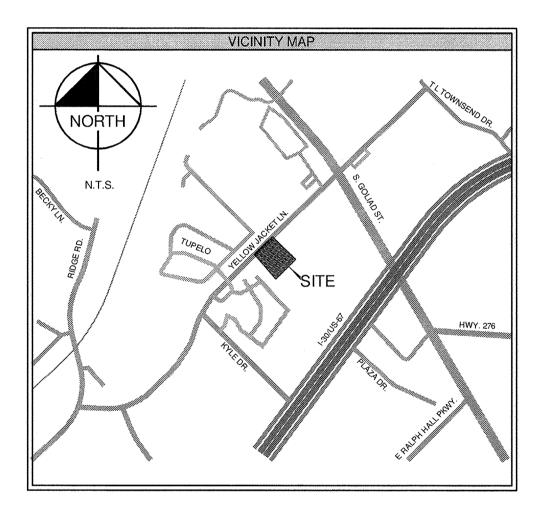
CONSTRUCTION PLANS

FOR

ROCKWALL RETIREMENT RESIDENCE

YELLOW JACKET LANE



SHEET NO.	DESCRIPTION	REVISION
CIVIL ENGINEERING	G (KIMLEY-HORN AND ASSOCIATES)	
C1.1	COVER SHEET	
C1.2	GENER AL NOTES	
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C2.2	FINAL PLAT (SHEET 1 OF 2)	
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C5.9	ROOF DRAINAGE PLAN	
C6.1	UTILITY PLAN	
C6.2	SANITAR Y SEWER PLAN AND PROFILE (1 OF 2)	
C6.3	SANITAR Y SEWER PLAN AND PROFILE (2 OF 2)	
C7.1	EROSION CONTROL PLAN	
C7.2	EROSION CONTROL DETAILS	
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C7.2	EROSION CONTROL DETAILS	

PLAN REVISION LOG

	 DESCRIPTION

STANDARD SHEETS, SPECIFICALLY IDENTIFIED IN THIS INDEX OF SHEETS HAVE BEEN SELECTED BY ME OR UNDER MY SUPER VISION AS BEING

OWNER

HAWTHORN RETIREMENT GROUP 9310 VANCOUVER MALL DR., STE. 200 VANCOUVER, WA 98662-8210 PH. (360) 213-1550

DEVELOPER/ARCHITECT

LENITY GROUP, LLC 471 HIGH STREET SE, STE. 10 SALEM, OR 97301 PH. (503) 399-1090 CONTACT: RON JACKSON

ENGINEER



12700 PARK CENTRAL DRIVE SUITE 1800 DALLAS, TEXAS 75251 PH. (972) 770-1300 CONTACT: RUSTY L. PRENTICE, P.E. DALLAS MAPSCO: 20CZ

J.D. McFARLAND SURVEY ABSTRACT NO. 145

ROCKWALL, TEXAS

CIVIL PLANS OCTOBER 2011 CONSTRUCTION START JANUARY 2012 "RECORD DRAWING"

THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES DURING THE CONSTRUCTION PROCESS REPORTED BY THE CONTRACTOR TO KIMLEY-HORN AND

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS

CAUTION!!

EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

CALL BEFORE YOU DIG 1-800-DIG-TESS (@ least 72 hours prior to digging)

STOP!

SHEET NUMBER C1.1

- 1. GENERAL NOTES ARE SHOWN HERE TO SATISFY CITY REQUIREMENTS. NOTES SHOWN ON SHEETS MAY SUPERSEDE THESE NOTES.
- 2. CONTRACTOR IS RESPONSIBLE TO OBTAIN THE MOST CURRENT NOTES, STANDARDS, SPECIFICATIONS, AND GEOTECHNICAL REPORT AS APPROVED BY THE CITY PRIOR TO CONSTRUCTION.
- 3. ALL MATERIALS SHALL CONFORM TO CITY OF ROCKWALL, N.C.T.C.O.G. (3RD EDITION), AND TCEQ STANDARDS.
- 4. CONTRACTOR SHALL USE "CITY OF ROCKWALL STANDARDS OF DESIGN AND CONSTRUCTION" AND "N.C.T.C.O.G. 3rd EDITION"
- 5. ALL CONSTRUCTION SHALL ADHERE TO RECOMMENDATIONS IN THE GEOTECHNICAL REPORT ISSUED FOR THE SITE.
- PROJECT GEOTECHNICAL ENGINEER:

8901 CARPENTER FREEWAY, SUITE 100 DALLAS, TEXAS 75247 PH: (214) 630-1010 CONTACT: SIVA PATHIVADA, P.E. REPORT NO.: 94115026 DATE: MARCH 10, 2011

PAVING GENERAL NOTES

- 1. EXISTING UTILITY DATA IS PROVIDED FOR INFORMATION ONLY. ALTHOUGH THIS DATA IS SHOWN AS ACCURATELY AS POSSIBLE, THE CONTRACTOR IS CAUTIONED THAT THE ENGINEER NEITHER ASSUMES NOR IMPLIES ANY RESPONSIBILITY FOR THE ACCURACY OF THIS DATA.
- 2. CONTRACTOR WILL BE RESPONSIBLE FOR FIELD VERIFYING THE LOCATION AND ELEVATION OF EXISTING PAVING AND UTILITIES PRIOR TO THIS OPERATION.
- 3. SEE UTILITY PLANS FOR LOCATION OF WATER MAINS, SEWER MAINS, AND UTILITY CROSSINGS. PAVING CONTRACTOR SHALL MAKE FINAL ADJUSTMENTS TO SANITARY MANHOLES, VALVES, FIRE HYDRANTS, AND ALL UTILITIES, ETC UPON COMPLETION OF
- 4. ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO APPLICABLE "STANDARD OF DESIGN AND CONSTRUCTION - CITY OF ROCKWALL" AND "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION - N.C.T.C.O.G." 3RD EDITION.
- 5. THE PAVING CONTRACTOR SHALL BE REQUIRED TO CONSTRUCT STANDARD SIDEWALK RAMPS AT ALL STREET INTERSECTIONS.
- 6. ALL BACK FILL SHALL BE COMPACTED TO 95 PERCENT STANDARD PROCTOR DENSITY AT -1 TO +3% OF OPTIMUM MOISTURE CONTENT. ALL FILL TO BE COMPACTED USING A SHEEP'S FOOT ROLLER.
- 7. CURB RADII AT STREET INTERSECTIONS SHALL BE 20 FEET MEASURED TO FACE OF CURB, UNLESS SHOWN OTHERWISE.
- 8. ALL PAVING DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- 9. SEE CONSTRUCTION DETAIL SHEET FOR PAVEMENT SECTION AND CONSTRUCTION DETAILS.
- 10. CONTRACTOR SHALL SAWCUT EXISTING PAVEMENT AND CURBS TO PROVIDE A SMOOTH CONNECTION AND INSURE POSITIVE DRAINAGE. ALL SAWCUTS OF EXISTING PAVEMENT SHALL BE FULL DEPTH OF PAVEMENT.
- 11. ALL CONSTRUCTION SHALL ADHERE TO RECOMMENDATIONS IN THE GEOTECHNICAL REPORT ISSUED FOR THIS SITE AND TO CITY
- 12. CONTRACTOR SHALL TAKE SPECIAL CARE TO ASSURE PROPER DOWEL PLACEMENT AT EXPANSION JOINTS. IMPROPER PLACEMENT WILL NECESSITATE REMOVAL OF PAVEMENT
- 13. SAWCUTTING SHALL BE DONE WITHIN EIGHT HOURS OF POUR OR AS SOON AS CONCRETE CAN SUPPORT WEIGHT AND CAN
- PROVIDE A NEAT CUT WHICH IS TRUE IN ALIGNMENT. 14. SUBGRADE SHALL BE MAINTAINED IN A MOIST CONDITION UNTIL
- THE PAVEMENT IS PLACED. 15. THE CONTRACTOR SHALL PROVIDE AS-BUILT PLANS TO THE ENGINEER SO THAT THE ENGINEERING PLANS MAY BE REVISED TO REFLECT AS-BUILT CONDITIONS.
- 16. TRAFFIC BARRICADES WILL BE REQUIRED AT ALL PROPOSED DRIVE CONNECTIONS AND CONSTRUCTION IN PUBLIC RIGHT-OF-WAY. BARRICADES AND TRAFFIC CONTROL SHALL ADHERE TO THE APPLICABLE INSTALLATION SHOWN IN THE TEXAS MUTCD, AS CURRENTLY AMENDED.
- 17. MARK FIRE LANE TO CITY SPECIFICATIONS. "NO PARKING FIRE LANE" EVERY 25' WHITE 4" LETTER ON A 6" RED STRIPED BACKGROUND.
- 18. NO SAND UNDER PAVING.

- STORM DRAIN NOTES
- 1. ALL CONSTRUCTION SHALL CONFORM TO CITY STANDARDS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CURRENT COPY OF THE CITY STANDARD DETAILS AND SPECIFICATIONS.
- 2. ALL DIMENSIONS SHOWN ARE TO FACE OF CURB, CENTERLINE OF PIPE AND RIGHT-OF-WAY UNLESS OTHERWISE NOTED.
- 3. CONTRACTOR SHALL MAINTAIN A VIABLE TRENCH SAFETY SYSTEM AT ALL TIMES AND PROVIDE TRENCH SAFETY PLANS SIGNED AND SEALED BY A LICENSED ENGINEER PRIOR TO START OF CONSTRUCTION.
- 4. THE CONTRACTOR SHALL PROVIDE AS-BUILT PLANS TO THE ENGINEER SO THAT THE ENGINEERING PLANS MAY BE REVISED TO REFLECT AS-BUILT CONDITIONS.
- 5. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE AND MAINTAIN ALL NECESSARY WARNING AND SAFETY DEVICES (FLASHING LIGHTS, BARRICADES, SIGNS, etc.) TO PROTECT PUBLIC SAFETY AND HEALTH UNTIL ALL WORK HAS BEEN COMPLETED AND ACCEPTED BY THE CITY.
- 6. THE LOCATION OF EXISTING UNDERGROUND FACILITIES INDICATED ON THE PLANS IS TAKEN FROM PUBLIC RECORDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAKE ARRANGEMENTS WITH THE OWNERS OF SUCH UNDERGROUND FACILITIES PRIOR TO WORKING IN THE AREA TO CONFIRM THEIR EXACT LOCATION AND TO DETERMINE WHETHER ANY ADDITIONAL FACILITIES, OTHER THAN THOSE SHOWN ON THE PLAN, MAY BE PRESENT. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL UNDERGROUND FACILITIES FOUND.
- 7. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL PUBLIC UTILITIES IN THE CONSTRUCTION OF THIS PROJECT. ALL MANHOLES, CLEANOUTS, VALVE BOXES, FIRE HYDRANTS, etc. MUST BE ADJUSTED TO PROPER LINE AND GRADE BY THE CONTRACTOR PRIOR TO AND AFTER THE PLACING OF PERMANENT PAVING.
- 8. CONTRACTOR SHALL VERIFY ALL EXISTING INVERTS AND RIM ELEVATION PRIOR TO BEGINNING CONSTRUCTION. NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCY.
- 9. PUBLIC STORM SEWER PIPE 15 INCHES OR LARGER SHALL BE CLASS III RCP, OR APPROVED EQUAL.
- 10. PRIVATE STORM SEWER PIPE 15 INCHES OR LARGER SHALL BE HDPE, OR APPROVED EQUAL.
- 11. ALL STORM SEWER PIPE LESS THAN 15 INCHES SHALL BE PVC OR APPROVED EQUAL.
- 12. ALL PVC, RCP, HDPE, AND CMP INTERCONNECTIONS SHALL BE CONSTRUCTED WITH CONCRETE COLLARS.
- 13. UNDERGROUND DETENTION STORM SEWER SHALL BE CORRUGATED METAL, OR APPROVED EQUAL.
- 14. CONTRACTOR SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS, INCLUDING GRADES AND DIMENSIONS, BEFORE COMMENCEMENT OF CONSTRUCTION. ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
- 15. CONTRACTOR SHALL INSTALL PLUGS IN STORM DRAIN LINES OR OTHERWISE PREVENT MUD FROM ENTERING THE STORM DRAIN SYSTEM DURING CONSTRUCTION.
- 16. ALL WYES AND PIPE-TO-PIPE CONNECTIONS SHALL BE FULLY

GRADING GENERAL NOTES

- 1. ALL CLAY SOIL USED AS FILL SHOULD BE COMPACTED TO A DRY DENSITY OF AT LEAST 95 AND NOT EXCEEDING 100 PERCENT OF STANDARD PROCTOR DENSITY AS DETERMINED BY ASTM D-698. THE COMPACTED MOISTURE CONTENT OF THE CLAYS DURING
- 2. COMPACTION SHOULD BE ACCOMPLISHED BY PLACING THE FILL IN EIGHT-INCH THICK LOOSE LIFTS AND COMPACTING EACH LIFT TO AT LEAST THE SPECIFIED MINIMUM DRY DENSITY. PARTICLE SIZES USED IN FILL SHALL BE LESS THAN FOUR INCHES DIAMETER. ALL FILL TO BE COMPACTED USING A SHEEP'S FOOT ROLLER.
- 3. GRADING CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OFF-SITE OF ALL EXCAVATED AND CLEARED MATERIAL WHICH SOILS LAB DECLARES UNSUITABLE FOR USE ON-SITE.
- 4. CONTRACTOR TO SLOPE THE ADJACENT GROUND AWAY FROM BUILDING PAD TO ACHIEVE POSITIVE SURFACE DRAINAGE.
- 5. INITIAL SITE GRADING SHALL BE COMPLETED TO A TOLERANCE OF PLUS OR MINUS ONE-TENTH OF ONE FOOT IN PAVED AREAS AND PLUS OR MINUS THREE-TENTHS OF ONE FOOT FOR BUILDING PADS. FINAL BUILDING PAD GRADING, TO BE DONE UPON COMPLETION OF PAVING AND UTILITY FACILITIES, SHALL BE PROVIDED TO A TOLERANCE OF PLUS OR MINUS ONE-TENTH OF ONE FOOT AT ALL FOUR CORNERS AND CENTER OF THE PAD, IN ALL SWALES AND LOT CORNERS.
- 6. CONTRACTOR SHALL REPLACE ANY EROSION CONTROL MATERIALS AT THE END OF EACH WORK DAY IF SAID MATERIALS WERE REMOVED DURING THE DAY FOR EASE OF CONSTRUCTION OR
- 7. IF ROCK IS ENCOUNTERED IN THE PAVING SUBGRADE, THE ROCK SHALL BE EXCAVATED TO A DEPTH OF SIX INCHES, REMOVED FROM THE PAVING. AND NON-ROCK MATERIAL SHALL BE REPLACED FOR THE PAVING SUBGRADE. THIS SHALL BE ACCOMPLISHED BY THE EXCAVATION CONTRACTOR, SUBSIDIARY TO THIS CONTRACT.
- 8. ALL VEGETATION AND TOPSOIL CONTAINING ORGANIC MATERIAL SHALL BE CLEARED AND GRUBBED AT THE BEGINNING OF EARTHWORK CONSTRUCTION.

WATER GENERAL NOTES

- 1. EXISTING UTILITY DATA IS PROVIDED FOR INFORMATION ONLY. ALTHOUGH THIS DATA IS SHOWN AS ACCURATELY AS POSSIBLE, THE CONTRACTOR IS CAUTIONED THAT THE DEVELOPER AND THE ENGINEER NEITHER ASSUMES NOR IMPLIES ANY RESPONSIBILITY FOR THE ACCURACY OF THIS DATA.
- 2. THE CONTRACTOR IS TO VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- 3. DEVELOPER'S SURVEYOR IS RESPONSIBLE FOR ALL CONSTRUCTION SURVEYING TO COMPLETE THIS PROJECT.
- 4. TRENCHES WHICH LAY OUTSIDE EXISTING OR FUTURE PAVEMENTS SHALL BE BACK FILLED ABOVE THE TOP OF THE EMBEDMENT WITH TYPE "C" BACK FILL MATERIALS. WHEN TYPE "C" BACK FILL MATERIAL IS NOT SUITABLE AND AT THE DIRECTION OF THE ENGINEER TYPE "B" MATERIAL SHALL BE USED. ALL BACK FILL MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 95% PROCTOR DENSITY BY MEANS OF TAMPING ONLY, TRENCHES THAT CROSS UNDER EXISTING OR FUTURE PAVEMENT SHALL BE BACK FILLED WITH 95% PROCTOR STANDARD DENSITY OF BETWEEN -2 AND +4% OF OPTIMUM MOISTURE CONTENT.
- 5. TOP OF WATER LINES SHALL BE A MINIMUM OF 3'-6" BELOW TOP OF CURB EXCEPT WHERE SHOWN OTHERWISE IN THESE
- 6. FIRE HYDRANTS SHALL BE A MINIMUM OF 3' BEHIND THE FACE OF THE CURB UNLESS OTHERWISE DIRECTED BY THE CITY OF ROCKWALL. FIRE HYDRANTS AND VALVES AS SHOWN ON THESE PLANS ARE SYMBOLIC ONLY. FIRE HYDRANTS SHALL HAVE 5' CLEAR AROUND.
- 7. INSERT POLY PIG IN WATER MAIN WHERE DIRECTED. POLY PIG IS TO BE FURNISHED BY THE CONTRACTOR.
- 8. CORPORATION STOPS SHALL BE TESTED FOR FULL FLOW WHEN THE SYSTEM IS PRESSURE TESTED.
- 9. CONTRACTOR SHALL COMPLY WITH TEXAS HOUSE BILL 1569. EFFECTIVE SEPTEMBER 1, 1989, TO MAINTAIN A VIABLE TRENCH SAFETY SYSTEM AT ALL TIMES.
- 10. ALL NEW WATER MAINS SHALL BE FULLY PURGED. DO NOT TEST AGAINST EXISTING VALVES WHEN CONNECTING TO EXISTING
- 11. ALL 6", 8", 10", & 12" WATER MAINS SHALL BE PVC AWWA CLASS 200, C900, DR-14.
- 12. FITTINGS SHALL BE MEGALUG.
- 13. WHEN CONSTRUCTED, ALL WATER MAINS SHALL BE SWABBED WITH KNOP POLY PIG BORE SWAB OR APPROVED EQUAL.
- 14. ALL WATER MAINS SHALL BE PLUGGED WITH A CAST IRON PLUG (OR EQUAL) AT THE END OF EACH WORKDAY.
- 15. IF LIVESTOCK ARE PRESENT DURING CONSTRUCTION, CONTRACTOR SHALL COORDINATE WITH DEVELOPER AND OWNER REPRESENTATIVES TO PROVIDE TEMPORARY FENCING DURING CONSTRUCTION TO PROTECT LIVESTOCK FROM INJURY.
- 16. WHEN EXISTING GRADES ARE LOWER THAN PROPOSED MAINS, THE FILL AREA OVER THE PIPE SHALL BE FILLED AND COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY TO THE PROPOSED FINISHED GRADE PRIOR TO
- INSTALLING ANY MAIN. 17. DEFLECT WATER MAINS AT JOINTS TO CLEAR CURB INLETS.
- 18. ALL FITTINGS SHALL BE DOMESTIC DUCTILE IRON.
- 19. ALL BENDS SHALL HAVE MEGA-LUG FITTINGS.
- 20. THE CONTRACTOR IS RESPONSIBLE FOR ALL BACTERIOLOGICAL AND PRESSURE TESTING PER TCEQ STANDARDS AND SHALL BE COORDINATED WITH THE CITY CONSTRUCTION INSPECTOR.
- 21. UNDERGROUND FIRE LINE MUST BE INSTALLED BY A CONTRACTOR WHO IS LICENSED WITH THE STATE OF TEXAS FIRE MARSHAL'S OFFICE FOR SUCH WORK.
- 22. BLUE EMS DISK SHALL BE PLACED ON THE WATER LINE AT EVERY CHANGE IN DIRECTION, VALVE, AND SERVICE.

SANITARY SEWER GENERAL NOTES

- 1. EXISTING UTILITY DATA IS PROVIDED FOR INFORMATION ONLY. ALTHOUGH THIS DATA IS SHOWN AS ACCURATELY AS POSSIBLE, THE CONTRACTOR IS CAUTIONED THAT THE DEVELOPER AND THE ENGINEER NEITHER ASSUME NOR IMPLY ANY RESPONSIBILITY FOR THE ACCURACY OF THIS DATA.
- 2. THE CONTRACTOR IS TO VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- 3. DEVELOPER'S SURVEYOR IS RESPONSIBLE FOR ALL CONSTRUCTION SURVEYING TO COMPLETE THIS PROJECT.
- 4. TRENCHES WHICH LAY OUTSIDE EXISTING OR FUTURE PAVEMENTS SHALL BE BACK FILLED ABOVE THE TOP OF THE EMBEDMENT WITH TYPE "C" BACK FILL MATERIALS. WHEN TYPE "C" BACK FILL MATERIAL IS NOT SUITABLE AND AT THE DIRECTION OF THE ENGINEER TYPE "B" MATERIAL SHALL BE USED. ALL BACK FILL MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 95% PROCTOR DENSITY BY MEANS OF TAMPING ONLY. TRENCHES THAT CROSS UNDER EXISTING OR FUTURE PAVEMENT SHALL BE BACK FILLED WITH 95% PROCTOR STANDARD DENSITY OF BETWEEN -2% AND +4% OF OPTIMUM MOISTURE CONTENT.
- 5. TOP OF SANITARY SEWER PIPE SHALL BE A MINIMUM OF 4'-0" BELOW TOP OF CURB EXCEPT WHERE SHOWN OTHERWISE IN
- 6. ALL FLEXIBLE SANITARY SEWER MAINS SHALL BE TESTED WITH STANDARD 5% DEFLECTION MANDREL.
- 7. AIR TESTING WILL BE TESTED BACK TO NEAREST MANHOLE ON
- 8. RIM ELEVATIONS OF THE PROPOSED SANITARY SEWER MANHOLES IN PROPOSED PAVING ARE SHOWN AS FINAL FINISHED GRADES. THEY SHALL BE CONSTRUCTED TO 15" BELOW FINAL FINISHED GRADE BY UTILITY CONTRACTOR AND ADJUSTED BY PAVING
- 9. ALL MANHOLES NOT IN CONCRETE PAVEMENT SHALL HAVE CONCRETE COLLARS.
- 10. ALL MANHOLES SHALL HAVE WATERTIGHT INSERTS.
- 11. CONTRACTOR SHALL COMPLY WITH TEXAS HOUSE BILL 1569, EFFECTIVE SEPTEMBER 1, 1989, TO MAINTAIN A VIABLE TRENCH SAFETY SYSTEM AT ALL TIMES.
- 12. ALL SANITARY SEWER MAINS SHALL BE CAPPED WITH AN APPROPRIATE CAP AT THE END OF EACH WORKDAY.
- 13. IF LIVESTOCK ARE PRESENT DURING CONSTRUCTION, CONTRACTOR SHALL COORDINATE WITH DEVELOPER AND OWNER REPRESENTATIVES TO PROVIDE TEMPORARY FENCING DURING CONSTRUCTION TO PROTECT LIVESTOCK FROM INJURY.
- 14. WHEN EXISTING GRADES ARE LOWER THAN PROPOSED MAINS, THE FILL AREA OVER THE PIPE SHALL BE FILLED AND COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY TO THE PROPOSED FINISHED GRADE PRIOR TO INSTALLING ANY MAIN.
- 15. ALL MANHOLES TO BE RAVEN LINED.
- 16. MANHOLES WITH PAVING LIMITS OR CREEK AREAS SHALL HAVE A PAMTIGHT 24" MANHOLE COVER AND FRAME. ALL OTHER MANHOLES SHALL HAVE A PAMREX 24" MANHOLE COVER AND FRAME.
- 17. GREEN EMS DISK SHALL BE PLACED ON THE SANITARY SEWER AT EVER CHANGE IN DIRECTION, MANHOLE, CLEANOUT, AND SERVICE.

EROSION CONTROL GENERAL NOTES

- 1. EROSION CONTROL MEASURES MAY ONLY BE PLACED IN FRONT OF INLETS, OR IN CHANNELS, DRAINAGE WAYS OR BORROW DITCHES AT RISK OF CONTRACTOR. CONTRACTOR SHALL REMAIN LIABLE FOR ANY DAMAGE CAUSED BY THE MEASURES, INCLUDING FLOODING DAMAGE, WHICH MAY OCCUR DUE TO BLOCKED DRAINAGE. AT THE CONCLUSION OF ANY PROJECT, ALL CHANNELS, DRAINAGE WAYS AND BORROW DITCHES IN THE WORK ZONE SHALL BE DREDGED OF ANY SEDIMENT GENERATED BY THE PROJECT OR DEPOSITED AS A RESULT OF EROSION CONTROL MEASURES.
- 2. 75%-85% OF ALL DISTURBED AREA SHALL HAVE 1" (HEIGHT) GRASS COVERAGE PRIOR TO SITE/CIVIL ACCEPTANCE.



BRADLEY J. MOSS

"RECORD DRAWING" THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES DURING THE CONSTRUCTION PROCESS REPORTED BY THE CONTRACTOR TO KIMLEY-HORN AND ASSOCIATES, INC. AND CONSIDERED TO BE SIGNIFICANT. THIS DRAWING IS NOT GUARANTEED TO BE "AS BUILT" BUT IS BASED ON THE INFORMATION MADE AVAILABLE.

- 1: 4" Aluminum disk in concrete stamped "City of Rockwall Monument R005" located in the center median of Summit Ridge Drive west of F. M. 740. Elev. = 578.708
- 2: 2" Brass disk in concrete stamped "City of Rockwall Monument R013" located in front of 1208 Lakeshore Drive southwest of the intersection of Lakeshore Drive and Summit Ridge. Elev. = 450.606'
- Square set with "X" on the southeast corner of curb inlet located on the southeast side of Yellow Jacket Lane approximately 100 feet northeast of Elev. = 522.11'
- 4: Square set with "X" on the northeast corner of curb inlet located on the southeast side of Yellow Jacket Lane approximately 10 feet southwest of westerly entrance into city park and baseball fields.

CAUTION!!

EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION, CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURED DURING CONSTRUCTION. CONTRACTOR SHALL

STOP! **CALL BEFORE YOU DIG**

1-800-DIG-TESS

(@ least 72 hours prior to digging)

SHEET NUMBER

THE HAWTHORN ETIREMENT GROU

RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN

REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL. IN REVIEWING AND RELEASING PLANS

FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY

FOR ADEQUACY OR ACCURACY OF DESIGN.

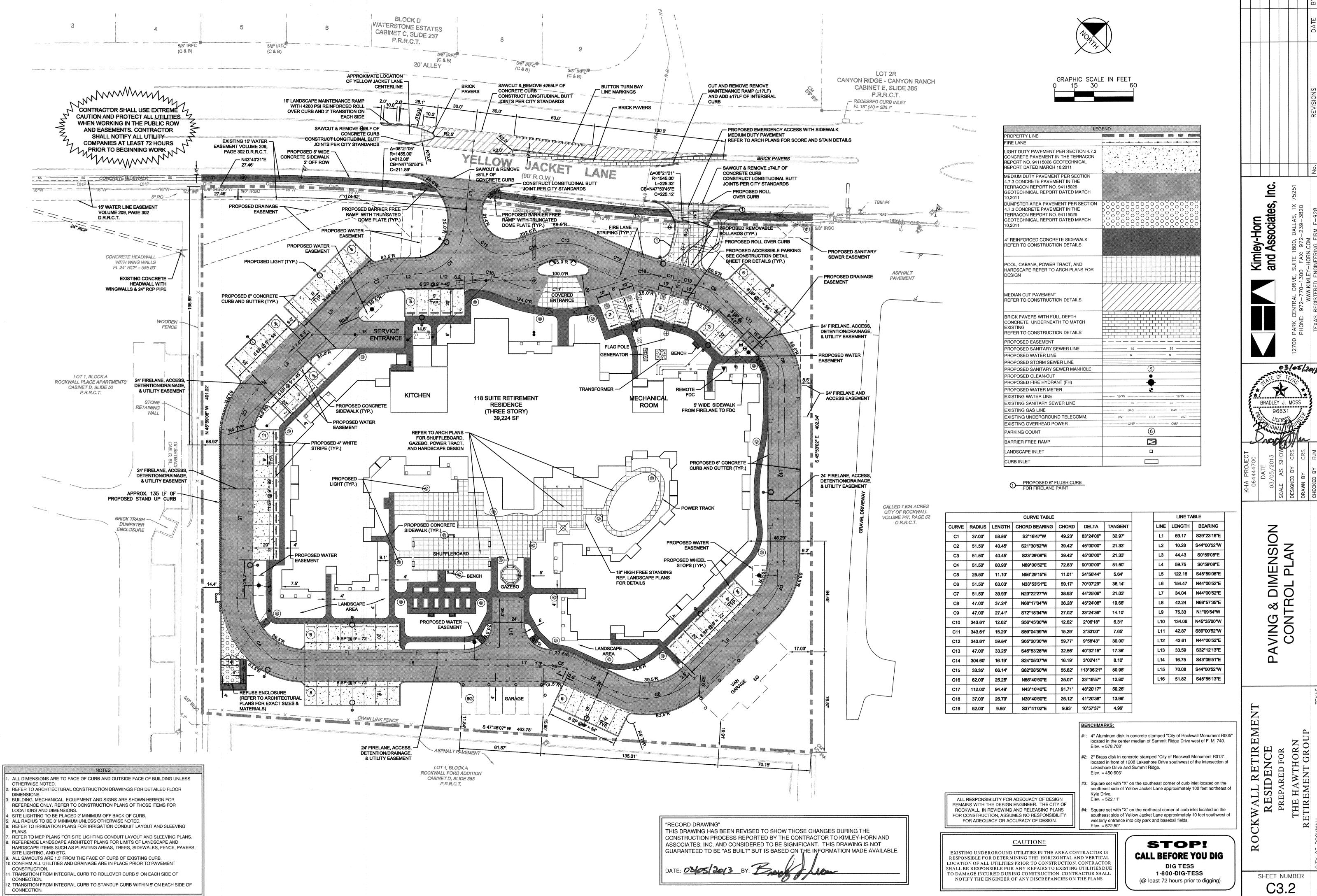
GAS COMPANY **ELECTRIC COMPANY** ATMOS ONCOR DINAH WOOD RUSSELL LEWIS (972) 485-6277 COMMUNICATIONS COMPANY AT&T

DUANE WELLS

903-457-2092

UTILITY CONTACTS

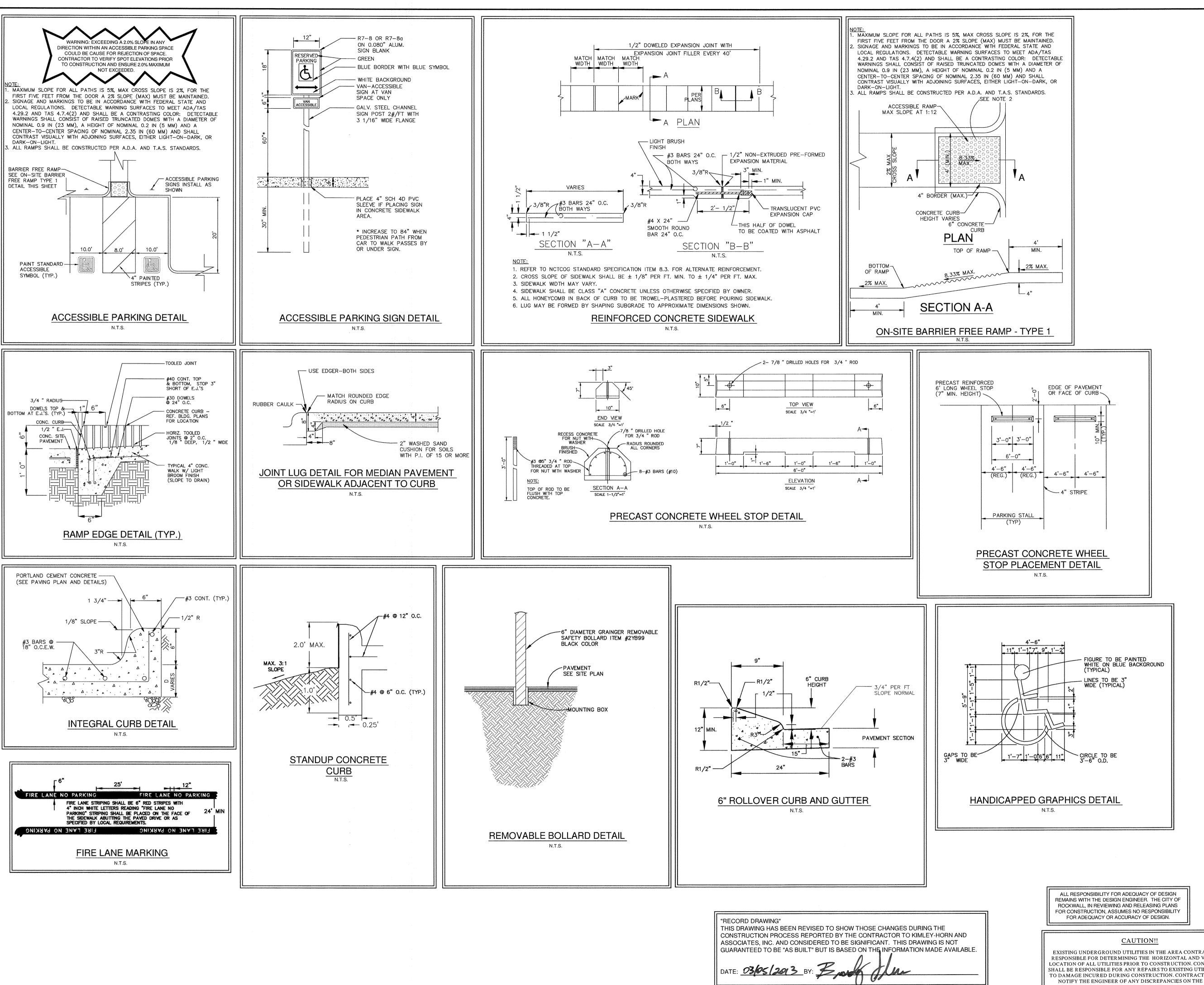
GEOTECHNICAL REPORT INFORMATION TERRACON CONSULTANTS, INC.. TERRACON PROJECT NO. 94115026 DATED: MARCH 10, 2011



SHEET NUMBER

C3.2

THE HAWTHORN ETIREMENT GROU



EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

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SHEET NUMBER C3.3

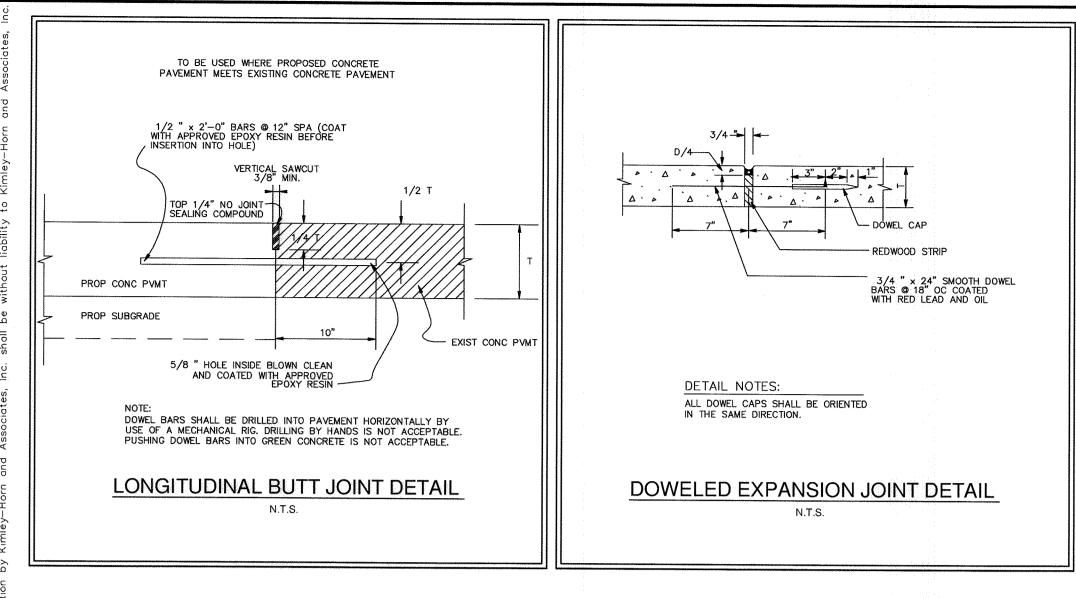
THE HAWTHORN ETIREMENT GROUP

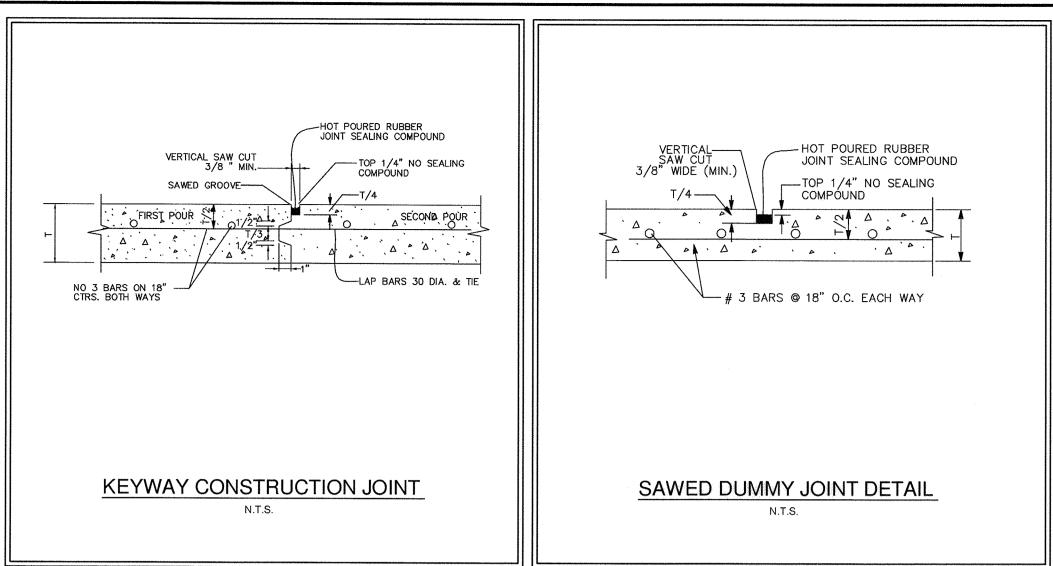
RETIREMENT

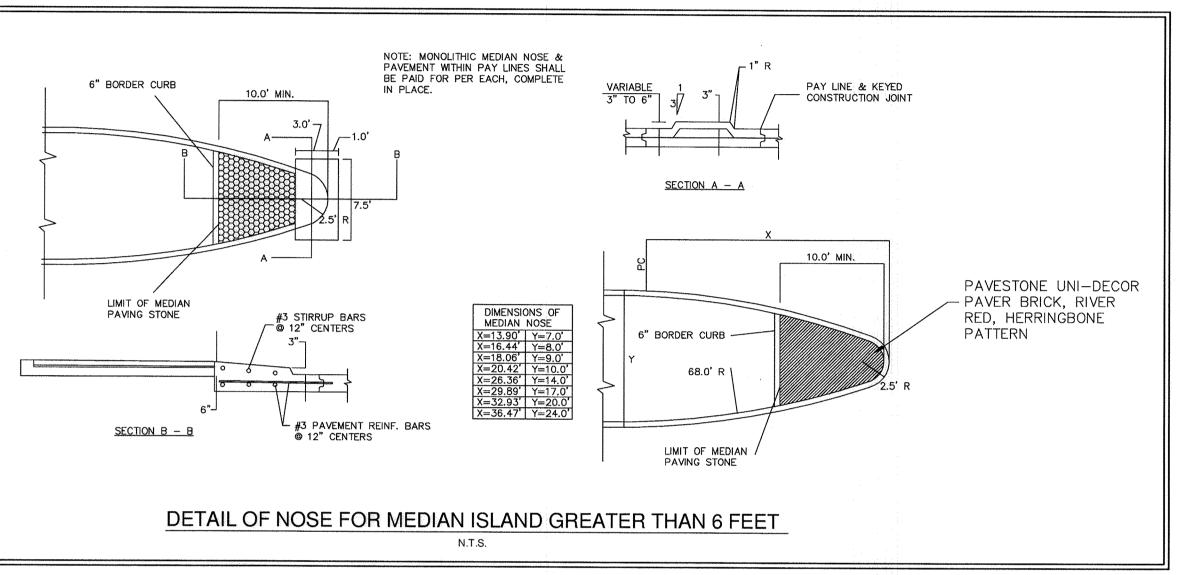
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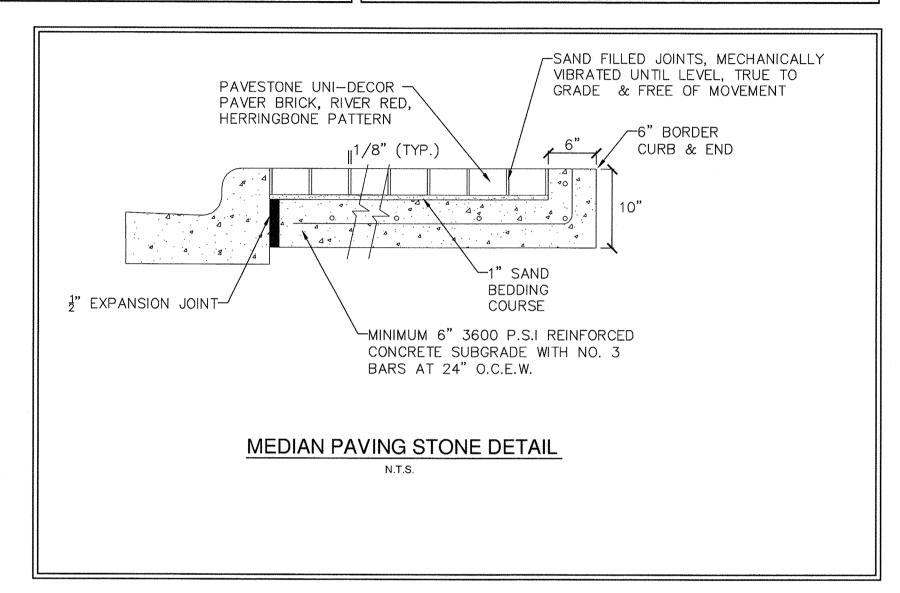
BRADLEY J. MOSS

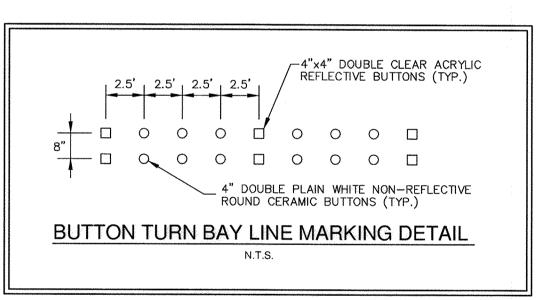
2











"RECORD DRAWING" THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES DURING THE CONSTRUCTION PROCESS REPORTED BY THE CONTRACTOR TO KIMLEY-HORN AND ASSOCIATES, INC. AND CONSIDERED TO BE SIGNIFICANT. THIS DRAWING IS NOT GUARANTEED TO BE "AS BUILT" BUT IS BASED ON THE INFORMATION MADE AVAILABLE

LIGHT DUTY PAVEMENT SECTION REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT WITH A COMPRESSIVE STRENGTH OF 3,000 LBS PER SQ INCH AT 28 DAYS. CONCRETE SHOULD BE DESIGNED WITH 4.5 ± 1.5 PERCENT ENTRAINED AIR. JOINTS IN CONCRETE SHOULD NOT EXCEED 15'. REINFORCING STEEL SHOULD CONSIST OF NO. 3 BARS PLACED AT 18" ON CENTER IN TWO DIRECTIONS. MIN. 5 SACK FOR MACHINE PLACE AND 5.5 SACK FOR HAND PLACE. -THE NATURAL SUBGRADE SHOULD BE UNIFORMLY COMPACTED TO A MINIMUM OF 95 PERCENT. OF ASTM D698 AT A MINIMUM OF +2 PERCENTAGE POINTS ABOVE OPTIMUM MOISTURE CONTENT DETERMINED BY THAT TEST. IT SHOULD THEN BE PROTECTED AND MAINTAINED IN A MOIST CONDITION UNTIL THE PAVEMENT IS PLACED. PAVEMENT SUBGRADES SHOULD BE GRADED TO PREVENT PONDING AND INFILTRATION OF EXCESSIVE MOISTURE ON OR ADJACENT TO THE PAVEMENT SUBGRADE SURFACE. NO SAND UNDER PAVING. INFORMATION FOR THIS DETAIL WAS PROVIDED BY THE GEOTECH REPORT PROVIDED BY TERRACON CONSULTANTS, INC., DATED: MARCH 10, 2011 AND IS SHOWN FOR REFERENCE ONLY.

MEDIUM DUTY PAVEMENT SECTION REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT WITH A COMPRESSIVE STRENGTH OF 3,600 LBS PER SQ INCH AT 28 DAYS. CONCRETE SHOULD BE DESIGNED WITH 4.5 ± 1.5 PERCENT ENTRAINED AIR. JOINTS IN CONCRETE SHOULD NOT EXCEED 15'. REINFORCING STEEL SHOULD CONSIST OF NO. 3 BARS PLACED AT 18" ON CENTER IN TWO DIRECTIONS. 6 SACK FOR MACHINE PLACE AND 6.5 SACK FOR HAND PLACE. -THE NATURAL SUBGRADE SHOULD BE UNIFORMLY COMPACTED TO A MINIMUM OF 95 PERCENT OF ASTM D698 AT A MINIMUM OF +2 PERCENTAGE POINTS ABOVE OPTIMUM MOISTURE CONTENT DETERMINED BY THAT TEST. IT SHOULD THEN BE PROTECTED AND MAINTAINED IN A MOIST CONDITION UNTIL THE PAVEMENT IS PLACED. PAVEMENT SUBGRADES SHOULD BE GRADED TO PREVENT PONDING AND INFILTRATION OF EXCESSIVE MOISTURE ON OR ADJACENT TO THE PAVEMENT SUBGRADE SURFACE. NO SAND UNDER PAVING.

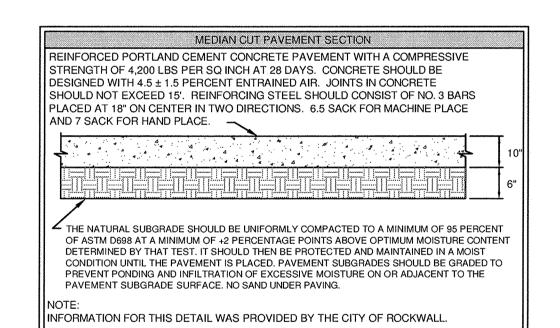
INFORMATION FOR THIS DETAIL WAS PROVIDED BY THE GEOTECH REPORT PROVIDED BY TERRACON CONSULTANTS, INC., DATED: MARCH 10, 2011 AND IS SHOWN FOR REFERENCE ONLY.

DUMPSTER AREA PAVEMENT SECTION REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT WITH A COMPRESSIVE STRENGTH OF 3,600 LBS PER SQ INCH AT 28 DAYS. CONCRETE SHOULD BE DESIGNED WITH 4.5 ± 1.5 PERCENT ENTRAINED AIR. JOINTS IN CONCRETE SHOULD NOT EXCEED 15'. REINFORCING STEEL SHOULD CONSIST OF NO. 3 BARS PLACED AT 18" ON CENTER IN TWO DIRECTIONS. 6 SACK FOR MACHINE PLACE AND 6.5 SACK FOR HAND PLACE. -THE NATURAL SUBGRADE SHOULD BE UNIFORMLY COMPACTED TO A MINIMUM OF 95 PERCENT OF ASTM D698 AT A MINIMUM OF +2 PERCENTAGE POINTS ABOVE OPTIMUM MOISTURE CONTENT DETERMINED BY THAT TEST. IT SHOULD THEN BE PROTECTED AND MAINTAINED IN A MOIST CONDITION UNTIL THE PAVEMENT IS PLACED. PAVEMENT SUBGRADES SHOULD BE GRADED TO PREVENT PONDING AND INFILTRATION OF EXCESSIVE MOISTURE ON OR ADJACENT TO THE PAVEMENT SUBGRADE SURFACE. NO SAND UNDER PAVING.

INFORMATION FOR THIS DETAIL WAS PROVIDED BY THE GEOTECH REPORT PROVIDED

BY TERRACON CONSULTANTS, INC., DATED: MARCH 10, 2011 AND IS SHOWN FOR

REFERENCE ONLY.



ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN.

CAUTION!!

EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

CALL BEFORE YOU DIG

STOP! DIG TESS

1-800-DIG-TESS (@ least 72 hours prior to digging)

SHEET NUMBER C3.4

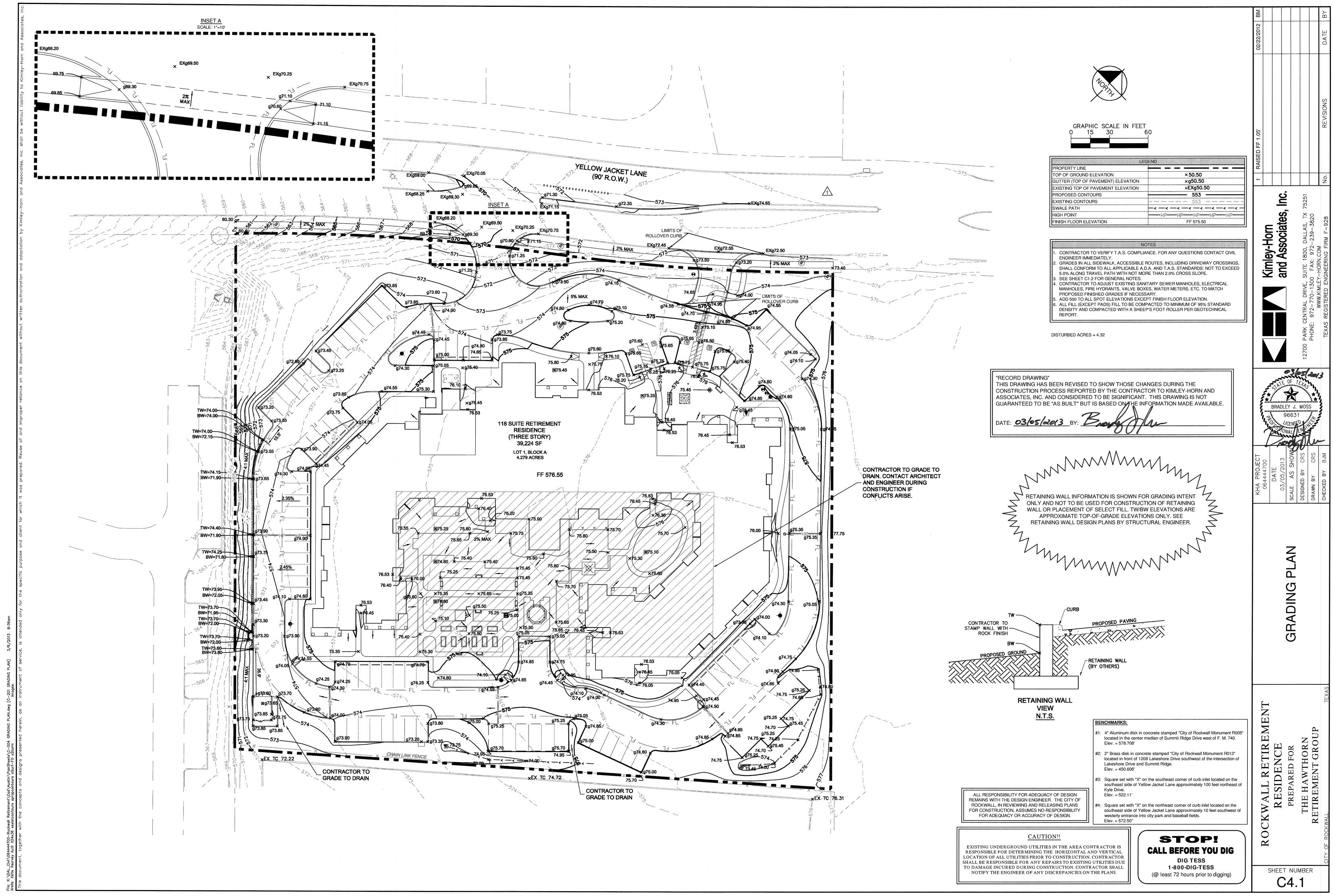
KWALL RETIREMENT
RESIDENCE
PREPARED FOR
THE HAWTHORN
RETIREMENT GROUP

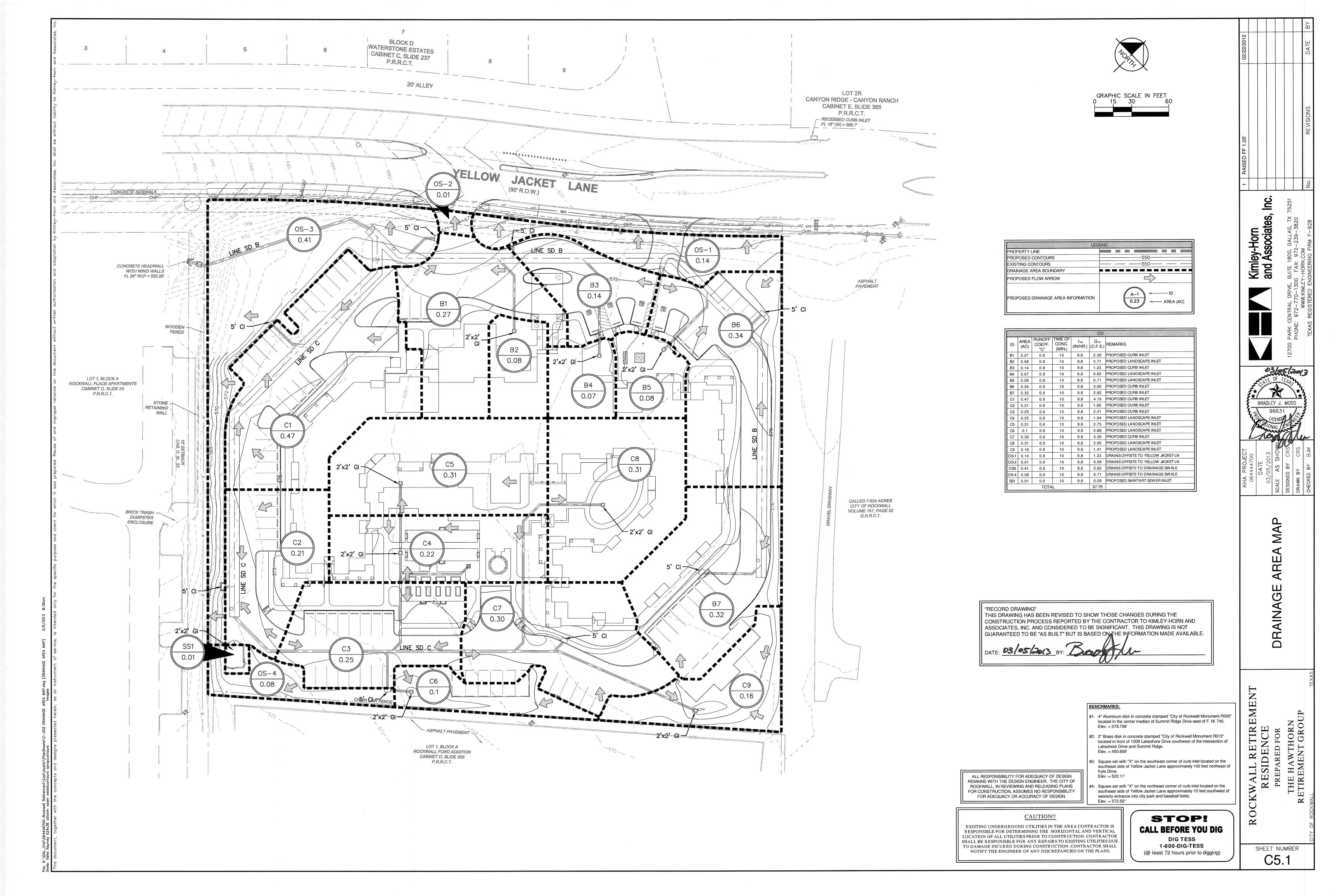
2.2/2/2013

5

CO

BRADLEY J. MOSS





$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Area Time (T _c) C value I ₁₀ Q ₁₀	0.90 C value 0.90 7.30 in/hr I ₁₀ 7.30 in 23.85 cfs Q ₁₀ 4.20 c	$ \begin{array}{c cccc} \text{ninutes} & & \text{Time } (T_{\text{c}}) & & 10 \text{ minutes} \\ & & & & \\ \text{C value} & & 0.90 \\ & & & \\ \text{n/hr} & & & \\ & & & \\ \text{8.30 in/hr} \\ \end{array} $	Allowable Release Proposed Bypass Area 0.64 acres Time (T _c) 10 minutes C value 0.90 l ₂₅ 8.30 in/hr Q ₂₅ 4.78 cfs Storage (ft ³) 13,130 17,834 21,558 26,064 29,003 29,786 30,176 32,723 32,917 33,700 < Controls 31,738 30,757 31,343	Onsite Existing Conditions Area 4.27 acres Time (T₀) 20 minutes C value 0.35 I₁₀₀ 8.30 in/hr Q₁₀₀ 6.76 cfs Allowable Release Onsite Proposed Conditions Area 3.63 acres Time (T₀) 10 minutes C value 0.90 I₁₀₀ 9.80 in/hr I₁₀₀ 9.80 in/hr I₁₀₀ 9.80 in/hr I₁₀₀ I₁₀₀ C value I₁₀₀ 9.80 in/hr I₁₀₀ I₁₀₀ C value I₁₀₀ Q₁₀₀ 20 32.02 cfs Detention Volume Storm Inflow (ft³) Outflow (ft³) Storage (ft³) 10 19,210 4,056 15,154 15 26,463 5,070 21,393 20 32,539 6,084 26,456 30 40,576 8,111 32,465 40 <th>0.90</th>	0.90
POINTS NO.	DRAINAGE AREA MENTAL AREA TOTAL RUNOFF INCREM. AREA (AC) AREA C' CA	TC DESIGN TOTAL INLET TIME FLOW TIME TOTAL TIME FREQ. CA (MIN.) IN SEWER (MIN) (YR)	STORMWATER FLOW IN Q IN INTENSITY RUNOFF PIPE ROW (IN/HR) (CFS) (cfs) (CFS)	IPE SIZE SLOPE UPSTREAM DOWNSTREA (IN) (FT/FT) MSL(FT) MSL (FT)	HEADLOSS @ CHANGE IN SECTION V1	DN TOP OF KjV1^2/2G HEAD LOSS ELEV. OF CURB (Hj) HYD. GRADE ELEV.
SD-B 1+55.21 TO 0+10.00 145.21 DET OUTF 0+10.00 TO 0+00.00 10 - LAT B1	FALL	— - 100 — 100 — 100	6.8 6.8 5.6 12.4	24 0.0009 558.30 558.17 24 0.0030 557.96 557.93	0.00 2.15 0.07 0.00 0.50 2.15 3.95 0.24 0.07 0.50	0.00 0.10 558.40 0.04 0.21 558.17 559.13
LAT B1 0+30.58 TO 0+23.06 7.52 B1 0+23.06 TO 0+00.00 23.06 LAT B2 0+63.32 TO 0+19.80 43.52 B2 0+19.80 TO 0+00.00 19.8	0.27 0.27 0.9 0.24 0.27	0.24 10.0 0.09 10.1 100 0.24 10.1 0.29 10.4 100 0.07 10.0 1.82 11.8 100	9.80 2.4 2.4 9.80 2.4 9.80 2.4 9.80 2.4 9.80 9	18 0.0005 570.55 570.54 18 0.0005 570.44 570.43	0.00 1.35 0.03 0.00 1.25 1.35 1.35 0.03 0.03 0.03	0.00 0.10 570.65 571.30 0.01 0.10 570.54 Elevation-
0+19.80 TO 0+00.00 19.8 LAT B3 0+11.82 TO 0+00.00 11.82 B3	0.00 0.00 0.00 0.00 0.00 0.10 0.14 0.14	0.07 11.8 0.85 12.7 100 0.07 11.8 0.85 12.7 100	9.53 — 0.7 — 9.80 1.2 1.2 —	16 0.0000 570.33 570.43 18 0.0000 570.43 570.43 18 0.0001 570.43 570.43	0.00 0.40 0.00 0.00 1.25 0.40 0.39 0.00 0.00 0.35	0.00 0.10 570.53 Elevation (561.41 561.50 562.00
LAT B4 0+83.50 TO 0+19.80 63.7 B4 0+19.80 TO 0+00.00 19.8	0.07 0.07 0.9 0.96 - 0.07	0.06 10.0 3.04 13.0 100 0.06 13.0 1.00 14.0 100	9.80 0.6 - 9.23 - 0.6	18 0.0000 570.53 570.53 18 0.0000 570.43 570.43	0.00 0.35 0.00 0.00 1.25 0.35 0.33 0.00 0.00 0.35	562.50 563.00 0.00 0.10 570.63 574.20 563.50 0.00 0.10 570.53 564.00
LAT B5 0+59.82 TO 0+11.96 47.86 B5 0+11.96 TO 0+00.00 11.96	0.08 0.08 0.9 0.07 0.08	0.07 10.0 2.00 12.0 100 0.07 12.0 0.52 12.5 100	9.80 0.7 0.7 · 9.48 · 0.7 · -	18 0.0000 570.53 570.53 18 0.0000 570.43 570.43	0.00 0.40 0.00 0.00 1.25 0.40 0.39 0.00 0.00 0.35	0.00 0.10 570.63 574.40 0.00 0.10 570.53 565.50 565.50 566.00
LAT B6 0+17.75 TO 0+00.00 17.75 B6 LAT B7	0.34 0.34 0.9 0.33	0.31 10.0 0.17 10.2 100	9.80 3.0 -	18 0.0008 570.44 570.43	0.00 1.70 0.04 0.00 0.35	566.50 0.00 0.10 570.54 573.50 567.00 567.50 568.00
LAT B7 0+50.06 TO 0+10.47 39.59 B7 0+10.47 TO 0+00.00 10.47 SD-C 7+48.71 TO 6+29.99 118.72 C9 6+29.99 TO 6+25.82 4.17	0.32 0.32 0.9 0.29 0.32 0.16 0.16 0.9 0.9	0.29 10.0 0.41 10.4 100 0.29 10.4 0.11 10.5 100 0.14 10.0 2.48 12.5 100	9.80 2.8 2.8 — 9.80 — 2.8 — 9.80 — 9.80 — 2.8 — 9.80 — 9.8	18 0.0007 570.57 570.54 18 0.0007 570.44 570.43 18 0.0002 571.76 571.74	0.00 1.60 0.04 0.00 1.25 1.60 1.60 0.04 0.04 0.35	0.00 0.10 570.67 573.40 568.50 0.01 0.10 570.54 569.00 569.50 0.00 0.10 571.86 572.70 570.00
6+25.82 TO 5+98.06 27.76 LAT C6 5+98.06 TO 4+94.85 103.21 LAT C5 4+94.85 TO 4+87.85 7 LAT C4	6 0.38 0.54 0.9 0.34 5 0.31 0.85 0.9 0.28 4 0.45 1.3 0.9 0.41	0.14 12.5 0.09 12.6 100 0.49 12.6 0.18 12.7 100 0.77 12.7 0.76 13.5 100 1.17 13.5 0.03 13.5 100	9.36 1.3 9.34 3.2 4.5 9.30 2.6 7.1 9.13 3.7 10.7	18 0.0002 571.64 571.64 18 0.0019 571.54 571.49 24 0.0010 571.39 571.29 24 0.0022 571.17 571.15	0.80 0.76 0.01 0.01 0.29 0.76 2.57 0.10 0.01 0.75 2.57 2.26 0.08 0.10 0.75 2.26 3.40 0.18 0.08 0.75	0.00 0.10 571.74 570.50 0.01 0.10 571.64 570.78 0.08 0.10 571.49 0.06 0.12 571.29
4+87.85 TO 3+95.29 92.56 LAT C3 3+95.29 TO 3+56.44 38.85 LAT C1 0+32.73 TO 0+10.00 22.73 C1 0+10.00 TO 0+00.00 10	3 0.35 1.65 0.9 0.32 1.65	1.49 13.5 0.36 13.9 100 1.49 13.9 0.15 14.1 100 0.42 10.0 0.16 10.2 100	9.12 2.9 13.5 9.04 13.4 9.80 4.1 4.1	24 0.0036 571.00 570.67 24 0.0035 570.57 570.43 18 0.0016 570.58 570.55	3.40 4.31 0.29 0.18 0.75 4.31 4.28 0.28 0.29 0.35 0.00 2.35 0.09 0.00 1.25	0.13
0+10.00 TO 0+00.00 10 LAT C2 0+07.50 TO 0+00.00 7.5 C2		0.42 10.2 0.07 10.2 100 0.19 10.0 0.12 10.1 100	9.80 - 4.1 -	18 0.0016 570.45 570.43 18 0.0003 570.43 570.43	2.35 2.35 0.09 0.09 0.35 0.00 1.05 0.02 0.00 0.35	Event 0.00 0.11 570.69 572.40 0.03 0.10 570.55 10-Year 25-Year 100-Year 0.00 0.10 570.53 572.80
LAT C3 0+31.39 TO 0+05.00 26.39 C3 + C3 0+05.00 TO 0+00.00 5	3A 0.35 0.35 0.9 0.32 0.35	0.32 10.0 0.25 10.3 100 0.32 10.3 0.05 10.3 100	9.80 3.1 3.1 - 9.80 3.1 -	18 0.0009 571.28 571.26 18 0.0009 571.16 571.15	0.00 1.75 0.05 0.00 1.25 1.75 1.75 0.05 0.05 0.35	0.00 0.10 571.38 572.65 0.02 0.10 571.28
LAT C3A 0+12.89 TO 0+00.00 12.89 C6 LAT C4	0.1 0.1 0.9 0.09	0.09 10.0 0.43 10.4 100	9.80 0.9 0.9	18 0.000 1 571.29 571.29	0.00 0.50 0.00 0.00 0.35	0.00 0.10 571.39 572.48
LAT C4 1+39.03 TO 0+82.52 56.51 C5 0+82.52 TO 0+10.00 72.52 C4 0+10.00 TO 0+00.00 10 LAT C5		0.28 10.0 0.61 10.6 100 0.41 10.6 0.54 11.1 100 0.41 11.1 0.07 11.2 100	9.80 2.7 2.7 - 9.80 1.2 4.0 - 9.70 - 3.9 -	18 0.0007 571.85 571.81 18 0.0014 571.71 571.60 18 0.0014 571.50 571.49	0.00 1.55 0.04 0.00 0.35 1.55 2.25 0.08 0.04 0.50 2.25 2.22 0.08 0.08 0.35	0.00 0.10 571.95 574.20 0.02 0.10 571.81 574.00 0.03 0.10 571.60
LAT C5 1+69.23 TO 1+50.35 18.88 C8 1+50.35 TO 1+05.78 44.57 1+05.78 TO 0+92.78 13 0+92.78 TO 0+10.00 82.78 0+10.00 TO 0+00.00 10	- 0.31	0.28 10.0 0.20 10.2 100 0.28 10.2 0.48 10.7 100 0.28 10.7 0.14 10.8 100 0.28 10.8 0.89 11.7 100 0.28 11.7 0.11 11.8 100	9.80 2.7 2.7 - 9.80 - 2.7 - 9.80 - 2.7 - 9.79 - 2.7 - 9.55 - 2.7 -	18 0.0007 572.16 572.14 18 0.0007 572.04 572.01 18 0.0007 571.91 571.90 18 0.0007 571.80 571.75 18 0.0006 571.65 571.64	0.00 1.55 0.04 0.00 1.25 1.55 1.55 0.04 0.04 0.35 1.55 1.55 0.04 0.04 0.35 1.55 1.55 0.04 0.04 0.35 1.55 1.51 0.04 0.04 0.35	0.00 0.10 572.26 574.20 0.01 0.10 572.14 0.01 0.10 572.01 0.01 0.10 571.90 0.01 0.10 571.75
LAT C6 0+10.19 TO 0+00.00 10.19 C7	0.38 0.38 0.9 0.34	0.34 10.0 0.09 10.1 100	9.80 3.4 3.4 -	18 0.0010 571.75 571.74	0.00 1.90 0.06 0.00 0.35	0.00 0.10 571.85 573.45
				"RECORD DRAWING"		ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN.

Drainage / Detention Calculations

25-Year Storm Event

Onsite Existing Conditions

Modified Rational Method

Drainage / Detention Calculations

100-Year Event

THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES DURING THE

CONSTRUCTION PROCESS REPORTED BY THE CONTRACTOR TO KIMLEY-HORN AND ASSOCIATES, INC. AND CONSIDERED TO BE SIGNIFICANT. THIS DRAWING IS NOT

GUARANTEED TO BE "AS BUILT" BUT IS BASED ON THE NFORMATION MADE AVAILABLE.

Modified Rational Method

Onsite Existing Conditions

Drainage / Detention Calculations

10-Year Storm Event

Onsite Existing Conditions

Modified Rational Method

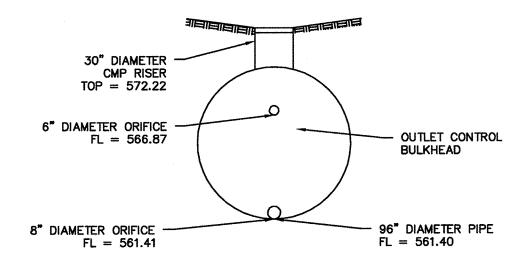
Drainage / Detention Calculations

5-Year Storm Event

Onsite Existing Conditions

Modified Rational Method

LET CONTROL SCHEMATIC



Elevation-Sto	orage Table
Elevation (ft)	Storage (ft ³)
561.41	0
561.50	1
562.00	266
562.50	1,315
563.00	3,230
563.50	5,742
564.00	8,637
564.50	11,802
565.00	15,156
565.50	18,630
566.00	22,164
566.50	25,703
567.00	29,187
567.50	32,558
568.00	35,749
568.50	38,681
569.00	41,247
569.50	43,264
570.00	44,375

	Discharge (c
561.41	0.00
562	0.85
563	1.88
564	2.52
565	3.03
566	3.47
567	3.85
568	5.09
569	5.82
570	6.43
570.78	6.86

3.03 3.47 3.85 5.09 5.82	.00	P.F.	B
 6.43		1	
6.86		-	2000
	KHA PROJECT	064444700	DATE

ummary Table							
Event	Q _{in} (cfs)	Q _{out} (cfs)	Q _{allow} (cfs)	Storage (ft ³)	WSEL (ft)		
5-Year	20.26	3.59	3.75	24,370	566.31		
10-Year	23.85	3.81	4.46	28,396	566.89		
25-Year	27.12	4.80	5.23	33,700	567.68		
100-Year	32.02	6.67	6.76	44,665	570.43		

BENCHMARKS:

- #1: 4" Aluminum disk in concrete stamped "City of Rockwall Monument R005" located in the center median of Summit Ridge Drive west of F. M. 740. Elev. = 578.708'
- #2: 2" Brass disk in concrete stamped "City of Rockwall Monument R013" located in front of 1208 Lakeshore Drive southwest of the intersection of Lakeshore Drive and Summit Ridge. Elev. = 450.606'
- #3: Square set with "X" on the southeast comer of curb inlet located on the southeast side of Yellow Jacket Lane approximately 100 feet northeast of Elev. = 522.11'
- #4: Square set with "X" on the northeast corner of curb inlet located on the southeast side of Yellow Jacket Lane approximately 10 feet southwest of westerly entrance into city park and baseball fields. Elev. = 572.50"

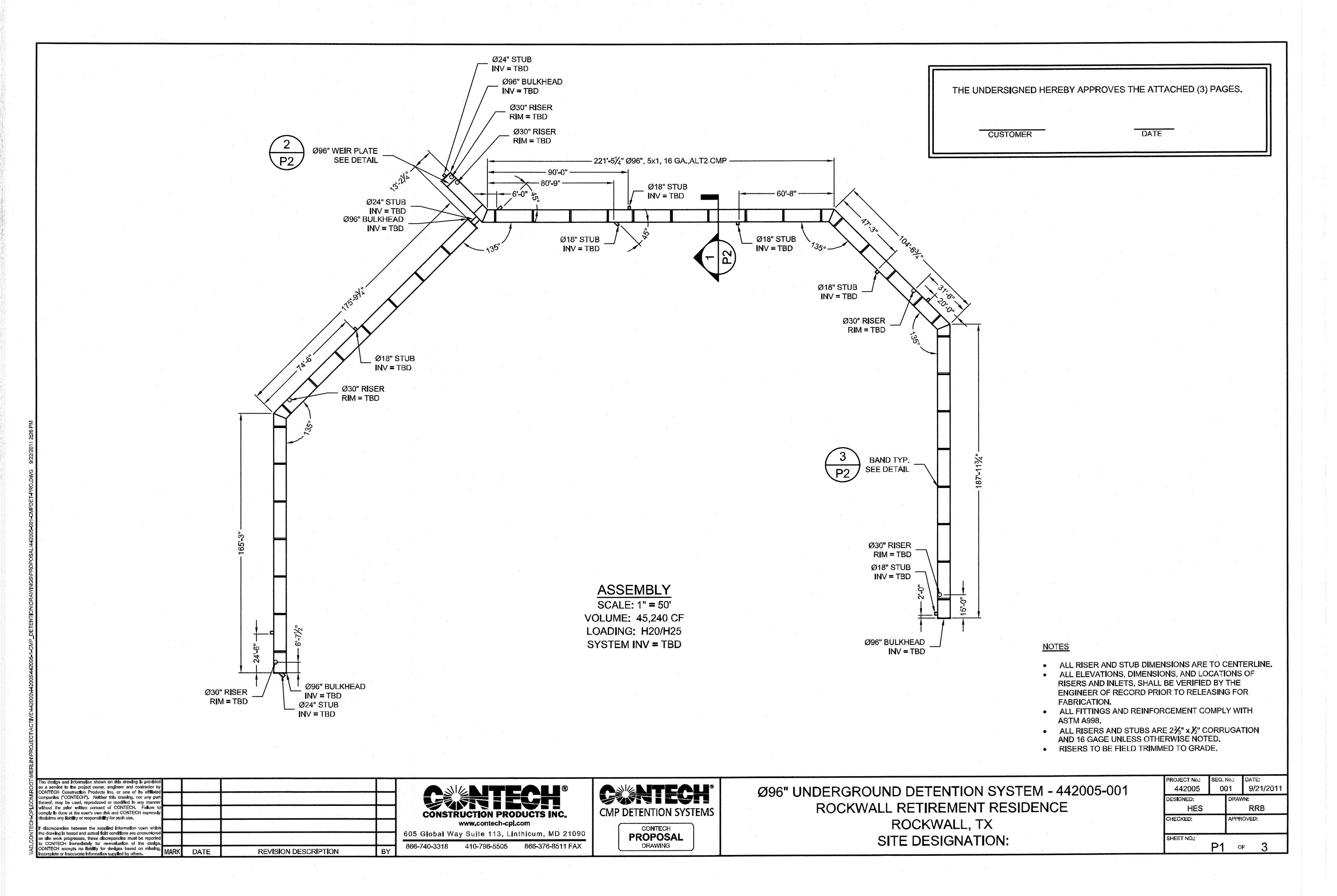
EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

STOP! **CALL BEFORE YOU DIG** DIG TESS 1-800-DIG-TESS

(@ least 72 hours prior to digging)

SHEET NUMBER C5.2

KWALL RETIREMI RESIDENCE PREPARED FOR THE HAWTHORN RETIREMENT GROUP



KEY

- 1. RIGID OR FLEXIBLE PAVEMENT
- 2. GRANULAR ROAD BASE
- 3. 12" MIN. FOR DIAMETERS THROUGH 96"
 18" MIN. FOR DIAMETERS FROM 102"
 AND LARGER MEASURED TO TOP OF RIGID
 OR BOTTOM OF FLEXIBLE PAVEMENT,
- 4. SELECT GRANULAR FILL PER AASHTO M145 A1, A2 OR A3, OR APPROVED EQUAL. PLACED IN 8" LIFTS (COMPACTED TO MIN. 90% STANDARD DENSITY PER AASHTO T99.)
- 5. GRANULAR BEDDING, ROUGHLY SHAPED TO FIT THE BOTTOM OF PIPE, 4" TO 6" IN DEPTH

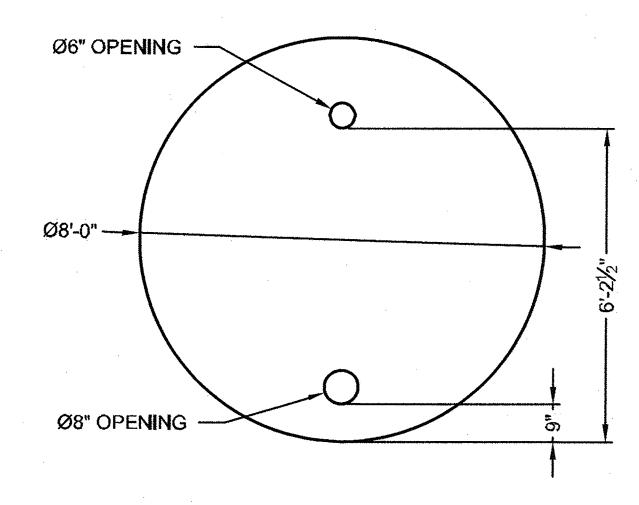
FOUNDATION/BEDDING PREPARATION

PRIOR TO PLACING THE BEDDING, THE FOUNDATION MUST BE CONSTRUCTED TO A UNIFORM AND STABLE GRADE. IN THE EVENT THAT UNSUITABLE FOUNDATION MATERIALS ARE ENCOUNTERED DURING EXCAVATION, THEY SHALL BE REMOVED AND BROUGHT BACK TO THE GRADE WITH A FILL MATERIAL AS APPROVED BY THE ENGINEER. ONCE THE FOUNDATION PREPARATION IS COMPLETE, 4" - 6" OF A WELL-GRADED GRANULAR MATERIAL SHALL BE PLACED AS THE BEDDING.

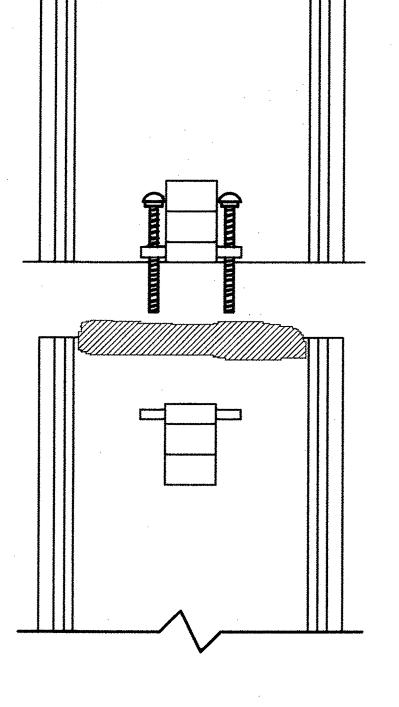
BACKFILL

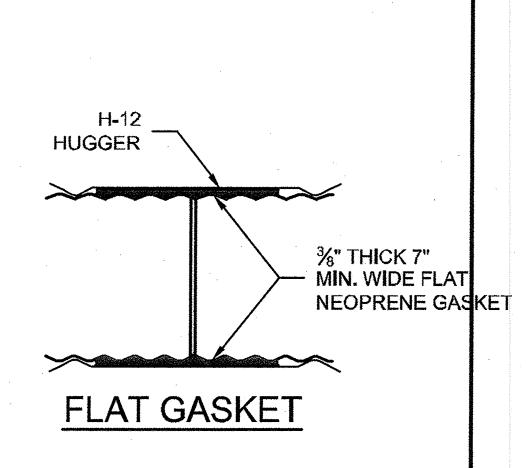
THE BACKFILL SHALL BE AN A1, A2 OR A3 GRANULAR FILL PER AASHTO M145, OR A WELL-GRADED GRANULAR FILL AS APPROVED BY THE SITE ENGINEER (SEE INSTALLATION GUIDELINES). THE MATERIAL SHALL BE PLACED IN 8" LOOSE LIFTS AND COMPACTED TO 90% AASHTO T99 STANDARD PROCTOR DENSITY. WHEN PLACING THE FIRST LIFTS OF BACKFILL IT IS IMPORTANT TO MAKE SURE THAT THE BACKFILL IS PROPERLY COMPACTED UNDER AND AROUND THE PIPE HAUNCHES. BACKFILL SHALL BE PLACED SUCH THAT THERE IS NO MORE THAN A TWO LIFT (16") DIFFERENTIAL BETWEEN ANY OF THE PIPES AT ANY TIME DURING THE BACKFILL PROCESS. THE BACKFILL SHALL BE ADVANCED ALONG THE LENGTH OF THE DETENTION SYSTEM AT THE SAME RATE TO AVOID DIFFERENTIAL LOADING ON THE PIPE.

OTHER ALTERNATE BACKFILL MATERIAL MAY BE ALLOWED DEPENDING ON SITE SPECIFIC CONDITIONS, AS APPROVED BY SITE ENGINEER.



2 TYP WEIR PLATE DETAIL P2 SCALE: N.T.S.





CONNECTION DETAIL SINGLE BOLT, BAR AND STRAP

GENERAL NOTES

- 1. BANDS ARE NORMALLY FURNISHED AS FOLLOWS: 12" THRU 48", 1-PIECE 54" THRU 96", 2-PIECE 102" THRU 144", 3-PIECES
- 2. BAND FASTENERS ARE ATTACHED WITH SPOT WELDS, RIVETS OR HAND WELDS
- 3. REROLLED ANNULAR END CORRUGATIONS ARE NORMALLY 23/3" x 1/2". DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES

3 H-12 HUGGER BAND DETAIL P2 SCALE: N.T.S.



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as site work progresses, these discrepancies must be reported					
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CONSTRUCTION PRODUCTS INC.

www.contech-cpl.com

605 Global Way Suite 113, Linthicum, MD 21090 866-740-3318 410-796-5505 866-376-8511 FAX CENTECH*

CMP DETENTION SYSTEMS

CONTECH

PROPOSAL

DRAWING

Ø96" UNDERGROUND DETENTION SYSTEM - 442005-001 ROCKWALL RETIREMENT RESIDENCE ROCKWALL, TX SITE DESIGNATION:

SEQ.	No.:	DATE:
0	01	9/21/2011
	DRA	W N:
	·	RRB
	APPI	ROVED:
	1	

FOR TEMPORARY CONSTRUCTION VEHICLE LOADS, AN EXTRA AMOUNT OF COMPACTED COVER MAY BE REQUIRED OVER THE TOP OF THE PIPE. THE HEIGHT-OF-COVER SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THE TABLE BELOW. THE USE OF HEAVY CONSTRUCTION EQUIPMENT NECESSITATES GREATER PROTECTION FOR THE PIPE THAN FINISHED GRADE COVER MINIMUMS FOR NORMAL HIGHWAY TRAFFIC.

PIPE SPAN, INCHES		AXLE LO	ADS (k i p	s)
INCHES	18-50	50-75	75-110	110-150
ALUM.	М	INIMUM	COVER (FT)
12 -4 2	3.0	3.5	4.0	4.0
48-72	4.0	4.0	5.0	5.5
78-120	4.0	5,0	5.5	5.5

*MINIMUM COVER MAY VARY, DEPENDING ON LOCAL CONDITIONS. THE CONTRACTOR MUST PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. MINIMUM COVER IS MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE.



SPECIFICATION FOR CORRUGATED STEEL PIPE-ALUMINIZED TYPE 2 STEEL

SCOPE

THIS SPECIFICATION COVERS THE MANUFACTURE AND INSTALLATION OF THE CORRUGATED STEEL PIPE (CSP) DETAILED IN THE PROJECT PLANS.

MATERIAL

THE ALUMINIZED TYPE 2 STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M274 OR ASTM A929.

PIPE

THE CSP SHALL BE MANUFACTURED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF AASHTO M36 OR ASTM A760. THE PIPE SIZES, GAGES AND CORRUGATIONS SHALL BE AS SHOWN ON THE PROJECT PLANS.

ALL FABRICATION OF THE PRODUCT SHALL OCCUR WITHIN THE UNITED STATES.

HANDLING AND ASSEMBLY

SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF THE NATIONAL CORRUGATED STEEL PIPE ASSOCIATION (NCSPA)

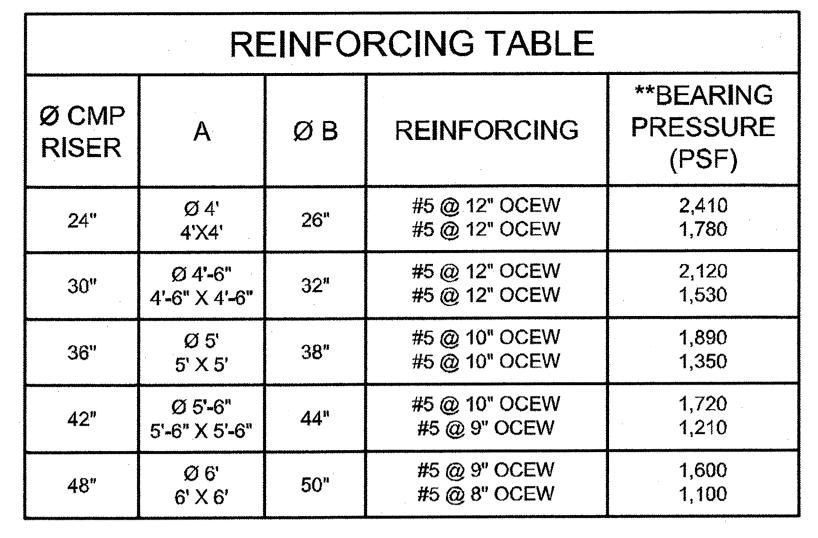
INSTALLATION

SHALL BE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 26, DIVISION II OR ASTM A798 AND IN CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. IF THERE ARE ANY INCONSISTENCIES OR CONFLICTS THE CONTRACTOR SHOULD DISCUSS AND RESOLVE WITH THE SITE ENGINEER.

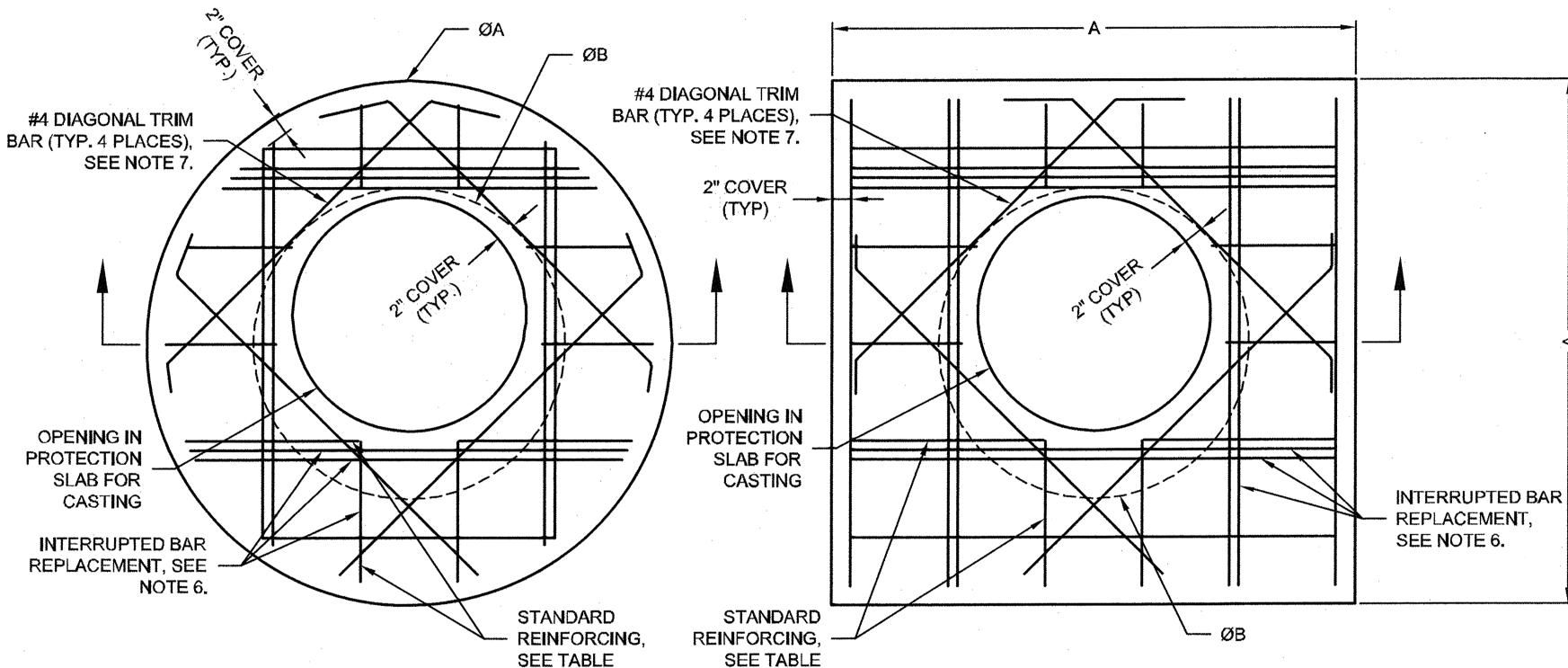
IT IS ALWAYS THE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW OSHA GUIDELINES FOR SAFE PRACTICES.

ACCESS CASTING TO BE PROVIDED AND INSTALLED BY CONTRACTOR. - Ø CMP RISER GASKET MATERIAL SUFFICIENT TO PREVENT SLAB FROM BEARING ON RISER TO BE PROVIDED BY CONTRACTOR.

SECTION VIEW



** ASSUMED SOIL BEARING CAPACITY



ROUND OPTION PLAN VIEW

NOTES:

- 1. DESIGN IN ACCORDANCE WITH AASHTO, 17th EDITION.
- 2. DESIGN LOAD HS25.
- 3. EARTH COVER = 1' MAX.
- 4. CONCRETE STRENGTH = 3,500 psi
- 5. REINFORCING STEEL = ASTM A615, GRADE 60.
- 6. PROVIDE ADDITIONAL REINFORCING AROUND OPENINGS EQUAL TO THE BARS INTERRUPTED, HALF EACH SIDE. ADDITIONAL BARS TO BE IN THE SAME PLANE.

SQUARE OPTION PLAN VIEW

- 7. TRIM OPENING WITH DIAGONAL #4 BARS, EXTEND BARS A MINIMUM OF 12" BEYOND OPENING, BEND BARS AS REQUIRED TO MAINTAIN BAR COVER.
- 8. PROTECTION SLAB AND ALL MATERIALS TO BE PROVIDED AND INSTALLED BY CONTRACTOR.
- 9. DETAIL DESIGN BY DELTA ENGINEERING, BINGHAMTON, NY.



UVIE					
3	The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by				
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3	thereof, may be used, reproduced or modified in any manner without the prior written consent of CONTECH. Fallure to				
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5	If discrepancies between the supplied information upon which				
	the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported				
1 - 2					
٤	to CONTECH immediately for re-evaluation of the design. CONTECH accepts no liability for designs based on missing. Incomplete or inaccurate information supplied by others.	MARK	DATE	REVISION DESCRIPTION	BY

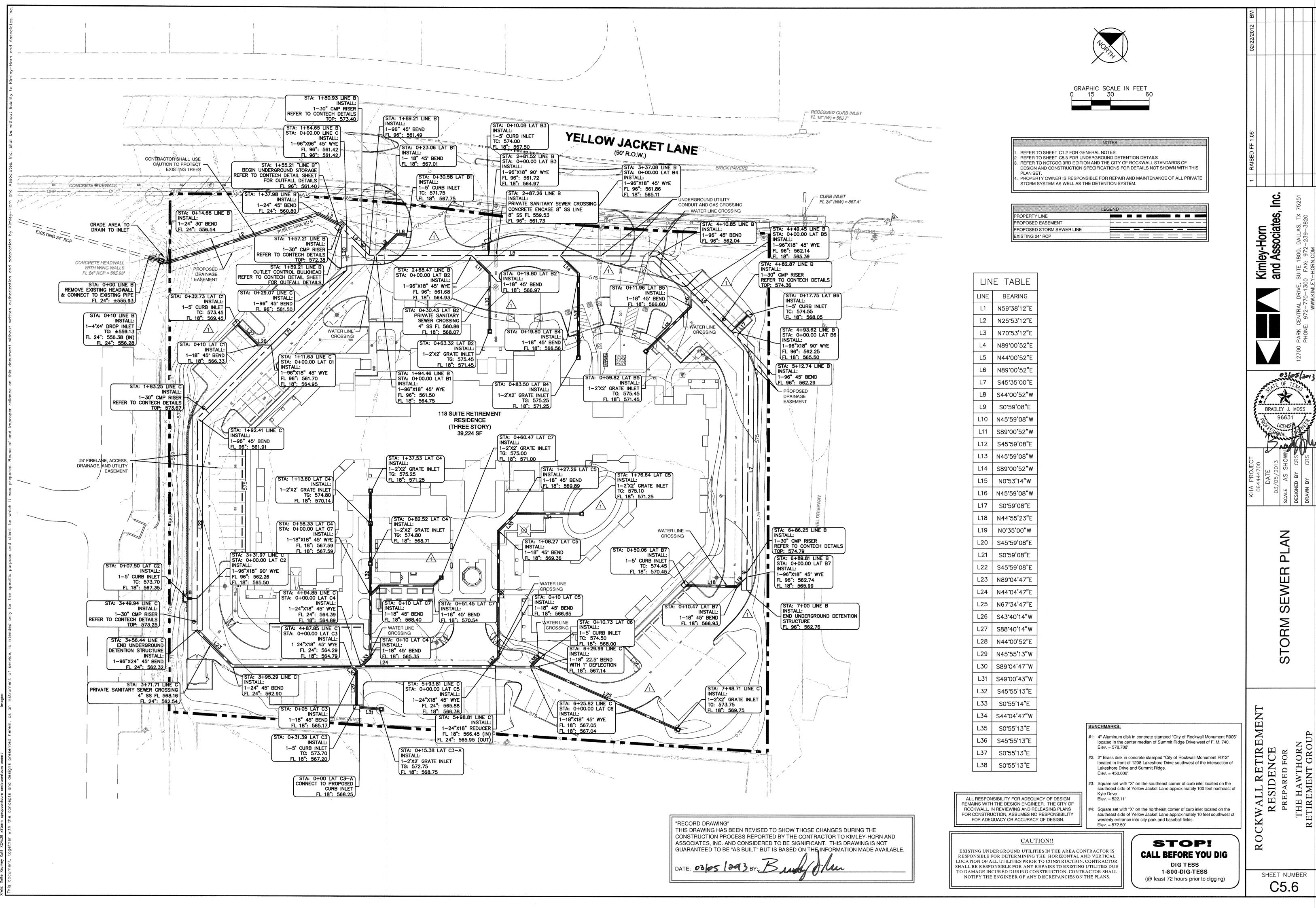
CONSTRUCTION PRODUCTS INC. www,contech-cpl.com

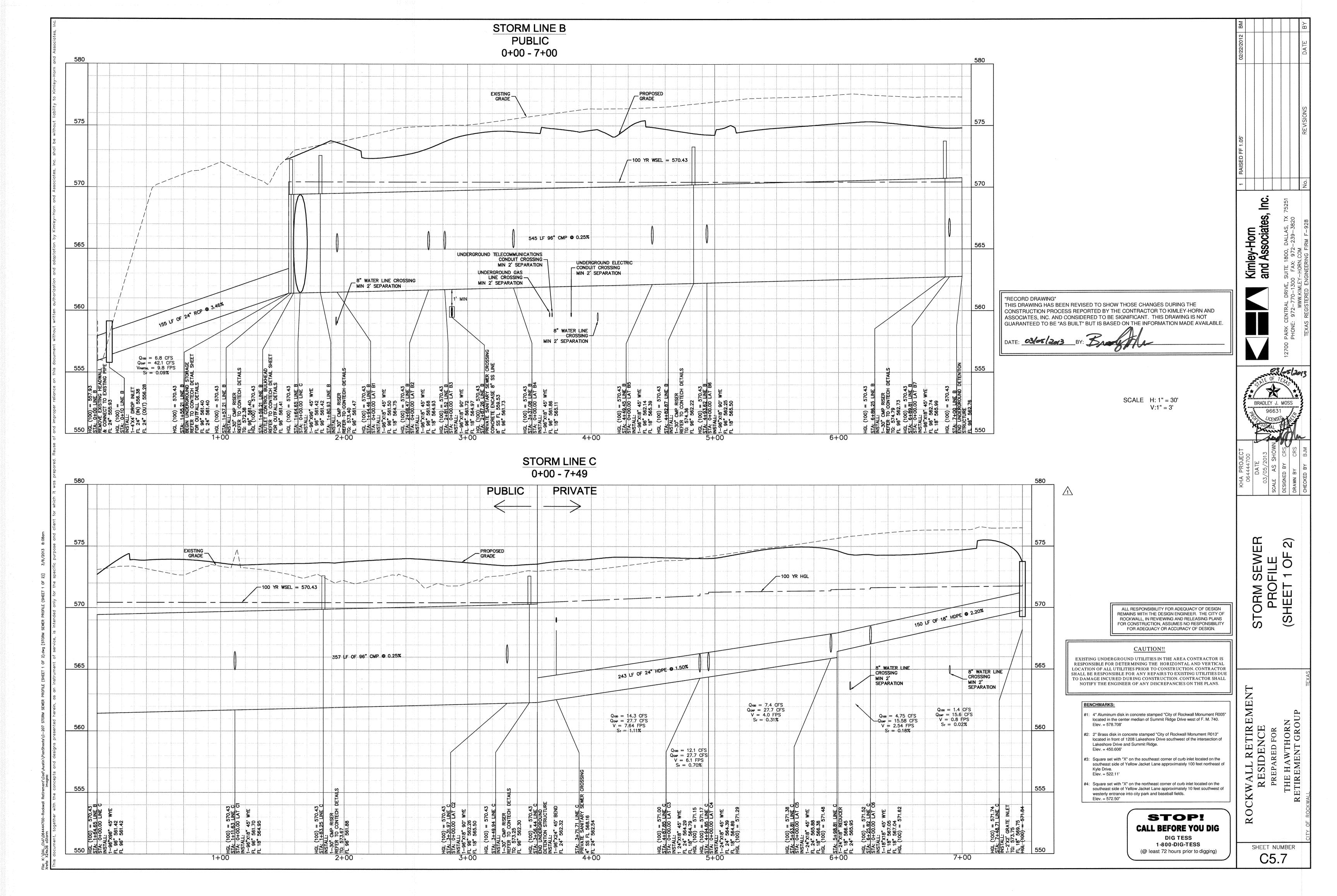
605 Global Way Suite 113, Linthicum, MD 21090 410-796-5505 866-376-8511 FAX 866-740-3318

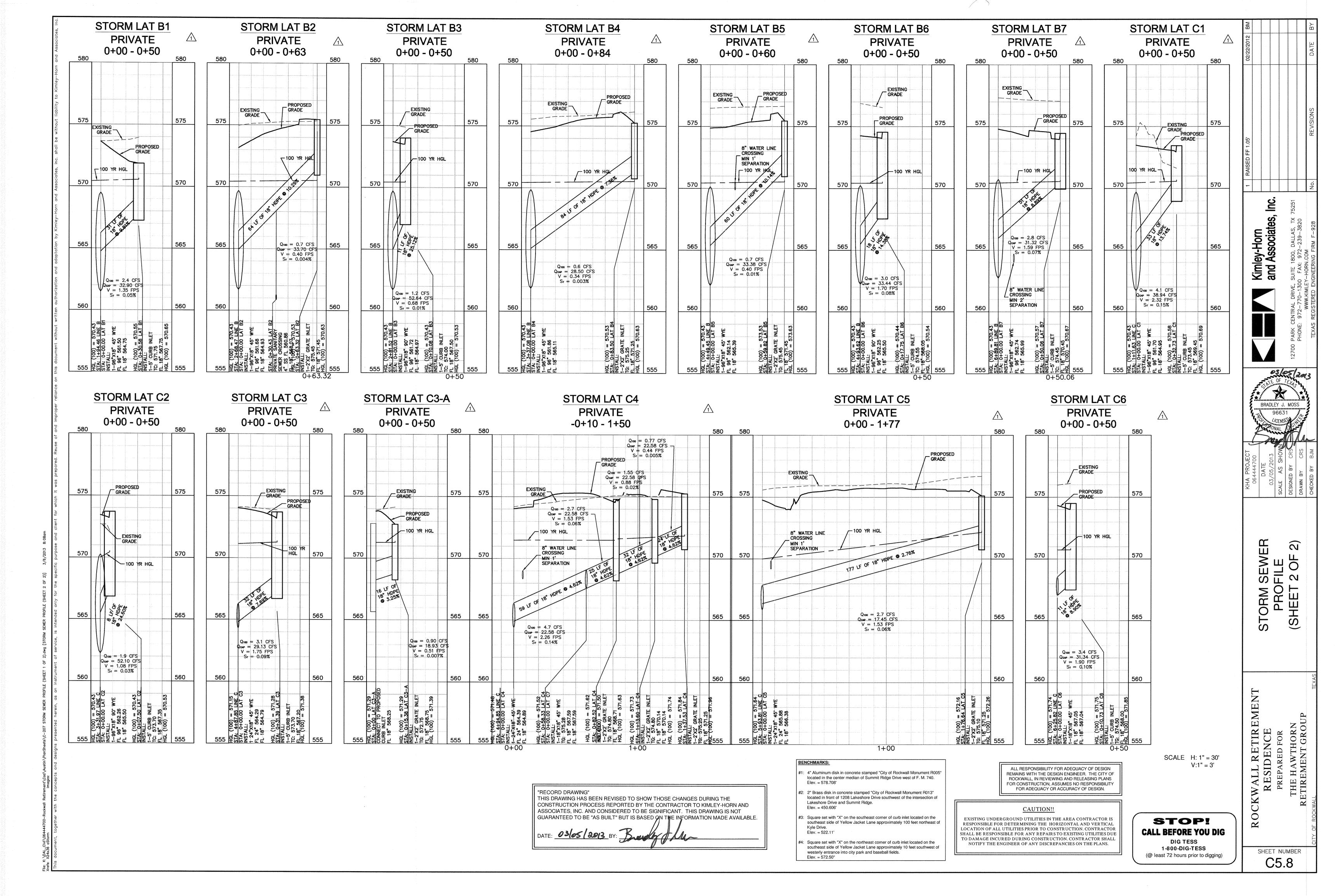


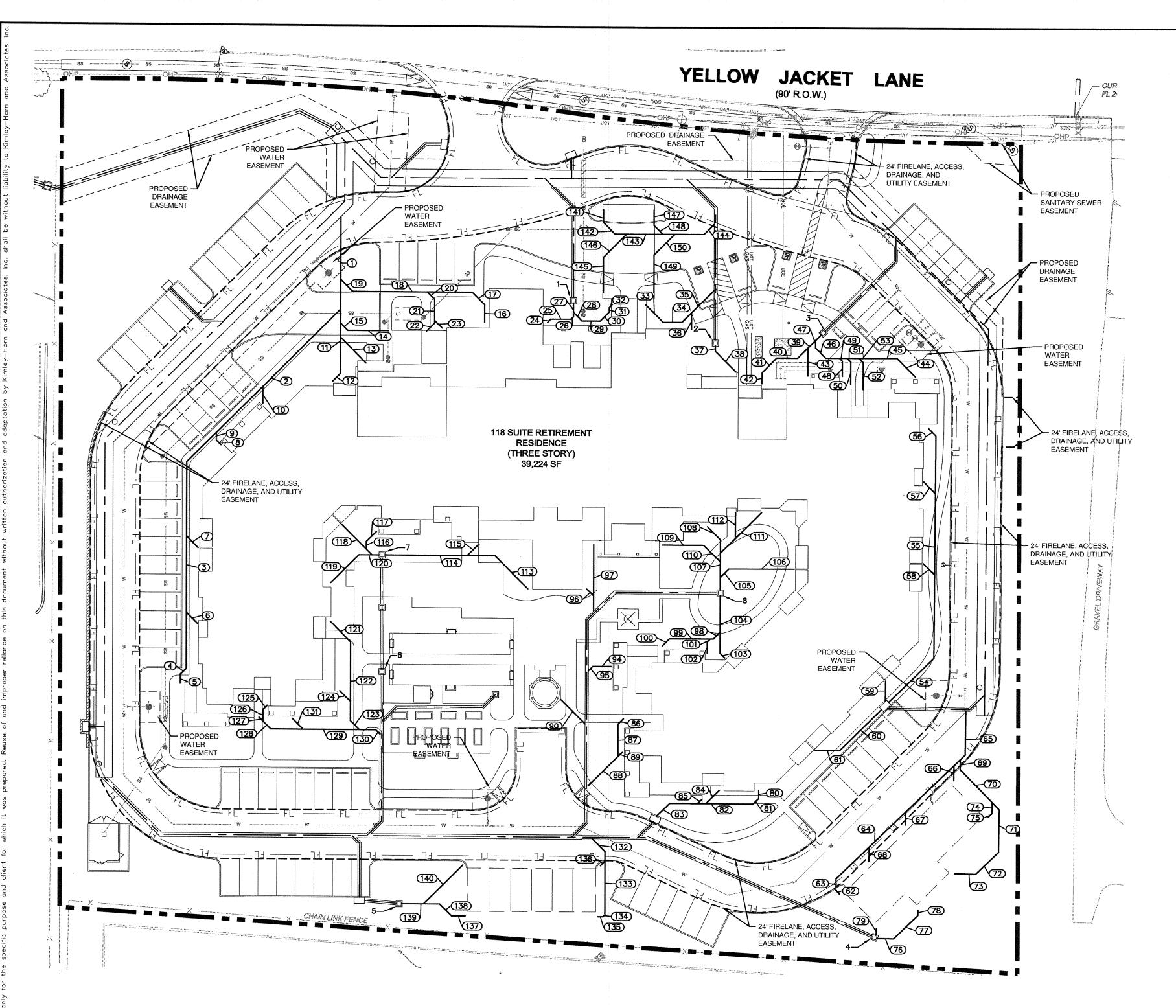
Ø96" UNDERGROUND DETENTION SYSTEM - 442005-001 ROCKWALL RETIREMENT RESIDENCE ROCKWALL, TX SITE DESIGNATION:

PROJECT No.:	SEQ.	No.:	DAT	= :	
442005	00)1	9/21/2011		
DESIGNED:		DRAW	/N:		
HES	,	RRB			
CHECKED:		APPR	OVED	*	
SHEET NO.:	P3	OI	F	3	









. REFER TO SHEET C1.2 FOR GENERAL NOTES.

AND MEP PLANS FOR CONTINUATION.

REDUCERS NOT SHOWN.

6. ALL LINES SHALL BE PVC.

ELEVATION)

PROPERTY LINE

PROPOSED EASEMENT

PROPOSED STORM SEWER LINE

PROPOSED ROOF DRAINAGE LINE

FIRE LANE

2. UTILITY CONNECTIONS TERMINATE 5' FROM BUILDING ENVELOPE. SEE ARCHITECT

3. REFER TO LANDSCAPE PLANS FOR EXACT LOCATION AND SIZE OF SLEEVES.

4. ALL CONNECTIONS ARE 45° BENDS AND 45° WYES UNLESS OTHERWISE NOTED.

5. ALL ROOF DRAINS ARE SET AT ELEVATION 571.00. (4.5' BELOW FINISHED FLOOR

GRATE (DRAIN BASIN) TABLE			
GRATE NUMBER	TOP OF GRATE	FL OF GRATE	
1	574.40	570.40	
2	574.20	570.20	
3	574.40	570.40	
4	572.70	568.70	
5	572.75	568.75	
6	574.00	568.08	
7	574.20	570.20	

~~~		
TE (DI	RAIN BAS	N) TABLE
ATE MBER	TOP OF GRATE	FL OF GRATE
1	574.40	570.40
2	574.20	570.20
3	574.40	570.40
4	572.70	568.70
5	572.75	568.75
6	574.00	568.08
7	574.20	570.20
8	574.20	570.20

LINE | LENGTH | BEARING 44.57 | \$45*59'08"E 2 | 104.77 | S0*59'08"E 3 | 100.50 | S45*59'08"E 3.99 S0'59'08"E 4.32 S45*59'08"E 8.04 S89'00'52"W 8.04 S89'00'52"W 3.16 S89'00'52"W N45'59'08"W 10 8.22 S45'59'08"E 11 | 31.08 S45*59'08"E 12 5.34 S0'59'08"E 13 | 17.44 | S89°00'52"W 14 | 19.55 | S44°00'52"W 5.02 S89°00'52"W 8.46 N45'59'08"W 8.45 S89'00'52"W 18 | 57.88 | S44°00'52"W 8.11 S89'00'52"W 5.05 N89'00'52"E 11.51 S45*59'08"E 22 5.44 S0'59'08"E 5.17 | S89°00'52"W 2.22 N0°59'08"W 9.65 N44°00'52"E 1.80 N0'59'08"W 27 6.29 N45'59'08"W 5.82 N89'00'52"E 8.80 N44'00'52"E 6.17 N0*59'08"W 31 2.11 N45*59'08"W 32 | 2.23 | N0°59'08"W 33 N89*00'52"E 11.98 34 9.14 N44'00'52"E 35 N0°59'08"W 36 8.06 N45*59'08"W 37 2.45 N45*59'08"W 38 14.12 S89'00'52"W 39 15.83 S0'53'14"E 40 10.20 S44°00'52"W 6" 41 | 10.00 S0'53'14"E 42 5.26 S45'53'14"E 6" 43 | 13.42 N45°53'14"W 6" 44 | 12.52 S89°06'46"W 45 34.54 S44*00'52"W 6.90 S89°06'46"W 47 3.66 N45°53'14"W

LINE TABLE

	LINE	TABLE				LINE 7	ΓABLE
LINE	LENGTH	BEARING	SIZE		LINE	LENGTH	BEARIN
51	2.33	S89'06'46"W	6"		104	27.71	N45*55'1
52	12.89	N45'53'14"W	6"		105	5.85	S0°55'1
53	2.77	S89'06'46"W	6"		106	31.50	S44'04'4
54	30.53	N0'35'00"W	8"	-	107	24.32	S45*55'1
55	107.94	N45'35'00"W	8"		108	8.90	N89 <b>*</b> 04'4
56	5.00	S89'25'00"W	6"		109	19.91	N44'04'4
57	8.03	S89'25'00"W	6"		110	11.35	N89°04'4
58	7.63	S89°25'00"W	6"		111	28.01	S0*55'1
59	9.96	S45'35'00"E	6"		112	12.60	N45°55'1
60	28.42	S0'35'00"E	6"		113	22.50	S89°00'5
61	11.70	S44°25'00"W	6"		114	52.94	S44°00'5
62	2.62	S89*55'23"W	6"		115	7.93	NO*59'08
63	5.68	N45°04'37"W	6"		116	3.68	N45°52'3
64	86.60	N0°04'37"W	8"		117	6.98	N0°52'32
65	21.18	S45°04'37"E	8"		118	20.68	S89°07'2
66	7.30	N45°04'37"W	6"		119	19.17	N0°52'32
67	6.38	N45°04'37"W	6"		120	9.85	N44°07'2
68	7.05	N45°04'37"W	6"		121	13.86	N89°04'4
69	4.78	S45'04'37"E	6"		122	38.11	S45*55'1
70	27.25	N89°55'23"E	6"		123	6.08	N89°04'4
71	20.58	S45°04'37"E	6"		124	7.40	N89°04'4
72	15.34	S0*04'37"E	6"		125	2.83	S0°55'13
73	10.12	S44*55'23"W	6"		126	5.67	S45'55'1
74	5.23	S45°04'37"E	6"		127	2.83	N89°04'4
75	2.53	S0*04'37"E	6"		128	5.27	N89°04'4
76	7.77	N44'55'23"E	6"		129	50.81	N44°04'4
77	16.39	N0°04'37"W	6"		130	2.97	N89°04'4
78	2.50	N45°04'37"W	6"		131	7.45	N89*04'4
79	3.00	N45°04'37"W	6"		132	8.86	N89°04'4
80	3.96	S45°35'00"E	6"		133	30.62	S45*55'1
81	3.83	S0*35'00"E	6"		134	1.28	S0°55'13
82	40.18	S44'25'00"W	6"		135	2.58	S44°04'4
83	9.08	S0°35'00"E	6 <b>"</b>		136	3.20	NO*55'13
84	9.18	N0°35'00"W	6"		137	6.64	S44'00'5
85	2.72	N0°35'00"W	6"		138	8.14	S89'00'5
86	3.60	S0*55'13"E	6"		139	17.96	S44'00'5
87	15.66	S45'55'13"E	6"		140	26.86	NO'59'08
88	20.36	S0'55'13"E	6"		141	5.99	S45*59'0
89	2.95	S0*55'13"E	6"		142	7.88	N89°00'5
90	16.90	S89'04'47"W	6"		143	43.01	N44'00'5
94	8.75	S44'04'47"W	6"		144	6.93	N0'59'08
95	3.09	S0'55'13"E	6"		145	17.09	N45*59'0
96	4.65	S89'04'47"W	6"		146	16.05	N0'59'08
97	32.23	N45°55'13"W	6"		147	7.31	N45°59'0
98	4.59	S0*55'13"E	6"		148	6.02	S89'00'5
99	21.23	S44'04'47"W	6"		149	18.41	S45'59'0
100	4.68	S0*55'13"E	6"	l	150	14.19	S0°59'08
101	2.07	N0°55'13"W	6"				
102	5.31	N45*55'13"W	6"				
1			1				

103 | 3.30 | S89°04'47"W | 6"

LINE LENGTH BEARING  104 27.71 N45*55'13"W  105 5.85 S0*55'13"E  106 31.50 S44*04'47"W  107 24.32 S45*55'13"E	SIZE 6" 6" 6" 8"
105 5.85 S0°55'13"E 106 31.50 S44°04'47"W	6" 6"
106 31.50 S44°04'47"W	6"
107 24.32 S45*55'13"E	8"
1 1	
108 8.90 N89°04'47"E	6"
109 19.91 N44°04'47"E	6"
110 11.35 N89°04'47"E	6"
111 28.01 S0°55'13"E	6"
112 12.60 N45°55'13"W	6"
113 22.50 S89°00'52"W	6"
114 52.94 S44°00'52"W	6"
115 7.93 N0*59'08"W	6"
116 3.68 N45*52'32"W	6"
117 6.98 N0°52°32"W	6"
118 20.68 S89°07'28"W	6"
119 19.17 N0°52'32"W	6"
120 9.85 N44°07'28"E	6"
121 13.86 N89°04'47"E	6"
122 38.11 S45*55'13"E	6"
123 6.08 N89°04'47"E	6"
124 7.40 N89°04'47"E	6"
125 2.83 S0*55'13"E	6"
126 5.67 S45*55'13"E	6"
127 2.83 N89°04'47"E	6"
128 5.27 N89°04'47"E	6"
129 50.81 N44°04'47"E	8"
130 2.97 N89°04'47"E	8"
131 7.45 N89°04'47"E	6"
132 8.86 N89°04'47"E	6"
133 30.62 S45°55'13"E	6"
134 1.28 S0°55'13"E	6"
135 2.58 S44°04'47"W	6"
136 3.20 N0°55′13″W	6"
137 6.64 S44'00'52"W	6"
138 8.14 S89°00'52"W	6"
139 17.96 S44°00'52"W	6"
140 26.86 N0°59'08"W	6"
141 5.99 S45*59'08"E	6"
142 7.88 N89°00'52"E	6"
143 43.01 N44°00'52"E	6"
144 6.93 N0°59'08"W	6"
145 17.09 N45*59'08"W	6"
146 16.05 N0°59'08"W	6"



PREPARED FOR THE HAWTHORN RETIREMENT GROUP

STOP!

#1: 4" Aluminum disk in concrete stamped "City of Rockwall Monument R005" located in the center median of Summit Ridge Drive west of F. M. 740.

#2: 2" Brass disk in concrete stamped "City of Rockwall Monument R013" located in front of 1208 Lakeshore Drive southwest of the intersection of

#3: Square set with "X" on the southeast corner of curb inlet located on the

#4: Square set with "X" on the northeast corner of curb inlet located on the

westerly entrance into city park and baseball fields.

southeast side of Yellow Jacket Lane approximately 100 feet northeast of

southeast side of Yellow Jacket Lane approximately 10 feet southwest of

BENCHMARKS:

Elev. = 578.708'

Elev. = 450.606'

Kyle Drive.

Elev. = 522.11'

Elev. = 572.50"

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN

REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS

FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY

FOR ADEQUACY OR ACCURACY OF DESIGN.

CAUTION!!

EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS

RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL

LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR

NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURED DURING CONSTRUCTION. CONTRACTOR SHALL

Lakeshore Drive and Summit Ridge.

DIG TESS

**CALL BEFORE YOU DIG** 

1-800-DIG-TESS SHEET NUMBER (@ least 72 hours prior to digging) C5.9

l	"RECORD DRAWING"
1	THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES DURING THE
I	CONSTRUCTION PROCESS REPORTED BY THE CONTRACTOR TO KIMLEY-HORN AND
1	ASSOCIATES, INC. AND CONSIDERED TO BE SIGNIFICANT. THIS DRAWING IS NOT
I	GUARANTEED TO BE "AS BUILT" BUT IS BASED ON THE INFORMATION MADE AVAILABLE.
	DATE: 03/05/2013 BY: Brown Mun
ı	

N45°53'14"W

S89°06'46"W

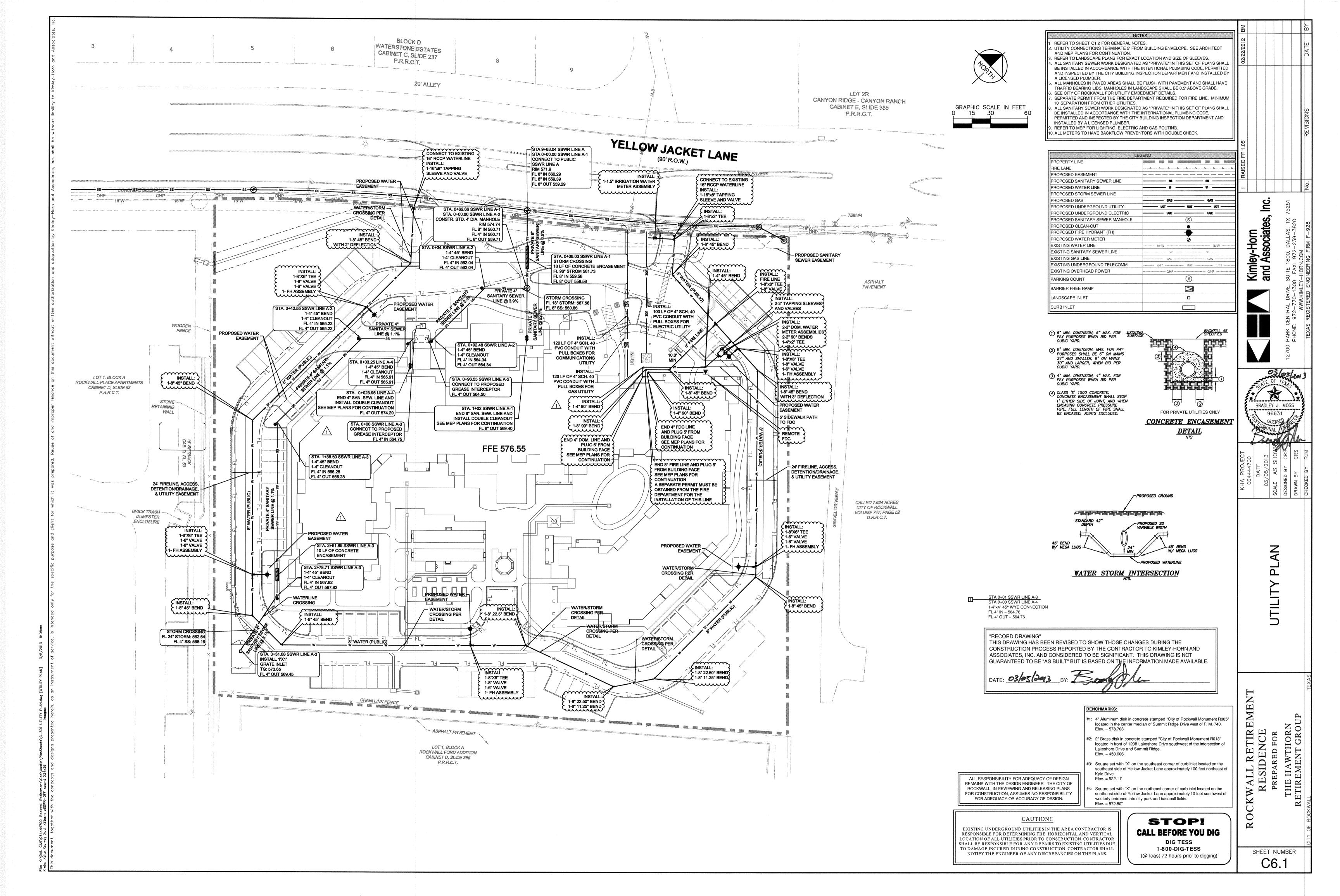
N45'53'14"W

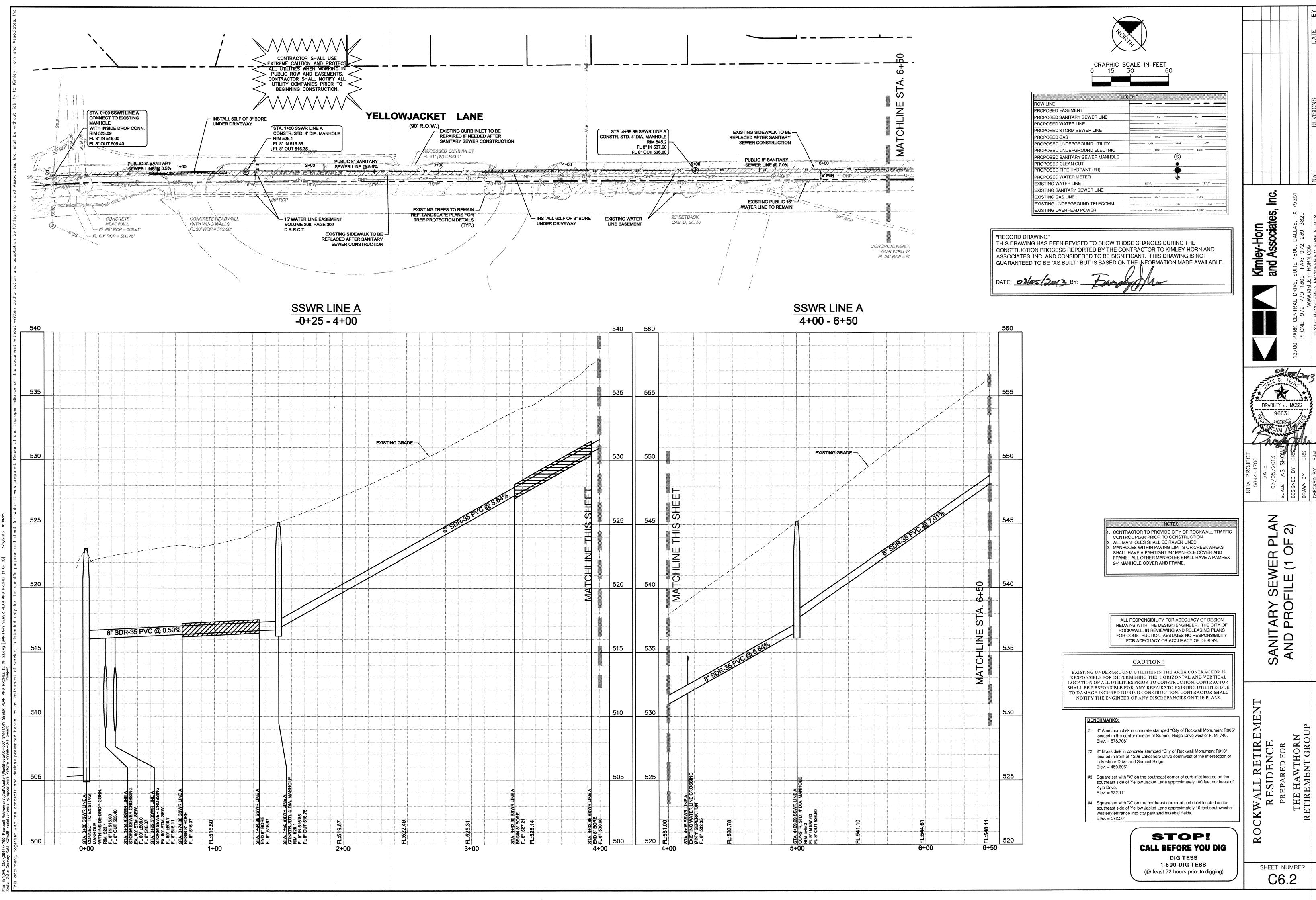
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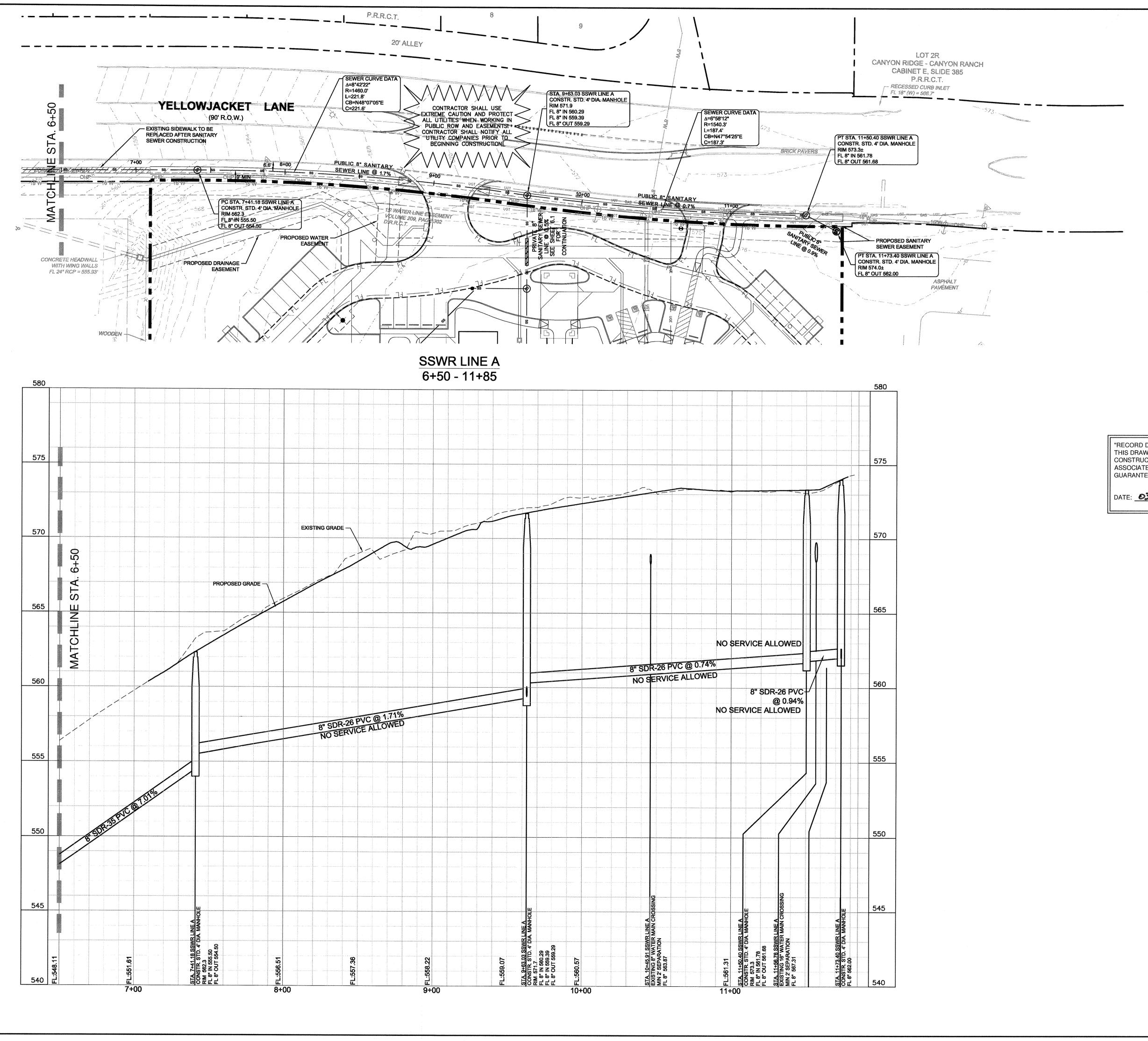
50 | 10.64

1.95

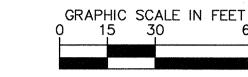
49











ROW LINE		
PROPOSED EASEMENT		
PROPOSED SANITARY SEWER LINE	ss	SS
PROPOSED WATER LINE	w	w
PROPOSED STORM SEWER LINE		
PROPOSED GAS	GAS	GAS
PROPOSED UNDERGROUND UTILITY	UGT t	JGT — UGT —
PROPOSED UNDERGROUND ELECTRIC	UGE	UGE
PROPOSED SANITARY SEWER MANHOLE		3)
PROPOSED CLEAN-OUT		
PROPOSED FIRE HYDRANT (FH)	-6	
PROPOSED WATER METER		9
EXISTING WATER LINE	16°W	16°W -
EXISTING SANITARY SEWER LINE	35	
EXISTING GAS LINE	GAS	GAS
EXISTING UNDERGROUND TELECOMM.		70Y YOY

. CONTRACTOR TO PROVIDE CITY OF ROCKWALL TRAFFIC CONTROL PLAN PRIOR TO CONSTRUCTION. . ALL MANHOLES SHALL BE RAVEN LINED. . MANHOLES WITHIN PAVING LIMITS OR CREEK AREAS SHALL HAVE A PAMTIGHT 24" MANHOLE COVER AND FRAME. ALL OTHER MANHOLES SHALL HAVE A PAMREX 24" MANHOLE COVER AND FRAME.

"RECORD DRAWING"

THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES DURING THE CONSTRUCTION PROCESS REPORTED BY THE CONTRACTOR TO KIMLEY-HORN AND ASSOCIATES, INC. AND CONSIDERED TO BE SIGNIFICANT. THIS DRAWING IS NOT

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN.

EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

- #1: 4" Aluminum disk in concrete stamped "City of Rockwall Monument R005" located in the center median of Summit Ridge Drive west of F. M. 740. Elev. = 578.708'
- #2: 2" Brass disk in concrete stamped "City of Rockwall Monument R013" located in front of 1208 Lakeshore Drive southwest of the intersection of Lakeshore Drive and Summit Ridge. Elev. = 450.606'
- #3: Square set with "X" on the southeast corner of curb inlet located on the southeast side of Yellow Jacket Lane approximately 100 feet northeast of Kyle Drive. Elev. = 522.11'
- #4: Square set with "X" on the northeast corner of curb inlet located on the southeast side of Yellow Jacket Lane approximately 10 feet southwest of westerly entrance into city park and baseball fields. Elev. = 572.50"

#### STOP! **CALL BEFORE YOU DIG**

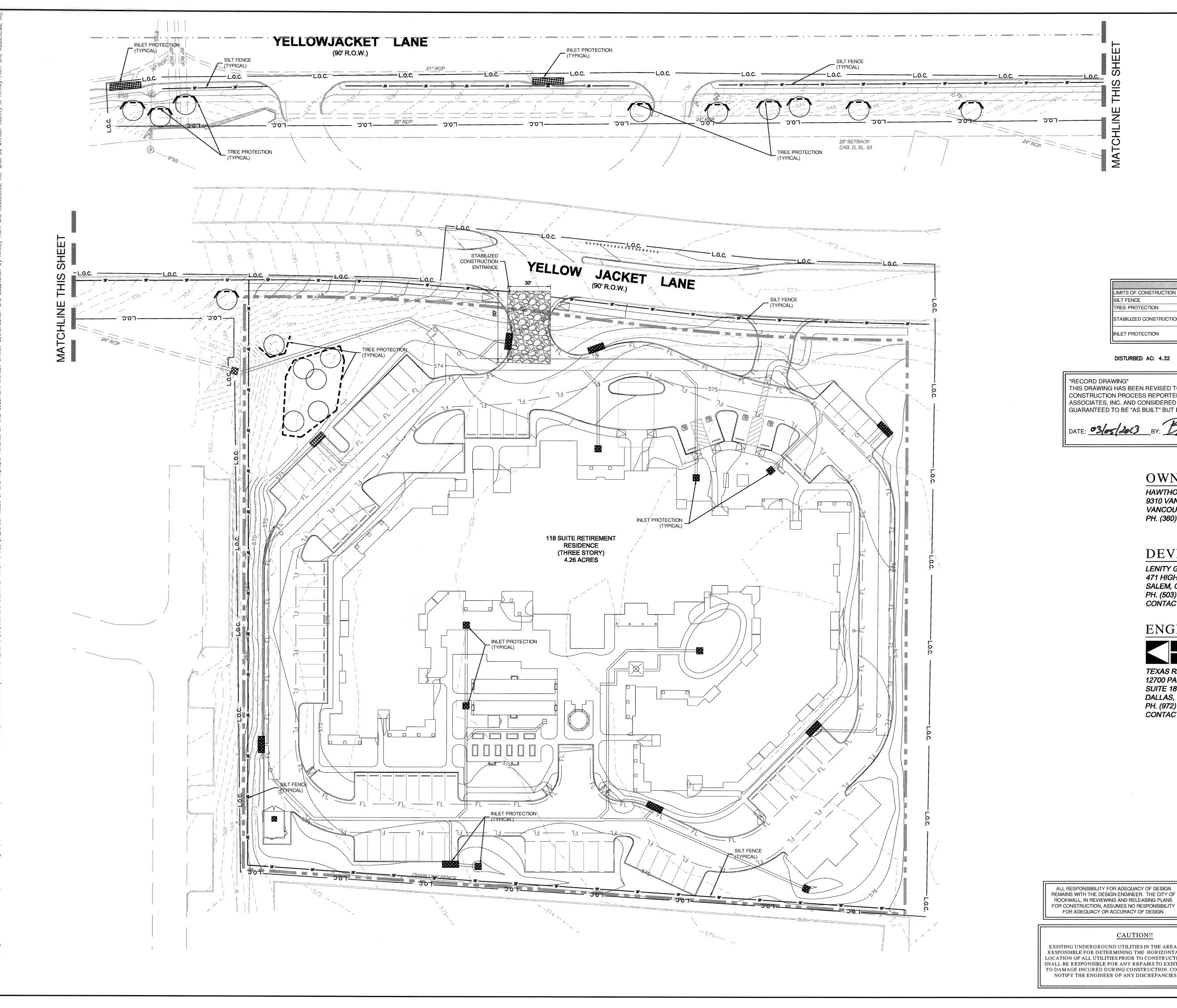
DIG TESS 1-800-DIG-TESS (@ least 72 hours prior to digging)

SHEET NUMBER C6.3

BRADLEY J. MOSS

SANITARY SEWEI AND PROFILE (2

CKWALL RETIREMI RESIDENCE PREPARED FOR THE HAWTHORN RETIREMENT GROUP





LIMITS OF CONSTRUCTION SILT FENCE TREE PROTECTION STABILIZED CONSTRUCTION ENTRANCE INLET PROTECTION

#### DISTURBED AC: 4.32

"RECORD DRAWING" THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES DURING THE CONSTRUCTION PROCESS REPORTED BY THE CONTRACTOR TO KIMLEY-HORN AND

#### **OWNER**

HAWTHORN RETIREMENT GROUP 9310 VANCOUVER MALL DR., STE. 200 VANCOUVER, WA 98662-8210 PH. (360) 213-1550

#### DEVELOPER/ARCHITECT

LENITY GROUP, LLC 471 HIGH STREET SE, STE. 10 SALEM, OR 97301 PH. (503) 399-1090 CONTACT: RON JACKSON

## **ENGINEER**



TEXAS REGISTERED ENGINEERING FIRM F-928 12700 PARK CENTRAL DRIVE SUITE 1800 DALLAS, TEXAS 75251 PH. (972) 770-1300 CONTACT: RUSTY L. PRENTICE, P.E.

#### BENCHMARKS:

- 1: 4" Aluminum disk in concrete stamped "City of Rockwall Monument R005" located in the center median of Summit Ridge Drive west of F. M. 740. Elev. = 578.708
- #2: 2" Brass disk in concrete stamped "City of Rockwall Monument R013" located in front of 1208 Lakeshore Drive southwest of the intersection of Lakeshore Drive and Summit Ridge. Elev. = 450.606'
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- #4: Square set with "X" on the northeast corner of curb inlet located on the southeast side of Yellow Jacket Lane approximately 10 feet southwest of westerly entrance into city park and baseball fields. Elev. = 572.50"

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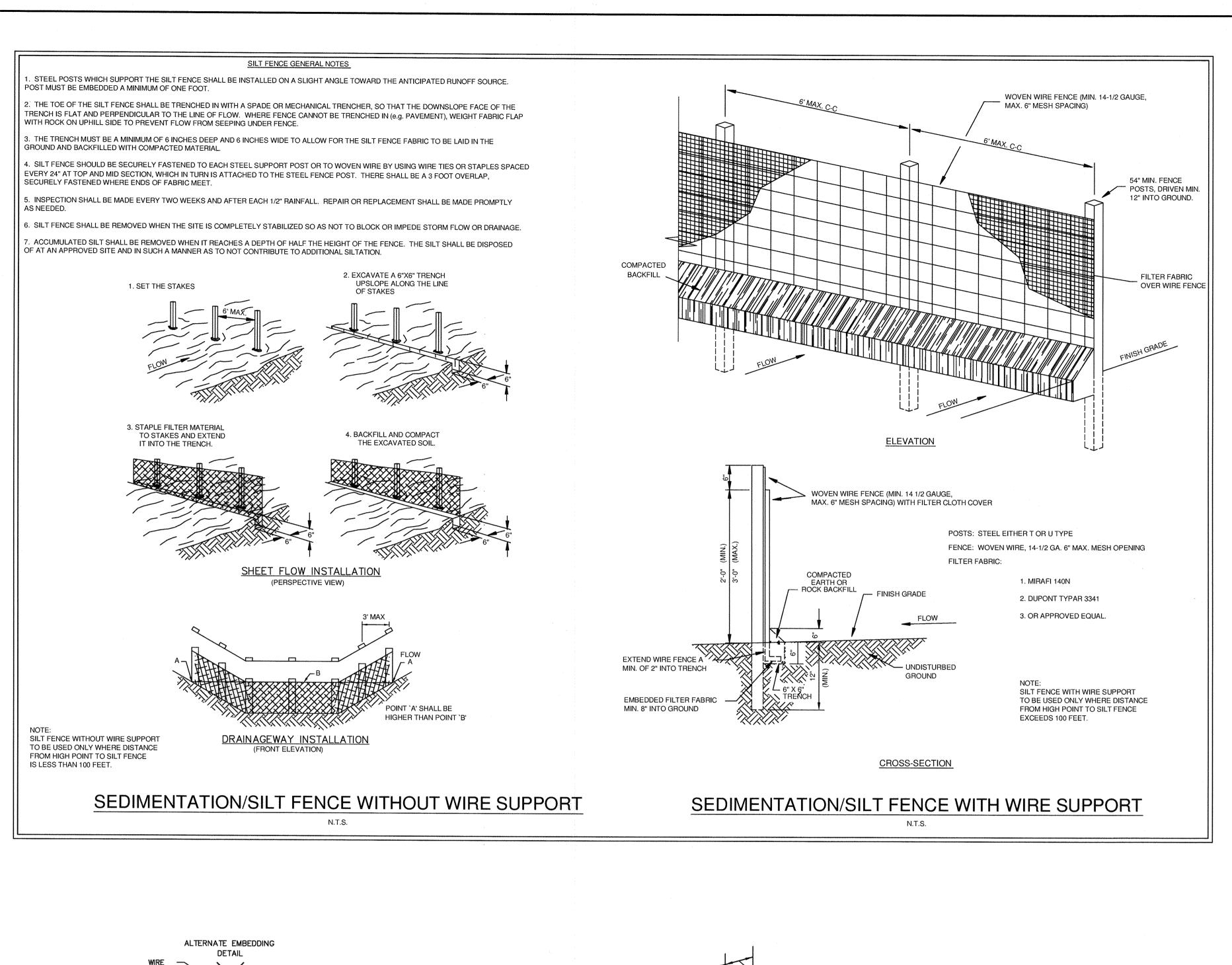
# **CALL BEFORE YOU DIG**

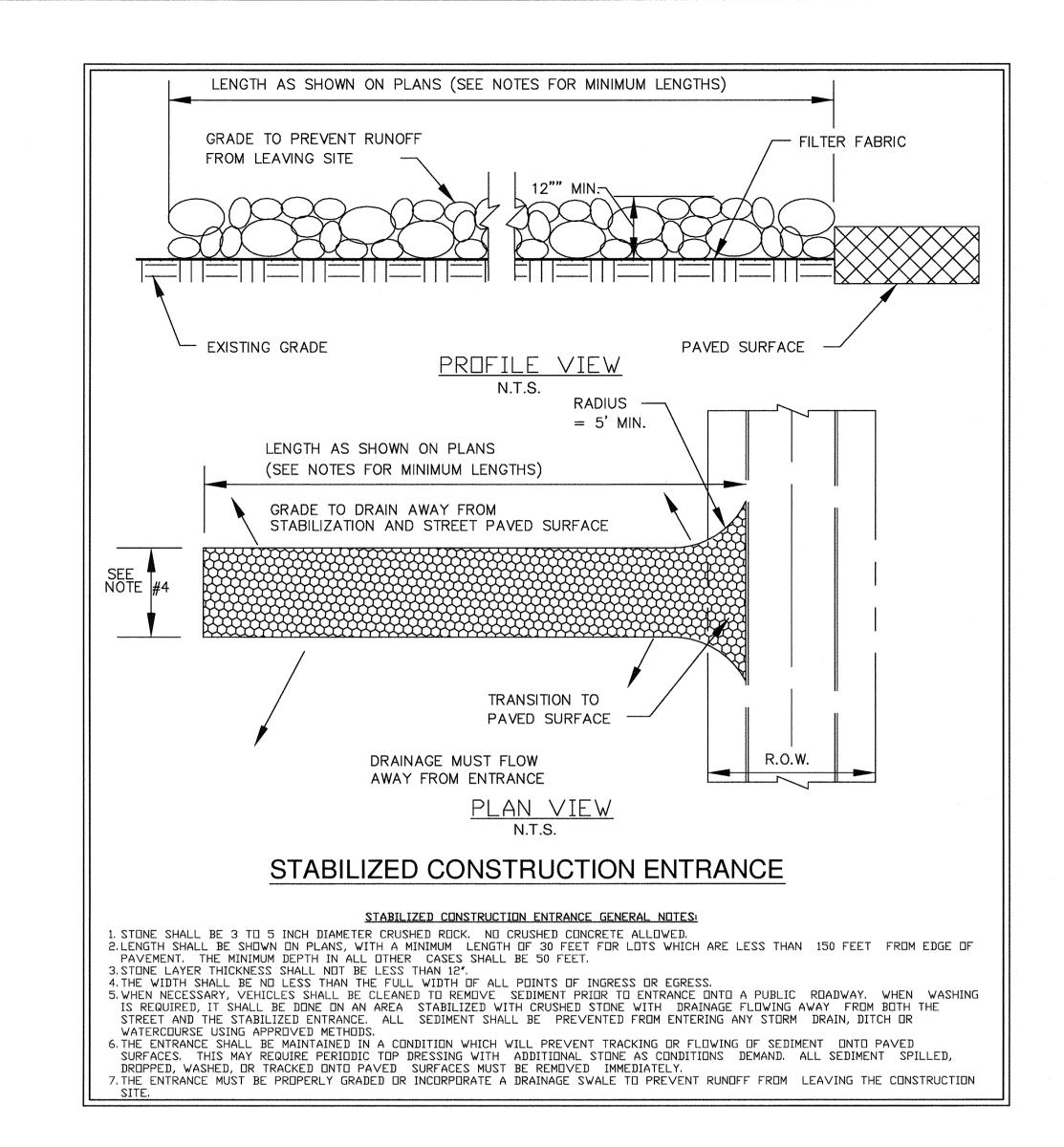
DIG TESS 1-800-DIG-TESS (@ least 72 hours prior to digging)

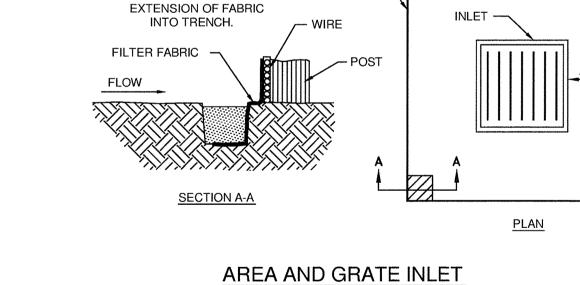
STOP!

SHEET NUMBER

THE HAWTHORN ETIREMENT GROUP

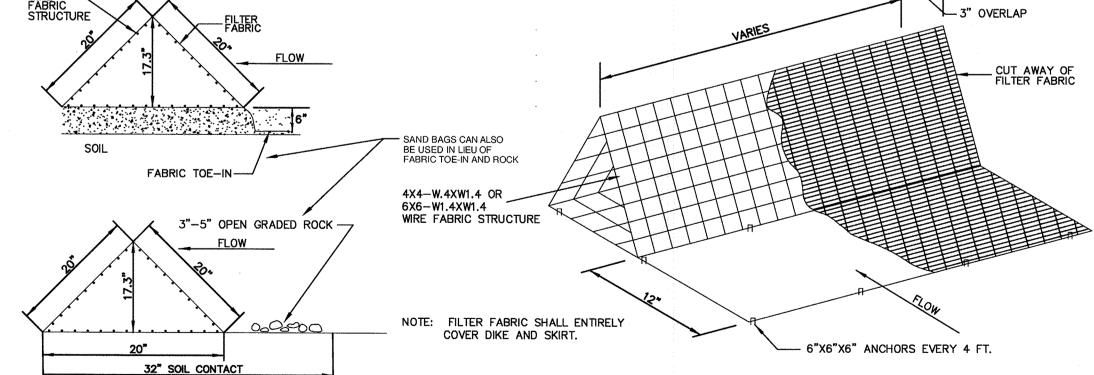






PROTECTION

FILTER FABRIC -



TRIANGULAR FILTER DIKE

FILTER THROUGH AND OVER THE MATERIAL BEFORE ENTERING THE INLET.

"RECORD DRAWING" THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES DURING THE CONSTRUCTION PROCESS REPORTED BY THE CONTRACTOR TO KIMLEY-HORN AND ASSOCIATES, INC. AND CONSIDERED TO BE SIGNIFICANT. THIS DRAWING IS NOT

1. PLACE CONCRETE BLOCKS IN A SINGLE ROW IN FRONT OF

MIN. HEIGHT OF BARRIER 12" AND MAX. HEIGHT OF 24"

FACE OF CONCRETE BLOCKS.

INLET ON THEIR SIDES, WITH ENDS OF ADJACENT BLOCKS ABUTTING.

2. HEIGHT OF BARRIER VARIES. USE STACKS OF 4-INCH, 8-INCH, OR 12" BLOCKS.

3. PLACE HARDWARE CLOTH/WIRE MESH W/ MAX. 1/2" OPENINGS OVER VERTICAL

4. THE AGGREGATE SHALL BE ANY NON-ERODIBLE MATERIAL SUCH AS LOOSE ROCK,

BROKEN CONCRETE THAT WILL SLOW THE FLOW OF THE WATER AND ALLOW IT TO



REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN. CAUTION!!

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN Elev. = 572.50"

BENCHMARKS:

Elev. = 578.7082: 2" Brass disk in concrete stamped "City of Rockwall Monument R013" located in front of 1208 Lakeshore Drive southwest of the intersection of Lakeshore Drive and Summit Ridge. Elev. = 450.606'

4" Aluminum disk in concrete stamped "City of Rockwall Monument R005"

located in the center median of Summit Ridge Drive west of F. M. 740.

WOOD OR METAL STAKE

3: Square set with "X" on the southeast corner of curb inlet located on the southeast side of Yellow Jacket Lane approximately 100 feet northeast of Elev. = 522.11'

4: Square set with "X" on the northeast corner of curb inlet located on the southeast side of Yellow Jacket Lane approximately 10 feet southwest of westerly entrance into city park and baseball fields.

EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION, CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

STOP! DIG TESS

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C7.2

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