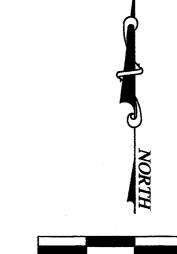


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GRAPHIC SCALE IN FEET

SCALE: 1"=20'

## **LEGEND**

CONCRETE PAVEMENT:
6" 3500 PSI CONCRETE PVMT. W/ #3 BARS @ 18" O.C.E.W. ON 6" COMPACTED SUBGRADE TO 95% AT OR ABOVE OPTIMUM MOISTURE CONTENT. (ASTM D 698)



PARKING LOT:
6" CRUSHED LIMESONE FLEX BASE ON 6" COMPACTED SUBGRADE TO 95% AT OR ABOVE OPTIMUM MOISTURE CONTENT. (ASTM D 698)



SIDEWALK & FLATWORK:

4" REINFORCED CONCRETE SIDEWALK FLATWORK (3000 PSI AT 28 DAYS) W/ #3 BARS @ 18" O.C.E.W. ON 6" COMPACTED SUBGRADE TO 95% AT OR ABOVE OPTIMUM MOISTURE CONTENT. (ASTM D 698)



## GRADING NOTES

1. GENERAL CONSTRUCTION NOTES: REFER TO SHEET C100 "GENERAL CONSTRUCTION NOTES, LEGEND, ABBREVIATIONS AND DETAILS" FOR THE GENERAL CIVIL CONSTRUCTION NOTES FOR THE PROJECT.

2. UNDISTURBED AREAS: PRIOR TO GRADING OR SITE CONSTRUCTION, THE CONTRACTOR SHALL MEET WITH THE DEVELOPER AND/OR ENGINEER AT THE SITE TO ASCERTAIN THE AREAS OF THE PROJECT SITE THAT ARE TO BE PROTECTED AND PRESERVED. REFER TO THE "GENERAL TREE PROTECTION NOTES" FOR ALL CONSTRUCTION IN THE VICINITY OF EXISTING TREES.

3. TESTING: ALL EARTHWORK OPERATIONS SHALL BE OBSERVED AND TESTED ON A CONTINUING BASIS BY THE GEOTECHNICAL ENGINEER FOR CONFORMANCE WITH THE REQUIREMENTS SET FORTH IN THE GEOTECHNICAL STUDY OR BY THE GEOTECHNICAL ENGINEER.

4. STRIPPING AND DEBRIS REMOVAL: THE BUILDING PAD SITES, AREAS TO BE PAVED, AND ALL AREAS THAT ARE TO RECEIVE FILL MATERIAL SHALL BE STRIPPED OF VEGETATION. TREES. ROOTS, STUMPS, DEBRIS, AND OTHER ORGANIC MATERIAL. THE DEPTH OF STRIPPING IS ESTIMATED TO BE ON THE ORDER OF SIX (6) INCHES IN ORDER TO REMOVE THE SURFACE SOIL CONTAINING ORGANIC MATERIAL. THE ACTUAL STRIPPING DEPTH SHALL BE BASED ON FIELD OBSERVATIONS. STRIPPED TOPSOIL SHALL BE STOCKPILED IN A LOCATION ON-SITE APPROVED BY THE DEVELOPER. ALL TREES, INCLUDING STUMPS AND ROOT SYSTEMS, VEGETATION, DEBRIS AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OFF-SITE. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS GOVERNING SPILLAGE OF DEBRIS WHILE TRANSPORTING TO A DISPOSAL SITE. ALL COSTS ASSOCIATED WITH DISPOSAL OF MATERIAL SHALL BE INCLUDED IN THE CONTRACT AMOUNT.

5. BURNING: BURNING SHALL NOT BE PERMITTED ON THE PROJECT SITE UNLESS APPROVED IN WRITING BY THE GOVERNING AUTHORITIES AND THE DEVELOPER.

6. PROOF ROLLING: UPON COMPLETION OF STRIPPING OPERATIONS, AND PRIOR TO PLACEMENT OF ANY FILL MATERIALS, THE STRIPPED AREAS SHOULD BE OBSERVED TO DETERMINE IF ADDITIONAL EXCAVATION IS REQUIRED TO REMOVE WEAK OR OTHERWISE OBJECTIONABLE MATERIALS THAT WOULD ADVERSELY AFFECT THE FILL PLACEMENT. THE SUBGRADE SHOULD BE FIRM AND ABLE TO SUPPORT CONSTRUCTION EQUIPMENT WITHOUT DISPLACEMENT. SOFT OR YIELDING SUBGRADE SHOULD BE CORRECTED AND MADE STABLE BEFORE CONSTRUCTION PROCEEDS. PROOF ROLLING SHOULD BE PERFORMED USING A HEAVY PNEUMATIC TIRE ROLLER, LOADED DUMP TRUCK, OR SIMILAR PIECE OF EQUIPMENT WEIGHING 25 TONS. THE PROOF ROLLING OPERATIONS SHOULD BE OBSERVED BY THE GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE.

7. UNSTABLE MATERIAL: WHEN CLAY OR OTHER UNSTABLE MATERIAL IS PRESENT IN AREAS OF PROPOSED BUILDING PADS OR PAVED AREAS, THE GEOTECHNICAL ENGINEER SHALL OBSERVE THE STABILITY OF ANY EXISTING CLAY OR WEATHERED MATERIAL THAT IS PRESENT IN THE SUBBASE, AND SHALL DETERMINE WHETHER ADDITIONAL EXCAVATION OF THESE MATERIALS WILL BE REQUIRED. IF THIS MATERIAL IS DEEMED SUITABLE FOR SUBBASE MATERIAL, THE SUBGRADE SHALL BE SCARIFIED TO A DEPTH OF SIX (6) INCHES, ITS MOISTURE CONTENT ADJUSTED AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER, AND THEN RE-COMPACTED TO ONE HUNDRED (100) PERCENT OF THE OPTIMUM DENSITY DETERMINED BY THE STANDARD PROCTOR TEST, ASTM D - 698 PRIOR TO PLACEMENT OF FILL MATERIALS.

8. CONTROLLED FILL: ALL SOILS USED FOR CONTROLLED FILL SHOULD BE FREE OF ROOTS, VEGETATION, AND OTHER DELETERIOUS OR UNDESIRABLE MATTER. ROCKS LESS THAN 4 INCHES IN LARGEST DIMENSION WITHIN 15" OF PROPOSED SUBGRADE ELEVATION, LESS THAN 6 INCHES IN SIZE FROM 15" TO 36" OF PROPOSED SUBGRADE ELEVATION, LESS THAN 12 INCHES IN SIZE FROM 36" TO 72" OF PROPOSED SUBGRADE ELEVATION, AND LESS THAN 18 INCHES IN LARGEST DIMENSION FOR FILLS IN EXCESS OF 72" FROM SUBGRADE ELEVATION, WILL BE ALLOWED AS ACCEPTABLE FILL MATERIAL. ROCK FILLS SHOULD BE SUPPLEMENTED WITH A SUFFICIENT AMOUNT OF FINE MATERIAL TO PREVENT VOIDS. SOILS IMPORTED FROM OFF-SITE FOR USE AS FILL SHOULD BE APPROVED BY THE GEOTECHNICAL ENGINEER. THE FILL MATERIAL SHOULD BE PLACED IN LEVEL, UNIFORM LIFTS, WITH EACH LIFT COMPACTED TO THE MINIMUM DRY DENSITY WITHIN THE COMPACTION SOIL MOISTURE RANGES RECOMMENDED. THE LOOSE LIFT THICKNESS SHOULD NOT EXCEED 10 INCHES. EACH LAYER SHOULD BE PROPERLY PLACED, MIXED, SPREAD, AND COMPACTED TO BETWEEN 95 AND 100 PERCENT OF STANDARD PROCTOR DENSITY AS DETERMINED BY ASTM D 698.

9. BUILDING ENTRANCE GRADES: REFER TO THE BUILDING PLANS FOR DETAILED SPOT GRADING AT THE BUILDING ENTRANCE AREAS. THE CONTRACTOR SHALL COMPLY WITH ALL ADA AND TEXAS ACCESSIBILITY STANDARDS FOR REQUIREMENTS REGARDING MAXIMUM SLOPES FOR HANDICAP PARKING AREAS, SIDEWALKS, ACCESS RAMPS AND

10. LANDSCAPE AREAS: ALL LANDSCAPE AREAS AND OTHER DISTURBED AREAS WITHIN THE LIMITS OF THE PROPERTY NOT DESIGNATED TO BE PAVED SHALL RECEIVE SIX (6) INCHES OF TOPSOIL. REFER TO THE EROSION AND SEDIMENT CONTROL PLANS AND/OR LANDSCAPE PLANS FOR LIMITS OF TOPSOIL PLACEMENT.

## PAYING NOTES

1. GENERAL CONSTRUCTION NOTES: REFER TO SHEET C100 "GENERAL CONSTRUCTION NOTES, LEGEND, ABBREVIATIONS AND DETAILS" FOR THE GENERAL CIVIL CONSTRUCTION NOTES FOR THE PROJECT.

2. PROTECTION OF EXISTING IMPROVEMENTS: THE CONTRACTOR SHALL TAKE CARE NOT TO DISTURB EXISTING UTILITIES, BUILDING FOUNDATION OR OTHER SITE STRUCTURES DURING PAVEMENT OPERATIONS.

SUBGRADE PREPARATION: PREPARATION OF SUBGRADE UNDER PAVED AREAS SHALL BE PERFORMED IN ACCORDANCE WITH THE GOVERNING AUTHORITIES' SPECIFICATIONS OR THE GEOTECHNICAL REPORT. THE MORE RESTRICTIVE REQUIREMENTS SHALL APPLY. PAVEMENT SUBGRADE SHALL NOT BE ALLOWED TO RETAIN WATER. WET MATERIAL SHALL BE REMOVED TO DRY, SOUND MATERIAL AND APPROPRIATE DENSITY ACHIEVED PRIOR TO PAVING OPERATIONS.

PROOF-ROLL SUBGRADE: THE SUBGRADE SHALL BE PROOF-ROLLED WITH HEAVY PNEUMATIC EQUIPMENT. ANY SOFT OR PUMPING AREAS SHALL BE EXCAVATED TO FIRM SUBGRADE AND BACKFILLED AND RE-COMPACTED IN CONFORMANCE WITH THE GEOTECHNICAL REPORT.

REINFORCING BARS: ALL REINFORCING BARS SHALL BE GRADE 40 KSI DEFORMED REINFORCING STEEL. SIZE AND SPACING SHALL BE IN ACCORDANCE WITH THE

6. BAR CHAIRS: ALL REINFORCING STEEL AND DOWEL BARS IN PAVEMENT SHALL BE SUPPORTED AND MAINTAINED AT THE CORRECT CLEARANCES BY THE USE OF BAR CHAIRS OR OTHER APPROVED SUPPORT.

8. TEMPERATURE CONDITIONS FOR CONCRETE PLACEMENT: CONCRETE SHALL NOT BE PLACED WHEN THE TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT AND FALLING, BUT MAY BE PLACED WHEN TEMPERATURE IS ABOVE 35 DEGREES FAHRENHEIT AND RISING. THE TEMPERATURE READING SHALL BE TAKEN IN THE SHADE AND AWAY FROM

9. CONCRETE PAVEMENT CURING: MEMBRANE CURING TYPE 2, WHITE PIGMENTED, SHALL BE USED FOR CURING ALL CONCRETE SURFACES IMMEDIATELY AFTER FINISHING OF SURFACES AND SHALL BE IN ACCORDANCE WITH THE TEXAS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS ITEM #526.

10. TESTING: SAMPLES FOR STRENGTH TESTS OF THE CONCRETE PAVEMENT WILL BE TAKEN BY THE GEOTECHNICAL ENGINEER TO VERIFY DESIGN STRENGTH. PAVEMENT AREAS FOUND TO BE DEFICIENT IN STRENGTH SHALL BE REMOVED AND REPLACED SOLELY AT THE EXPENSE OF THE CONTRACTOR. THE GEOTECHNICAL ENGINEER SHALL ALSO RANDOMLY CORE THE PAVEMENT TO VERIFY THE THICKNESS OF CONCRETE. ANY AREA FOUND TO BE DEFICIENT IN THICKNESS SHALL BE REMOVED AND REPLACED SOLELY AT THE EXPENSE OF THE CONTRACTOR.

11. SIDEWALKS AND RAMPS: CONSTRUCTION OF SIDEWALKS, WHEELCHAIR RAMPS AND ACCESSIBLE ROUTES SHALL BE IN ACCORDANCE WITH THE TEXAS ACCESSIBILITY STANDARDS (TAS) AND THE AMERICANS DISIBILITY ACT (ADA).

12. PAVEMENT MARKINGS: PAVEMENT MARKINGS SHALL BE PROVIDED IN ACCORDANCE WITH THE TEXAS "UNIFORM TRAFFIC MANUAL FOR PAVEMENT MARKINGS". ALL HANDICAP SYMBOLS, SIGNAGE AND PAVEMENT MARKINGS SHALL COMPLY WITH TAS AND ADA STANDARDS.

## UTILITY NOTES

GENERAL CONSTRUCTION NOTES: REFER TO SHEET C100 "GENERAL CONSTRUCTION NOTES, LEGEND, ABBREVIATIONS AND DETAILS" FOR THE GENERAL CIVIL

INSPECTION AND TESTING: THE CONTRACTOR SHALL COORDINATE INSPECTION AND TESTING WITH THE APPROPRIATE GOVERNING AUTHORITIES PRIOR TO BACKFILLING

TRENCH COMPACTION: THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING COMPACTION TO A MINIMUM OF 95% STANDARD PROCTOR IN AREAS OF PROPOSED AND FUTURE PAVEMENT AND ALL AREAS EXCAVATED AT THE BUILDING FOOTINGS FOR UTILITY SERVICE ENTRIES. TRENCHES WHICH LIE OUTSIDE THESE AREAS SHALL BE COMPACTED TO A MINIMUM OF 90% STANDARD PROCTOR.

4. CONFLICTS: THE CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND TO ASSURE PROPER DEPTHS ARE ACHIEVED. IN THE EVENT OF A CONFLICT BETWEEN WATER LINES AND STORM DRAIN OR SANITARY SEWER PIPING, THE CONTRACTOR SHALL ADJUST THE WATER LINE DOWNWARDS IN SUCH A MANNER SO THAT THE PIPE MANUFACTURER'S RECOMMENDATIONS ON THE PIPE DEFLECTION AND JOINT STRESS ARE NOT EXCEEDED.

CONNECTION TO EXISTING UTILITIES: THE CONTRACTOR SHALL VERIFY THE SIZE, TYPE, ELEVATION, CONFIGURATION, AND ANGULATION OF EXISTING WATER, SANITARY SEWER AND UTILITY LINES PRIOR TO CONSTRUCTION OF TIE—IN MATERIALS. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR REPAIRS TO EXISTING FACILITIES DAMAGED BY HIS ACTIVITIES.

6. WATER METERS: THE CONTRACTOR SHALL ACQUIRE WATER METERS FROM THE GOVERNING AUTHORITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING

METERS INSTALLED IN BOXES AND CONNECTING PUBLIC TO PRIVATE WATER LINES.

8. HORIZONTAL BLOCKING: HORIZONTAL BLOCKING FOR WATER LINES HAS BEEN OMITTED FOR CLARITY, HOWEVER, BLOCKING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE GOVERNING AUTHORITIES 'STANDARD DETAILS'.

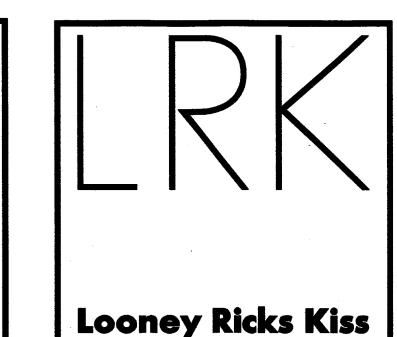
9. THRUST BLOCKING: THRUST BLOCKING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE GOVERNING AUTHORITIES' STANDARD DETAILS. DO NOT COVER BELLS OR FLANGES WITH CONCRETE. THE CONTRACTOR SHALL REMOVE EXISTING THRUST BLOCKING OR RESTRAINTS WHERE NECESSARY TO ALLOW THE WORK TO PROCEED, AND SHALL REPLACE THE THRUST BLOCKS WHERE REQUIRED. THE COST TO REMOVE, REPLACE OR PROVIDE THRUST BLOCKING SHALL BE INCLUDED IN THE CONTRACT AMOUNT. 10. ADDITIONAL BENDS: THE CONTRACTOR SHALL SUPPLY AND INSTALL ANY ADDITIONAL BENDS WITH THRUST BLOCKING AND OTHER APPURTENANCES REQUIRED TO ASSURE PROPER INSTALLATION OF WATER MAINS AND LATERALS. THE CONTRACTOR MAY PULL PIPE AS NEEDED AT THE BENDS WHERE THE DEFLECTION ANGLE OF THE PIPE DEFLECTION IS WITHIN TOLERABLE MANUFACTURERS LIMITS. THE COST FOR ADDITIONAL BENDS AND

BLOCKING SHALL BE INCLUDED IN THE CONTRACT AMOUNT. 11. POLYETHYLENE WRAP: ALL VALVES, DUCTILE IRON AND CAST IRON PIPE, FITTINGS AND SPECIALS SHALL BE POLYETHYLENE WRAPPED.

12. ADJUSTMENTS: THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING ALL MANHOLES, CLEANOUTS, VALVES, BOXES, VAULTS AND HYDRANTS TO FINAL GRADE. THE COST SHALL BE INCLUDED IN THE CONTRACT AMOUNT.

13. SANITARY SEWER PIPE: ALL SEWER PIPE SHALL BE SDR-35, IN ACCORDANCE WITH ASTM SPECIFICATIONS D-3034 FOR 4" PIPE.

14. WATER PIPING: ALL WATER PIPING SHALL BE TYPE 'K' COPPER.



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Issues	and	Revisions	

No. Date Issues / Revisions

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**Bicentennial Financial Center** 

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Project	Number:	00.00000.00

Project Name:

Addison, Texas

White Rock Chapel Addition

GRADING. PAVING &

UTILITY PLAN

Drawn By: DSM

Checked By: BFD