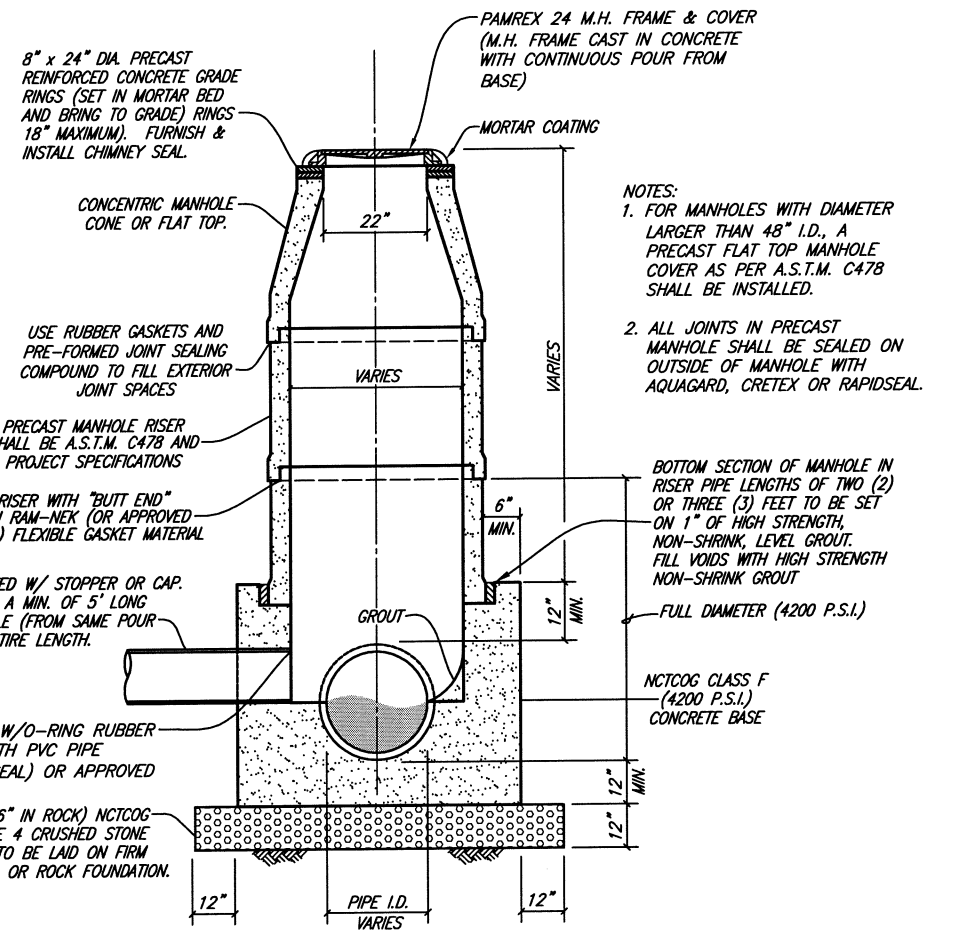
NOTE:
WHERE VENT IS LOCATED UNDER PAVEMENT, 4" GOOSENECK SHALL BE LOCATED AT LEAST 3- FEET BEYOND EDGE OF PAVEMENT.

COMBINATION AIR & VACUUM RELEASE VALVE

NOT TO SCALE



CLASS B-4 EMBEDMENT



NOTES:
1. FOR MANHOLES WITH DIAMETER LARGER THAN 48" I.D., A PRECAST FLAT TOP MANHOLE COVER AS PER A.S.T.M. C478 SHALL BE INSTALLED.
2. ALL JOINTS IN PRECAST MANHOLE SHALL BE SEALED ON OUTSIDE OF MANHOLE WITH AQUAGARD, CRETEX OR RAPIDSEAL.

BOTTOM SECTION OF MANHOLE IN RISER PIPE LENGTHS OF TWO (2) OR THREE (3) FEET TO BE SET ON 1" OF HIGH STRENGTH, NON-SHRINK, LEVEL GROUT. FILL VOIDS WITH HIGH STRENGTH NON-SHRINK GROUT.

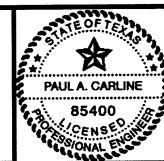
PRECAST CONCRETE MANHOLE

NO SCALE

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Texas Firm 526
11910 Greenville Ave., Suite 600
Dallas, Texas (214) 361-7900



[Signature]
4/12/10

CITY ROCKWALL, TEXAS

DETAILS

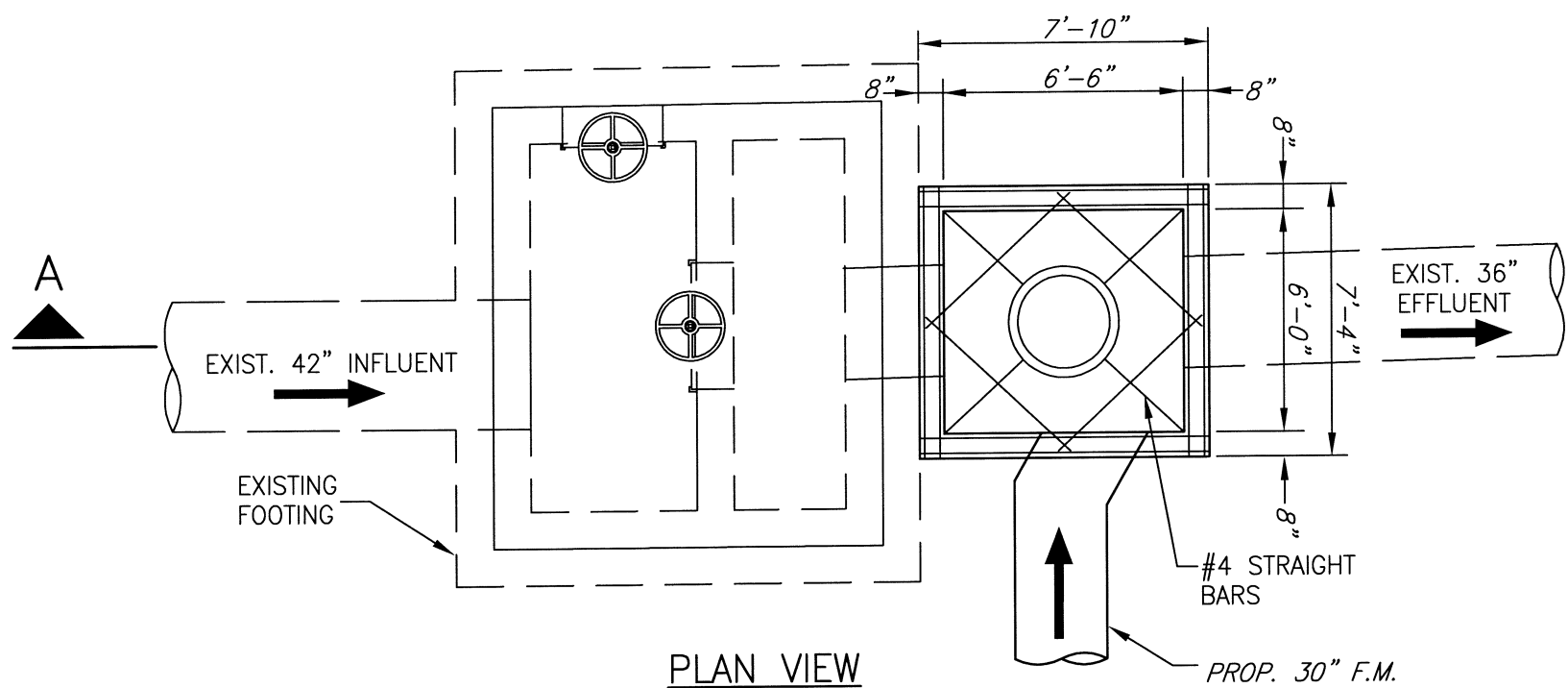
BHC
PROJECT NO.
2007-110

April, 2010

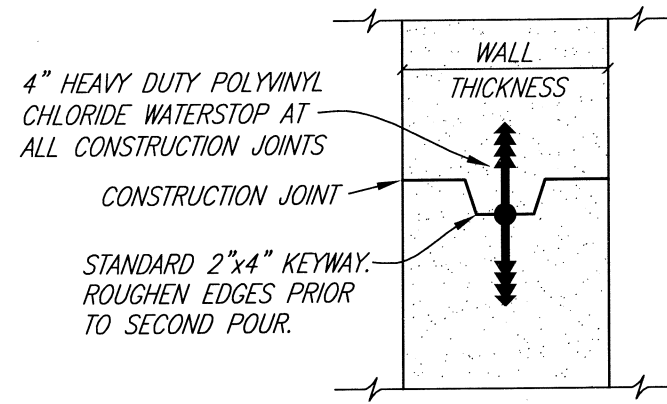
SHEET NO.

16

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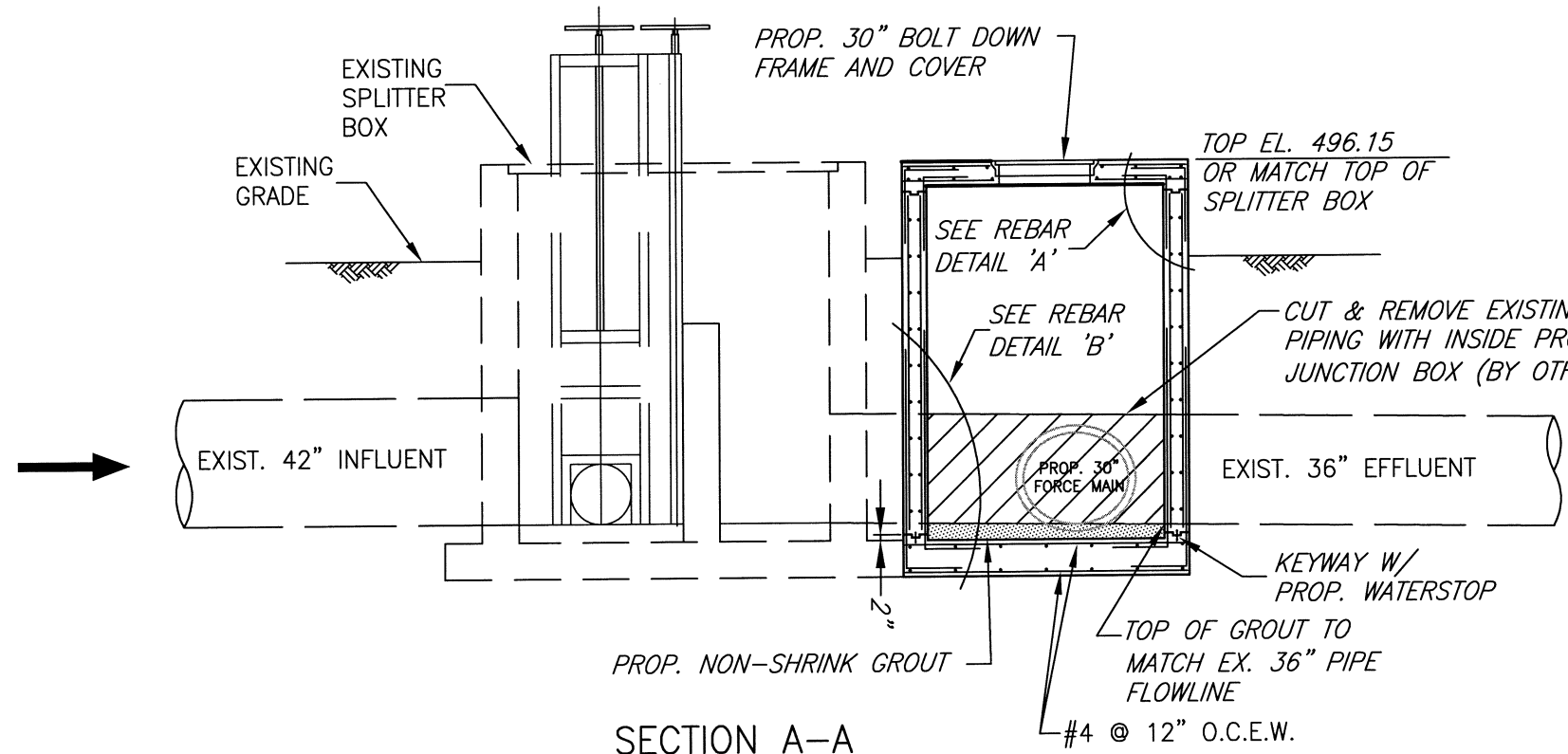
PLAN VIEW



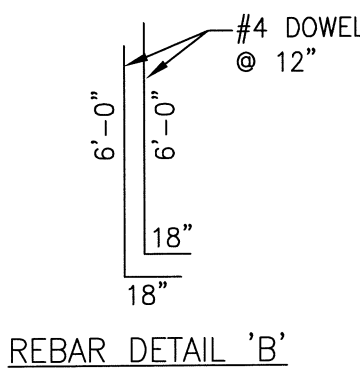
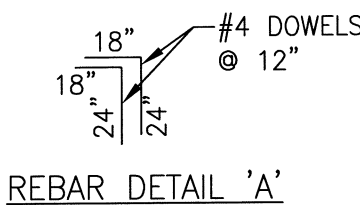
JUNCTION BOX CONSTRUCTION JOINT
KEYWAY WITH WATERSTOP

NOTE:

1. ALL REBAR NOT NOTED SHALL BE #4 @ 12" O.C.E.W.
2. ALL CONCRETE AND GROUT SURFACES INSIDE THE JUNCTION BOX SHALL BE ABRASIVE BLASTED AND COATED WITH TNEMEC SERIES 218 MORTARCLAD OR SERIES 215 EPOXY SURFACER, TNEMEC SERIES 434 PERMA-SHIELD H2S OR SERIES 436 PERMA-SHIELD FR LINING (125 MIL DFT), SERIES 435 PERMA-GLAZE TOPCOAT (30 MIL DFT) AND THIOKOL 2235SL POLYSULFIDE JOINT SEALANT AS MANUFACTURED BY POLYSPEC, OR APPROVED EQUAL. EXTERIOR OF JUNCTION BOX EXPOSED TO SOIL SHALL BE COATED WITH 46H-413 H.B. TNEME-TAR (16 MIL DFT). ALL SURFACES SHALL BE PREPARED AND MATERIALS APPLIED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.



SECTION A-A
PROPOSED JUNCTION BOX
NOT TO SCALE



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[Signature]
6/16/10

CITY OF ROCKWALL, TEXAS
SQUABBLE CREEK FORCE MAIN
JUNCTION BOX DETAILS

BHC
PROJECT NO.
2007-110
August, 2010

SHEET NO.
17