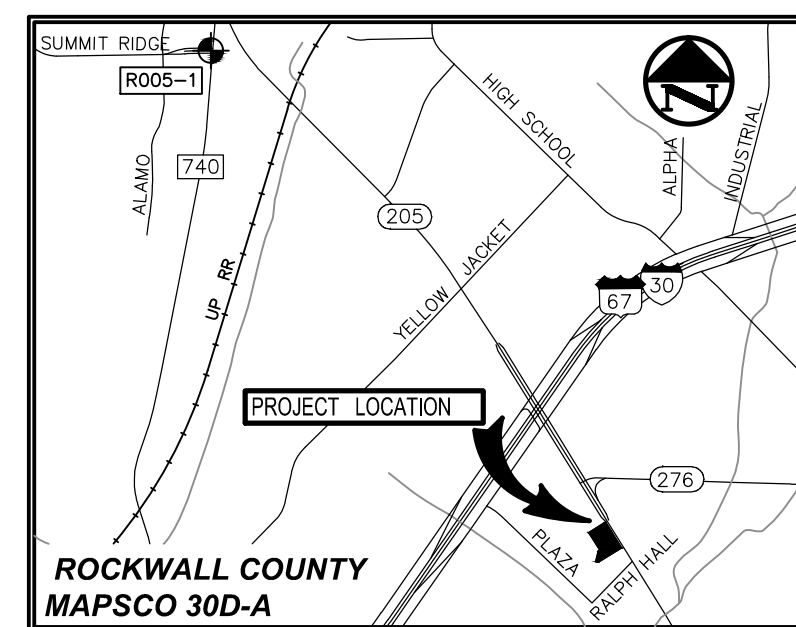


CONSTRUCTION DOCUMENTS FOR **SPEEDY BEE CAR WASH** **2360 S. GOLIAD STREET** **LOT 7, ROCKWALL BUSINESS PARK EAST**

1.055 ACRES

CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

MARCH 2016



VICINITY MAP
(NOT TO SCALE)

DRAWING SHEET INDEX

SHEET	DESCRIPTION
C0.0	COVER
SP	SITE PLAN
L2.01	LANDSCAPE PLAN
L2.02	LANDSCAPE SPECIFICATIONS AND DETAILS
L1.01	TREE PRESERVATION PLAN
L3.01	IRRIGATION PLAN
L3.02	IRRIGATION SPECIFICATIONS AND DETAILS
C1.1	DEMOLITION PLAN
C2.1	DIMENSIONAL CONTROL PLAN
C3.1	GRADING PLAN
C4.1	EXISTING DRAINAGE AREA MAP
C4.2	PROPOSED DRAINAGE AREA MAP
C5.1	STORM SEWER PLAN
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C6.1	WATER PLAN
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C7.1	PAVING PLAN
C7.2	PAVING DETAILS
C8.1	EROSION CONTROL PLAN
C8.2	EROSION CONTROL DETAILS

OWNER/DEVELOPER

GOLIAD EXPRESS, LLC
3005 JUSTIN ROAD
FLOWER MOUND, TEXAS 75028
PHONE: 972-965-4323
CONTACT: JAMES BENTON

PREPARED BY



7557 RAMBLER ROAD SUITE 1400 T: 972.235.3031
DALLAS, TX 75231 F: 972.235.9544
TX REG. ENGINEERING FIRM F-14439
TX REG. SURVEYING FIRM LS-10193805

RECORD DRAWING

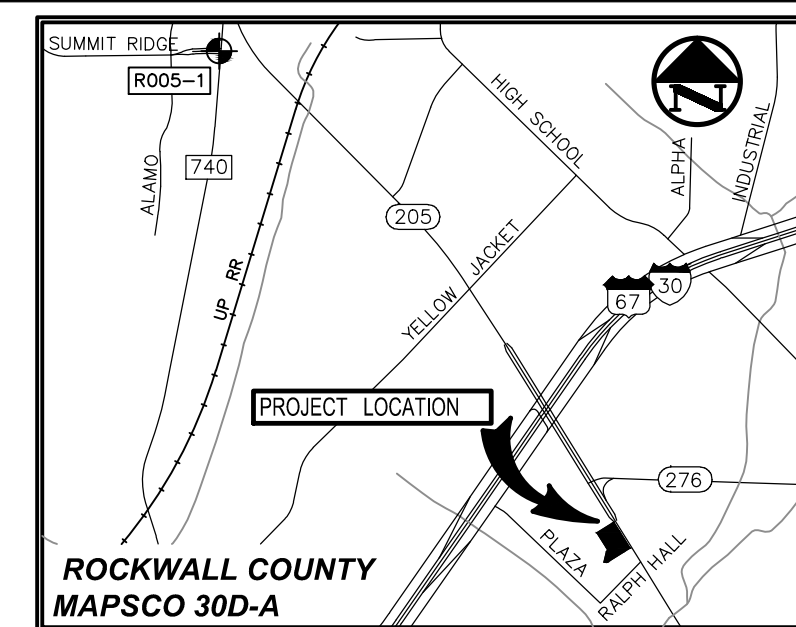
THE SIGNED AND SEALED CONSTRUCTION DOCUMENT HAS BEEN REVISED TO REFLECT CONSTRUCTION RECORDS MAINTAINED AND PROVIDED BY THE CONTRACTOR FOR THIS PROJECT. THE INFORMATION SHOWN ON THIS RECORD DRAWING, WHICH WAS PROVIDED BY THE CONTRACTOR, OR OTHERS NOT ASSOCIATED WITH THE DESIGN ENGINEER, CANNOT BE VERIFIED FOR ACCURACY OR COMPLETENESS. PACHECO KOCH SHALL ASSUME NO LIABILITY FOR ANY CHANGES MADE DURING CONSTRUCTION THAT WERE NOT SPECIFICALLY APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION. THE SEALED CONSTRUCTION DRAWINGS ARE ON FILE AT THE OFFICES OF PACHECO KOCH.

ATTESTED BY:
SIGNATURE:
ENGINEER OF RECORD: A. GREGORY GERBIG
CONTRACTOR: FRANCIS COMMERCIAL
DATE REVISED: 04/28/2017

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.

NO.	DATE	REVISION

STATE HIGHWAY NO. 205 (S. GOLIAD STREET) (VARIABLE WIDTH R.O.W.)

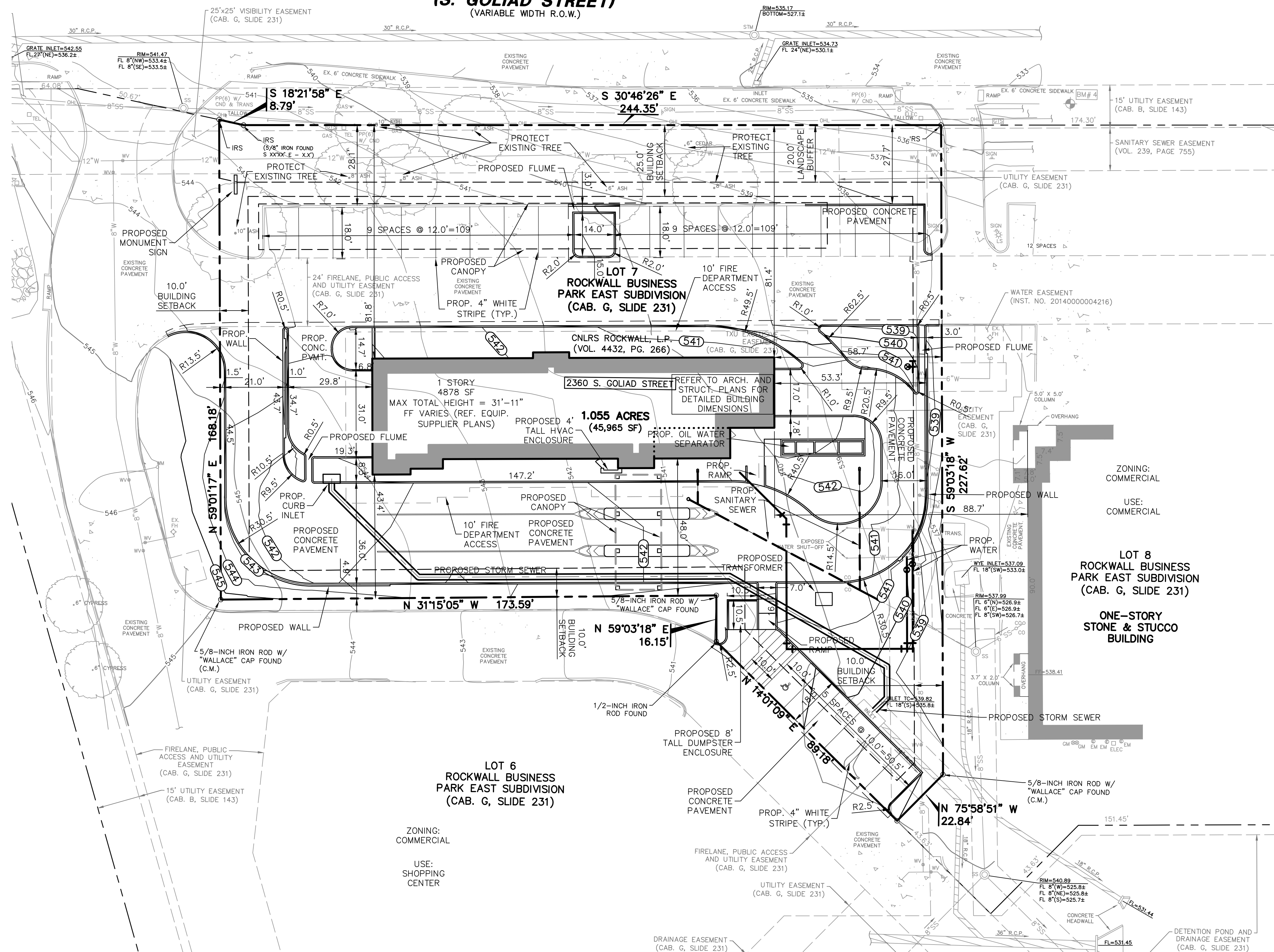


VICINITY MAP
(NOT TO SCALE)

LEGEND

- B. BOLLARD
- EM. ELECTRIC METER
- PP. POWER POLE
- LS. LIGHT STANDARD
- WM. WATER METER
- WV. WATER VALVE
- ICV. IRRIGATION CONTROL VALVE
- FH. FIRE HYDRANT
- CO. CLEANOUT
- MH. MANHOLE
- TSC. TRAFFIC SIGNAL CONTROL
- TSP. TRAFFIC SIGNAL POLE
- TE. TELEPHONE BOX
- FL. FLOOD LIGHT
- FP. FLAG POLE
- SIGN. TRAFFIC SIGN
- IRS. 1/2-INCH IRON ROD
- (C.M.) W/"PACHECO KOCH" CAP SET
- CONTROLLING MONUMENT
- PROPERTY LINE
- - - OVERHEAD UTILITY LINE
- - - UNDERGROUND ELECTRIC LINE
- - - UNDERGROUND WATER LINE
- - - UNDERGROUND CABLE LINE
- - - EXIST. CONTOUR
- (400) PROPOSED CONTOUR
- PROPOSED DRAINAGE FLOW DIRECTION

ALL DIMENSIONS ARE TO
BACK-OF-CURB UNLESS
OTHERWISE NOTED.



SITE PLAN NOTES:

- A SEPARATE SIGN PERMIT WILL BE REQUIRED FOR ALL SIGNS.
- THE INTENT OF THIS PLAN IS TO SHOW THE CONCEPTUAL DRAINAGE DESIGN FOR THE PROPOSED PROJECT AS PART OF THE SITE PLAN APPROVAL PROCESS ONLY AND SHALL NOT BE CONSTRUCTED AS A FINAL DESIGN.
- THE LIGHT LEVELS ALONG ALL PROPERTY LINES AND STREET FRONTAGES MUST BE 0.20FC OR LESS.
- SUBJECT PROPERTY IS SHOWN ON THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP FOR ROCKWALL COUNTY, TEXAS AND INCORPORATED AREAS. MAP NO. 485970040L, COMMUNITY-PANEL NO. 480547 0040 L, EFFECTIVE DATE: SEPTEMBER 26, 2008. ALL OF THE SUBJECT PROPERTY IS SHOWN TO BE LOCATED IN ZONE "X" ON SAID MAP. THE LOCATION OF THE SAID FLOODZONES IS BASED ON SAID MAP, IS APPROXIMATE AND IS NOT LOCATED ON THE GROUND. RELEVANT ZONES ARE DEFINED ON SAID PAM AS FOLLOWS:

ZONE "X" - OTHER AREAS: AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN.

- PROPOSED USE:**
CAR WASH
- GROSS BUILDING AREA:**
CAR WASH: 4878 SF
NUMBER OF STORIES: 1
- BUILDING HEIGHT:**
MAX BUILDING HEIGHT = 31'-11"
- PARKING REQUIRED:**
PARKING RATIO = 1 SPACE PER 250 SF OF BUILDING
TOTAL REQUIRED = 20 SPACES
- PARKING PROVIDED:**
PROPOSED REGULAR PARKING = 23 SPACES
PROPOSED H.C. PARKING = 1 SPACE
TOTAL PROVIDED = 23 + 1 = 24 SPACES
- SITE COVERAGE:**

TOTAL BUILDING	45,965 SF (1.055 AC)
TOTAL SITE	4878 SF (0.112 AC)
PAVEMENT	24,969 SF (0.573 AC)
LANDSCAPE	15,954 SF (0.366 AC)
BUILDING COVERAGE	10.6% < 60.0% MAX.
PAVEMENT COVERAGE	54.3%
LANDSCAPE COVERAGE	34.7%
PERCENT IMPERVIOUS	64.9% < 85.0%-90.0% MAX.
- ZONING:**
COMMERCIAL
SH 205 OVERLAY DISTRICT

RECORD DRAWING

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ATTESTED BY:
SIGNATURE: *[Signature]*
ENGINEER OF RECORD: A. GREGORY GERBIG
CONTRACTOR: FRANCIS COMMERCIAL
DATE REVISED: 04/28/2017

NO.	DATE	REVISION
1	04/28/2017	RECORD DRAWINGS

Pacheco Koch
7557 RAMBLER ROAD, SUITE 1400
DALLAS, TX 75231 972.235.3031
TX REG. ENGINEERING FIRM F-14439
TX REG. SURVEYING FIRM LS-10193805

Case No. SP2015-024

DESIGNER	ENGINEER	DEVELOPER/OWNER
HERMONAT ESTIMATING & DESIGN 2340 E. TRINITY MILLS, SUITE 300 CARROLLTON, TEXAS 75006 ATTN: DAVID HERMONAT PHONE: 972-478-4388	PACHECO KOCH 7557 RAMBLER ROAD, SUITE 1400 DALLAS, TEXAS 75231 ATTN: GREG GERBIG PHONE: (972) 235-3031	EMERGE ENTERPRISES 3005 JUSTIN ROAD FLOWER MOUND, TEXAS 75028 ATTN: JAMES BENTON PHONE: (972) 965-4323

SITE PLAN

SPEEDY BEE CAR WASH
2360 S. GOLIAD STREET
LOT 7, ROCKWALL BUSINESS PARK EAST
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
AGG	ADR	12/01/15	1"=20'			SP

LOT 4, BLOCK A
TRAVEL CENTERS OF
AMERICA ADDITION
(CAB. G. SLIDE 137)

PLANT LIST

SYMBOL	BOTANICAL NAME	COMMON NAME	QTY.	SIZE	REMARKS
TREES					
CM	<i>Lagerstroemia indica</i> 'Natchez'	Crape Myrtle 'Natchez'	3	30 gal.	container grown, 3-5 trunk, no cross canes, 8' ht., 4' spread, matching
LE	<i>Ulmus parvifolia</i> 'Sempervirens'	Lacebark Elm	1	3" cal.	container grown, 12' ht., 4' spread, 4' branching ht., matching
RB	<i>Cercis canadensis</i> 'Oklahoma'	Oklahoma Redbud	11	30 gal.	container grown, 8' ht., 4' spread min.
SO	<i>Quercus shumardii</i>	Shumard Red Oak	1	4" cal.	container grown, 15' ht., 5' spread, 5' branching ht., matching
SHRUBS/GROUND COVER					
DBH	<i>Ilex cornuta</i> 'Burfordii Nana'	Dwarf Burford Holly	77	5 gal.	container full, 24" spread, 36" o.c.
DWM	<i>Myrica pauciflora</i>	Dwarf Wax Myrtle	45	5 gal.	container full, 20" spread, 36" o.c.
TS	<i>Leucosyllum frutescens</i> 'Green Cloud'	Texas Sage 'Green Cloud'	45	5 gal.	container full, 20" spread, 36" o.c.
WC	<i>Euonymus fortunei</i> 'Coloratus'	Wintercreeper	520	4" pots	container (3) 12" runners min., 12" o.c. refer to notes
	<i>Cynodon dactylon</i>	Common Bermudagrass			

NOTE: ALL TREES SHALL HAVE STRAIGHT TRUNKS AND BE MATCHING WITHIN VARIETIES.
PLANT LIST IS AN AID TO BIDDERS ONLY. CONTRACTOR SHALL VERIFY ALL QUANTITIES ON PLAN.
ALL HEIGHTS AND SPREADS ARE MINIMUMS. ALL PLANT MATERIAL SHALL MEET OR EXCEED REMARKS AS INDICATED.

LANDSCAPE TABULATIONS
THE CITY OF ROCKWALL, TEXAS

STREET LANDSCAPING

- 20' wide landscape buffer
- Three (3) canopy trees and four (4) accent trees per 100 l.f.
- Berm and/or shrubs, 30" min. ht.

STATE HIGHWAY 205: 254 l.f.	
Required	Provided
20' landscape buffer (8) trees, 4" cal.	20' landscape buffer (7) existing trees, 6" cal. (1) tree, 4" cal.
(11) accent trees	(11) accent trees
Berm/shrubs, 30" ht.	Shrubs, 30" ht.

PARKING LOT LANDSCAPING

- 5% of the interior parking lot shall be landscaped.

Total interior parking lot area = 11,152 s.f.
Total parking spaces = 24 spaces

Required		Provided	
564 s.f. (5%)		910 s.f. (8%)	

SITE LANDSCAPING

- 15% of the total site shall be landscaped for COMMERCIAL.
- 50% of the total requirements shall be located in the front of and along side buildings for COMMERCIAL.

Total site = 1.05 AC; 45,965 s.f.

Required		Provided	
6,894 s.f. (15%)		15,690 s.f. (34%)	
3,447 s.f. (50%)		9,578 s.f. (61%)	

LANDSCAPE NOTES

- CONTRACTOR SHALL VERIFY ALL EXISTING AND PROPOSED SITE ELEMENTS AND NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES. SURVEY DATA OF EXISTING CONDITIONS WAS SUPPLIED BY OTHERS.
- CONTRACTOR SHALL LOCATE ALL EXISTING UNDERGROUND UTILITIES AND NOTIFY LANDSCAPE ARCHITECT OF ANY CONFLICTS. CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING IN THE VICINITY OF UNDERGROUND UTILITIES.
- CONTRACTOR SHALL PROVIDE A MINIMUM 2% SLOPE AWAY FROM ALL STRUCTURES.
- CONTRACTOR SHALL FINE GRADE AREAS TO ACHIEVE FINAL CONTOURS AS INDICATED. LEAVE AREAS TO RECEIVE TOPSOIL 3" BELOW FINAL FINISHED GRADE IN PLANTING AREAS AND 1" BELOW FINAL FINISHED GRADE IN LAWN AREAS.
- ALL PLANTING BEDS AND LAWN AREAS SHALL BE SEPARATED BY STEEL EDGING. NO STEEL EDGING SHALL BE INSTALLED ADJACENT TO BUILDINGS, WALKS, OR CURBS. CUT STEEL EDGING AT 45 DEGREE ANGLE WHERE IT INTERSECTS WALKS AND CURBS.
- ALL LAWN AREAS SHALL BE FINE GRADED, IRRIGATION TRENCHES COMPLETELY SETTLED AND FINISH GRADE APPROVED BY THE OWNER'S CONSTRUCTION MANAGER OR LANDSCAPE ARCHITECT PRIOR TO LAWN INSTALLATION.
- CONTRACTOR SHALL REMOVE ALL ROCKS 3/4" DIAMETER AND LARGER, DIRT CLOUDS, STICKS, CONCRETE SPOILS, ETC. PRIOR TO PLACING TOPSOIL AND LAWN INSTALLATION.
- ALL LAWN AREAS SHALL BE SOLID SOD BERMUDAGRASS, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- ALL PROVIDED LANDSCAPE AREAS SHALL BE PROVIDED WITH AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM WITH RAIN AND FREEZE SENSORS AND EVAPOTRANSPIRATION (ET) WEATHER-BASED CONTROLLERS AND SAID IRRIGATION SYSTEM SHALL BE DESIGNED BY A QUALIFIED PROFESSIONAL AND INSTALLED BY A LICENSED IRRIGATOR.
- CONTRACTOR SHALL PROVIDE BID PROPOSAL LISTING UNIT PRICES FOR ALL MATERIAL PROVIDED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED LANDSCAPE AND IRRIGATION PERMITS.

MAINTENANCE NOTES

- THE OWNER, TENANT AND THEIR AGENT, IF ANY, SHALL BE JOINTLY AND SEVERALLY RESPONSIBLE FOR THE MAINTENANCE OF ALL LANDSCAPE.
- ALL LANDSCAPE SHALL BE MAINTAINED IN A NEAT AND ORDERLY MANNER AT ALL TIMES. THIS SHALL INCLUDE MOWING, EDGING, PRUNING, FERTILIZING, WATERING, WEEDING AND OTHER SUCH ACTIVITIES COMMON TO LANDSCAPE MAINTENANCE.
- ALL LANDSCAPE AREAS SHALL BE KEPT FREE OF TRASH, LITTER, WEEDS AND OTHER SUCH MATERIAL OR PLANTS NOT PART OF THIS PLAN.
- ALL PLANT MATERIAL SHALL BE MAINTAINED IN A HEALTHY AND GROWING CONDITION AS IS APPROPRIATE FOR THE SEASON OF THE YEAR.
- ALL PLANT MATERIAL WHICH DIES SHALL BE REPLACED WITH PLANT MATERIAL OF EQUAL OR BETTER VALUE.
- CONTRACTOR SHALL PROVIDE SEPARATE BID PROPOSAL FOR ONE YEAR'S MAINTENANCE TO BEGIN AFTER FINAL ACCEPTANCE.

NO TREES WITHIN 5'-0" OF ANY UTILITIES.

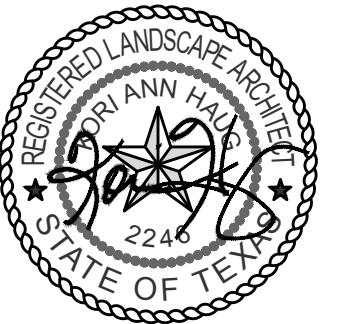
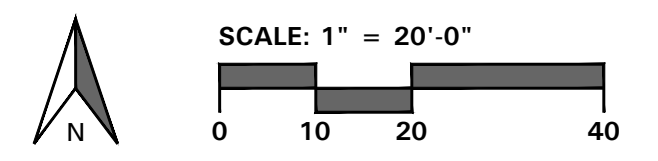
GENERAL LAWN NOTES

- CONTRACTOR SHALL COORDINATE OPERATIONS AND AVAILABILITY OF EXISTING TOPSOIL WITH ON-SITE CONSTRUCTION MANAGER.
- CONTRACTOR SHALL LEAVE LAWN AREAS 1" BELOW FINAL FINISHED GRADE PRIOR TO TOPSOIL INSTALLATION.
- CONTRACTOR SHALL FINE GRADE AREAS TO ACHIEVE FINAL CONTOURS AS INDICATED ON CIVIL PLANS. ADJUST CONTOURS TO ACHIEVE POSITIVE DRAINAGE AWAY FROM BUILDINGS. PROVIDE UNIFORM ROUNDING AT TOP AND BOTTOM OF SLOPES AND OTHER BREAKS IN GRADE. CORRECT IRREGULARITIES AND AREAS WHERE WATER MAY STAND.
- ALL LAWN AREAS SHALL BE FINE GRADED, IRRIGATION TRENCHES COMPLETELY SETTLED AND FINISH GRADE APPROVED BY THE OWNER'S CONSTRUCTION MANAGER OR LANDSCAPE ARCHITECT PRIOR TO LAWN INSTALLATION.
- CONTRACTOR SHALL REMOVE ALL ROCKS 3/4" DIAMETER AND LARGER, DIRT CLOUDS, STICKS, CONCRETE SPOILS, ETC. PRIOR TO PLACING TOPSOIL AND LAWN INSTALLATION.
- CONTRACTOR SHALL MAINTAIN ALL LAWN AREAS UNTIL FINAL ACCEPTANCE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: MOWING, WATERING, WEEDING, CULTIVATING, CLEANING AND REPLACING DEAD OR BARE AREAS TO KEEP PLANTS IN A VIGOROUS, HEALTHY CONDITION.
- CONTRACTOR SHALL GUARANTEE ESTABLISHMENT OF ACCEPTABLE TURF AREA AND SHALL PROVIDE REPLACEMENT FROM LOCAL SUPPLY IF NECESSARY.

SOLID SOD NOTES

- PLANT SOD BY HAND TO COVER INDICATED AREAS COMPLETELY. ENSURE EDGES OF SOD ARE TOUCHING. TOP DRESS JOINTS BY HAND WITH TOPSOIL TO FILL VOIDS.
- ROLL GRASS AREAS TO ACHIEVE A SMOOTH, EVEN SURFACE, FREE FROM UNNATURAL UNDULATIONS.
- WATER SOD THOROUGHLY AS SOD OPERATION PROGRESSES.
- IF INSTALLATION OCCURS BETWEEN SEPTEMBER 1 AND MARCH 1, OVER-SEED BERMUDAGRASS SOD WITH WINTER RYEGRASS, AT A RATE OF FOUR (4) POUNDS PER ONE THOUSAND (1000) SQUARE FEET.

STATE HIGHWAY NO. 205
(S. GOLD STREET)
(VARIABLE WIDTH R.O.W.)



04/28/16

RECORD DRAWINGS

CASE NO. SP2015-024



- 4245 North Central Expy
- Suite 501
- Dallas, Texas 75205
- 214.865.7192 office

04/28/2017		RECORD DRAWINGS	
NO.	DATE	REVISION	
Pacheco Koch		7557 RAMBLER ROAD, SUITE 1400 DALLAS, TX 75231 972.235.3031 TX REG. ENGINEERING FIRM F-14439 TX REG. SURVEYING FIRM LS-10193805	
LANDSCAPE PLAN			
ROCKWALL CAR WASH			
LOT 7			
ROCKWALL BUSINESS PARK EAST			
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS			
DESIGN	DRAWN	DATE	SCALE
KAH	MUA	11/12/15	1" = 20'-0"
NOTES	FILE	NO.	
		L2.01	

ROCKWALL CAR WASH

SECTION 32 9300 - LANDSCAPE

PART 1 - GENERAL

1.1 REFERENCED DOCUMENTS

- A. Refer to Landscape Plans, notes, details, bidding requirements, special provisions, and schedules for additional requirements.
1.2 DESCRIPTION OF WORK
A. Work included: Furnish all supervision, labor, materials, services, equipment and appliances required to complete the work covered in conjunction with the landscaping covered in these specifications and landscaping plans, including:
1. Planting (trees, shrubs and grasses)
2. Bed preparation and fertilization
3. Notification of sources
4. Water and maintenance until final acceptance
5. Guarantee

1.3 REFERENCE STANDARDS

- A. American Standard for Nursery Stock published by American Association of Nurserymen 27 October 1980, Edition; by American National Standards Institute, Inc. (Z60.1) - plant material
B. American Joint Committee on Horticultural Nomenclature: 1942 Edition of Standardized Plant Names.
C. Texas Association of Nurserymen, Grades and Standards
D. Hortis Third, 1976 - Cornell University

1.4 NOTIFICATION OF SOURCES AND SUBMITTALS

- A. Samples: Provide representative quantities of sandy loam soil, mulch, bed mix material, gravel and crushed stone. Samples shall be approved by Owner's Authorized Representative before use on the project.

1.5 JOB CONDITIONS

- A. General Contractor to complete the following punch list: Prior to Landscape Contractor initiating any portion of landscape installation, General Contractor shall leave planting bed areas three (3") inches below final finish grade of sidewalks, drives and curbs as shown on the drawings. All lawn areas to receive solid sod shall be left one (1") inch below the final finish grade of sidewalks, drives and curbs. All construction debris shall be removed prior to Landscape Contractor beginning any work.
B. Storage of materials and equipment at the job site will be at the risk of the Landscape Contractor. The Owner cannot be held responsible for theft or damage.

1.6 MAINTENANCE AND GUARANTEE

- A. Maintenance:
1. The Landscape Contractor shall be held responsible for the maintenance of all work from the time of planting until final acceptance by the Owner. No trees, shrubs, groundcover or grass will be accepted unless they show healthy growth and satisfactory foliage conditions.
2. Maintenance shall include watering of trees and plants, cultivation, weeding spraying, edging, pruning of trees, mowing of grass, cleaning up and all other work necessary of maintenance.
3. A written notice requesting final inspection and acceptance should be submitted to the Owner at least seven (7) days prior to completion. An on-site inspection by the Owner's Authorized Representative will be completed prior to written acceptance.
B. Guarantee:

- 1. Trees, shrubs and groundcover shall be guaranteed for a twelve (12) month period after final acceptance. The Contractor shall replace all dead materials as soon as weather permits and upon notification of the Owner. Plants, including trees, which have partially died so that shape, size, or symmetry have been damaged, shall be considered subject to replacement. In such cases, the opinion of the Owner shall be final.
a. Plants used for replacement shall be of the same size and kind as those originally planted and shall be planted as originally specified. All work, including materials, labor and equipment used in replacements, shall carry a twelve (12) month guarantee. Any damage, including ruts in lawn or bed areas, incurred as a result of making replacements shall be immediately repaired.
b. At the direction of the Owner, plants may be replaced at the start of the next year's planting season. In such cases, dead plants shall be removed from the premises immediately.
c. When plant replacements are made, plants, soil mix, fertilizer and mulch are to be utilized as originally specified and re-inspected for full compliance with the contract requirements. All replacements are to be included under "Work" of this section.

1.8 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Preparation:
1. Baled and Burlapped (B&B) Plants: Dig and prepare specified and in a manner that will not damage roots, branches, shape and future development.
2. Container Grown Plants: Deliver plants in rigid container to hold ball shape and protect root mass.
B. Delivery:
1. Deliver packaged materials in sealed containers showing weight, analysis and name of manufacturer. Protect materials from deterioration during delivery and while stored on site.
2. Deliver only plant materials that can be planted in one day unless adequate storage and watering facilities are available on job site.
3. Protect root balls by heeling in with sawdust or other approved moisture retaining material if not planted within 24 hours of delivery.
4. Protect plants during delivery to prevent damage to root balls or desiccation of leaves. Keep plants moist at all times. Cover all materials during transport.
5. Notify Owner's Authorized Representative of delivery schedule 72 hours in advance job site.
6. Remove rejected plant material immediately from job site.
7. To avoid damage or stress, do not lift, move, adjust to plumb, or otherwise manipulate plants by trunk or stems.

1.7 QUALITY ASSURANCE

- A. General: Comply with applicable federal, state, county and local regulations governing landscape materials and work.
B. Personnel: Employ only experienced personnel who are familiar with the required work. Provide full time supervision by a qualified foreman acceptable to Landscape Architect.
C. Selection of Plant Material:
1. Make contact with suppliers immediately upon obtaining notice of contract acceptance to select and book materials. Develop a program of maintenance (pruning and fertilization) which will ensure the purchased materials will meet and / or exceed project specifications.
2. Substitutions: Do not make plant material substitutions. If the specified landscape material is not obtainable, submit proof of non-availability to Landscape Architect, together with proposal for use of equivalent material. At the time bids are submitted, the Contractor is assumed to have located the materials necessary to complete the job as specified.
3. Landscape Architect will provide a key identifying each tree location on site. Written verification will be required to document material selection, source and delivery schedules to site.
4. Measurements: Measure trees with branches and trunks or canes in their normal position. Do not prune to obtain required sizes. Take caliper measurements six inches above ground for trees up to and including 4" caliper size, and twelve inches above ground for larger sizes. Measure main body of all plant material of height and spread dimensions,

- A. General: Well-formed No. 1 grade or better nursery grown stock. Listed plant heights are from tops of root balls to nominal tops of plants. Plant spread refers to nominal outer width of the plant, not to the outer leaf tips. Plants will be individually approved by the Owner's Authorized Representative and his decision as to their acceptability shall be final.
B. Quantities: The drawings and specifications are complimentary. Anything called for on one and not the other is as binding as if shown and called for on both. The plant schedule is an aid to bidders only. Confirm all quantities on plan.
C. Quality and size: Plant materials shall conform to the size given on the plan, and shall be healthy, symmetrical, well-shaped, full branched and well rooted. The plants shall be free from injurious insects, diseases, injuries to the bark or roots, broken branches, objectionable disfigurements, insect eggs and larvae, and are to be of specimen quality.
D. Approval: All plants which are found unsuitable in growth, or are in any unhealthy, badly shaped or oversized condition will be rejected by the Owner's Authorized Representative either before or after planting and shall be removed at the expense of the Landscape Contractor and replaced with acceptable plant as

do not measure from branch or root tip-to-tip.

Owner's Authorized Representative shall inspect all plant material with requirements for genus, species, cultivar / variety size and quality.

Owner's Authorized Representative retains the right to further inspect all plant material upon arrival to the site and during installation for size and condition of root balls and root systems, limbs, branching habit, insects, injuries and latent defects.

Owner's Authorized Representative may reject unsatisfactory or defective material at any time during the process work. Remove rejected materials immediately from the site and replace with acceptable material at no additional cost to the Owner. Plants damaged in transit or at job site shall be rejected.

specified at no additional cost to the Owner.

Trees shall be healthy, full-branched, well-shaped, and shall meet the minimum trunk and diameter requirements of the plant schedule. Balls shall be firm, neat, slightly tapered and well wrapped in burlap. Any tree loose in the ball or with a broken root ball at time of planting will be rejected. Balls shall be ten (10") inches in diameter for each one (1") inch of trunk diameter, measured six (6") inches above ball. (Nomenclature confirms to the customary nursery usage. For clarification, the term "multi-trunk" defines a plant having three (3) or more trunks of nearly equal diameter.)

Pruning: All pruning of trees and shrubs, as directed by the Landscape Architect prior to final acceptance, shall be executed by the Landscape Contractor at no additional cost to the Owner.

2.2 SOIL PREPARATION MATERIALS

- A. Sandy Loam:
1. Friable, fertile, dark, loamy soil, free of clay lumps, subsoil, stones and other extraneous material and reasonably free of weeds and foreign grasses. Loam containing Dallasgrass or Nutgrass shall be rejected.
2. Physical properties as follows:
a. Clay - between 7-27 percent
b. Silt - between 15-25 percent
c. Sand - less than 52 percent
3. Organic matter shall be 3%-10% of total dry weight.
4. If requested, Landscape Contractor shall provide a certified soil analysis conducted by an approved soil testing laboratory verifying that sandy loam meets the above requirements.
B. Organic Material: Compost with a mixture of 80% vegetative matter and 20% animal waste. Ingredients should be a mix of course and fine textured material.
C. Premixed Bedding Soil as supplied by Vital Earth Resources, Gladewater, Texas; Professional Bedding Soil as supplied by Living Earth Technology, Dallas, Texas or Acid Gro Municipal Mix as supplied by Soil Building Systems, Dallas, Texas or approved equal.
D. Sharp Sand: Sharp sand must be free of seeds, soil particles and weeds.
E. Mulch: Double Shredded Hardwood Mulch, partially decomposed, dark brown. Living Earth Technologies or approved equal.
F. Organic Fertilizer: Fertilaid, Sustane, or Green Sense or equal as recommended for required applications. Fertilizer shall be delivered to the site in original unopened containers, each bearing the manufacturer's guaranteed statement of analysis.
G. Commercial Fertilizer: 10-20-10 or similar analysis. Nitrogen source to be a minimum 50% slow release organic Nitrogen (SCU or UF) with a minimum 8% sulfur and 4% iron, plus micronutrients.
H. Peat: Commercial sphagnum peat moss or partially decomposed shredded pine bark or other approved organic material.

2.3 MISCELLANEOUS MATERIALS

- A. Steel Edging: All steel edging shall be 3/16" thick x 4" deep x 16' long with 6 stakes per section, painted black at the factory as manufactured by The J.D. Russell Company and under its trade name DURAEDEGE Heavy Duty Steel.
B. Staking Material for Shade Trees: refer to details.
C. Gravel: Washed native pea gravel, graded 1 inch to 1-1/2 inch.
D. Filter Fabric: 'Mirafi Mirascape' by Mirafi Construction Products available at Lone Star Products, Inc., (469) 523-0444 or approved equal.
E. River Rock: 'Colorado' or native river rock, 2" - 4" dia.

Decomposed Granite: Base material shall consist of a natural material mix of granite aggregate not to exceed 1/8" diameter in size and shall be composed of various stages of decomposed earth base.

PART 3 - EXECUTION

3.1 BED PREPARATION & FERTILIZATION

- A. Landscape Contractor to inspect all existing conditions and report any deficiencies to the Owner.
B. All planting areas shall be conditioned as follows:
1. Prepare new planting beds by scraping away existing grass and weeds as necessary. Till existing soil to a depth of six (6") inches prior to placing compost and fertilizer. Apply fertilizer as per Manufacturer's recommendations. Add six (6") inches of compost and till into a depth of six (6") inches of the topsoil. Apply organic fertilizer such as Sustane or Green Sense at the rate of twenty (20) pounds per one thousand (1,000) square feet.
2. All planting areas shall receive a two (2") inch layer of specified mulch.
3. Backfill for tree pits shall be as follows: Use existing top soil on site (use imported topsoil as needed) free from large clumps, rocks, debris, caliche, subsoils, etc., placed in nine (9") inch layers and watered in thoroughly.
C. Grass Areas:
1. Blocks of sod should be laid joint to joint (staggered joints) after fertilizing the ground first. Roll grass areas to achieve a smooth, even surface. The joints between the blocks of sod should be filled with topsoil where they are evidently gaped open, then watered thoroughly.

3.2 INSTALLATION

- A. Maintenance of plant materials shall begin immediately after each plant is delivered to the site and shall continue until all construction has been satisfactorily accomplished.
B. Plant materials shall be delivered to the site only after the beds are prepared and areas are ready for planting. All shipments of nursery materials shall be thoroughly protected from the drying winds during transit. All plants which cannot be planted at once, after delivery to the site, shall be well protected against the possibility of drying by wind and Balls of earth of B & B plants shall be kept covered with soil or other acceptable material. All plants remain the property of the Contractor until final acceptance.
C. Position the trees and shrubs in their intended location as per plan.
D. Notify the Owner's Authorized Representative for inspection and approval of all positioning of plant materials.
E. Excavate pits with vertical sides and horizontal bottom. Tree pits shall be large enough to permit handling and planting without injury to balls of earth or roots and shall be of such depth that, when planted and settled, the crown of the plant shall bear the same relationship to the finish grade as it did to soil surface in original place of growth.
F. Shrub and tree pits shall be no less than twenty-four (24") inches wider than the lateral dimension of the earth ball and six (6") inches deeper than it's vertical dimension. Remove and haul from site all rocks and stones over three-quarter (3/4") inch in diameter. Plants should be thoroughly moist before removing containers.
G. Dig a wide, rough sided hole exactly the same depth as the height of the ball, especially at the surface of the ground. The sides of the hole should be rough and jagged, never slick or glazed.
H. Percolation Test: Fill the hole with water. If the water level does not percolate within 24 hours, the tree needs to move to another location or have drainage added. Install a PVC stand pipe per

tree planting detail as approved by the Landscape Architect if the percolation test fails.

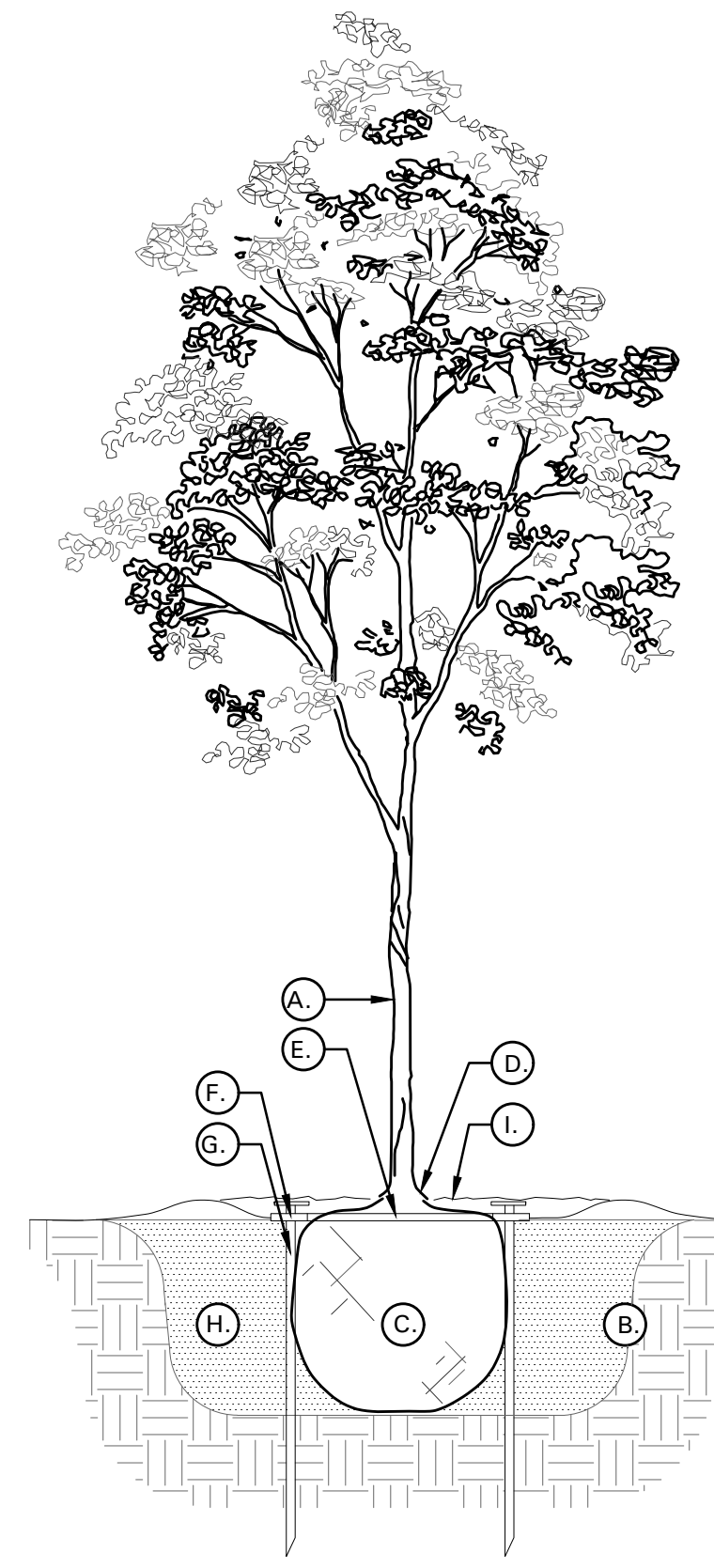
- I. Backfill only with 5 parts existing soil or sandy loam and 1 part bed preparation. When the hole is dug in solid rock, topsoil from the same area should not be used. Carefully settle by watering to prevent air pockets. Remove the burlap from the top 1/2 of the ball, as well as all nylon, plastic string and wire. Container trees will usually be root bound, if so follow standard nursery practice of "root scoring".
J. Do not wrap trees.
K. Do not over prune.
L. Mulch the top of the ball. Do not plant grass all the way to the trunk of the tree. Leave the area above the top of the ball and mulch with at least two (2") inches of specified mulch.
M. All plant beds and trees to be mulched with a minimum settled thickness of two (2") inches over the entire bed or pit.
N. Obstruction below ground: In the event that rock, or underground construction work or obstructions are encountered in any plant pit excavation work to be done under this section, alternate locations may be selected by the Owner. Where locations cannot be changed, the obstructions shall be removed to a depth of not less than three (3') feet below grade and no less than six (6") inches below the bottom of ball when plant is properly set at the required grade. The work of this section shall include the removal from the site of such rock or underground obstructions encountered at the cost of the Landscape Contractor.
O. Trees and large shrubs shall be staked as site conditions require. Position stakes to secure trees against seasonal prevailing winds.
P. Pruning and Mulching: Pruning shall be directed by the Landscape Architect and shall be pruned in accordance with standard horticultural practice following Fine Pruning, Class I pruning standards provided by the National Arborist Association.

- 1. Dead wood, suckers, broken and badly bruised branches shall be removed. General tipping of the branches is not permitted. Do not cut terminal branches.
2. Pruning shall be done with clean, sharp tools.
3. Immediately after planting operations are completed, all tree pits shall be covered with a layer of organic material two (2") inches in depth. This limit of the organic material for trees shall be the diameter of the plant pit.
Q. Steel Curbing Installation:
1. Curbing shall be aligned as indicated on plans. Stake out limits of steel curbing and obtain Owners approval prior to installation.
2. All steel curbing shall be free of kinks and abrupt bends.
3. Top of curbing shall be 1/2" maximum height above final finished grade.
4. Stakes are to be installed on the planting bed side of the curbing, as opposed to the grass side.
5. Do not install steel edging along sidewalks or curbs.
6. Cut steel edging at 45 degree angle where edging meets sidewalks or curbs.

3.3 CLEANUP AND ACCEPTANCE

- A. Cleanup: During the work, the premises shall be kept neat and orderly at all times. Storage areas for all materials shall be so organized so that they, too, are neat and orderly. All trash and debris shall be removed from the site as work progresses. Keep paved areas clean by sweeping or hosing them at end of each work day.

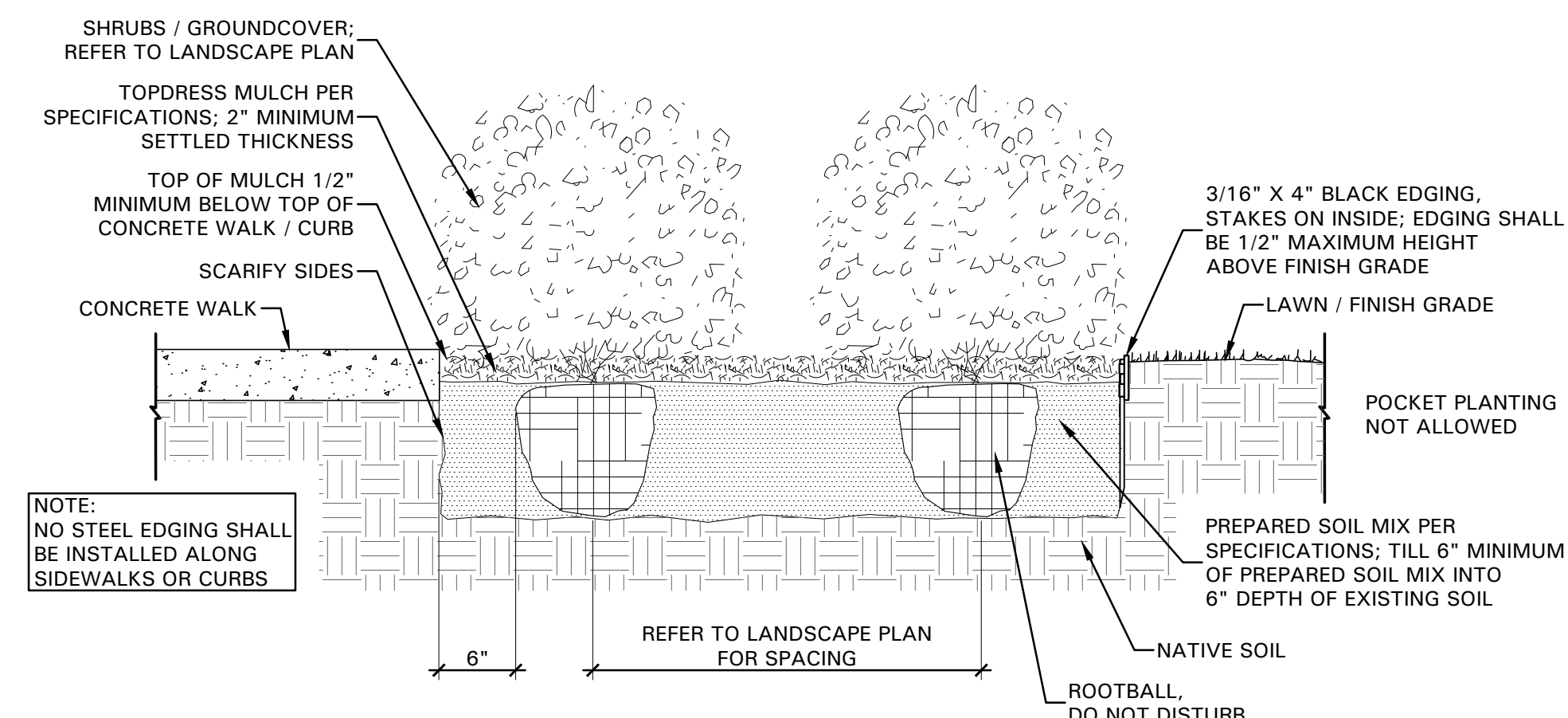
END OF SECTION



01 TREE PLANTING DETAIL NOT TO SCALE

TREE PLANTING DETAIL LEGEND AND NOTES

- A. TREE: TREES SHALL CONFORM WITH LATEST AMERICAN STANDARD FOR NURSERY STOCK. www.anla.org
B. TREE PIT: WIDTH TO BE AT LEAST TWO (2) TIMES THE DIAMETER OF THE ROOT BALL CENTER TREE IN HOLE & REST ROOT BALL ON UNDISTURBED NATIVE SOIL.
C. ROOT BALL: REMOVE TOP 1/2 BURLAP AND ANY OTHER FOREIGN OBJECT; CONTAINER GROWN STOCK TO BE INSPECTED FOR GIRDLING ROOTS.
D. ROOT FLARE: ENSURE THAT ROOT FLARE IS EXPOSED, FREE FROM MULCH, AND AT LEAST TWO INCHES ABOVE GRADE. TREES SHALL BE REJECTED WHEN GIRDLING ROOTS ARE PRESENT & ROOT FLARE IS NOT APPARENT.
E. ROOTBALL ANCHOR RING: REFER TO MANUFACTURER'S GUIDELINES FOR SIZING. PLACE ROOTBALL ANCHOR RING ON BASE OF ROOTBALL. TRUNK SHOULD BE IN THE CENTER OF THE RING.
F. 'U' BRACKET.
G. NAIL STAKE: REFER TO MANUFACTURER'S GUIDELINES FOR SIZING. INSTALL NAIL STAKES WITH HAMMER OR Mallet FIRMLY INTO UNDISTURBED GROUND. DRIVE NAIL STAKES FLUSH WITH BRACKET ADJACENT TO ROOTBALL (DO NOT DISTURB ROOTBALL).
H. BACKFILL: USE EXISTING NATIVE SOIL (no amendments) WATER THOROUGHLY TO ELIMINATE AIR POCKETS.
I. MULCH: DOUBLE SHREDDED HARDWOOD MULCH 2" INCH SETTLED THICKNESS, WITH 2" HT. WATERING RING. ENSURE THAT ROOT FLARE IS EXPOSED. BELOW GROUND STAKE SHOULD NOT BE VISIBLE.
J. TREE STAKES: TREE STAKE SOLUTIONS 'SAFETY STAKE' BELOW GROUND MODEL AVAILABLE FROM: Tree Stake Solutions ATTN: Jeff Tuley (903) 676-6143 jeff@treestakesolutions.com www.treestakesolutions.com
K. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN A COPY OF THE MANUFACTURER'S SPECIFICATIONS PRIOR TO INSTALLATION OF TREE STAKES. CONTRACTOR SHALL ADHERE TO MANUFACTURER'S INSTALLATION GUIDELINES, SPECIFICATIONS, AND OTHER REQUIREMENTS FOR TREE STAKE INSTALLATION.



02 SHRUB / GROUNDCOVER DETAIL NOT TO SCALE

RECORD DRAWINGS

CASE NO. SP2015-024



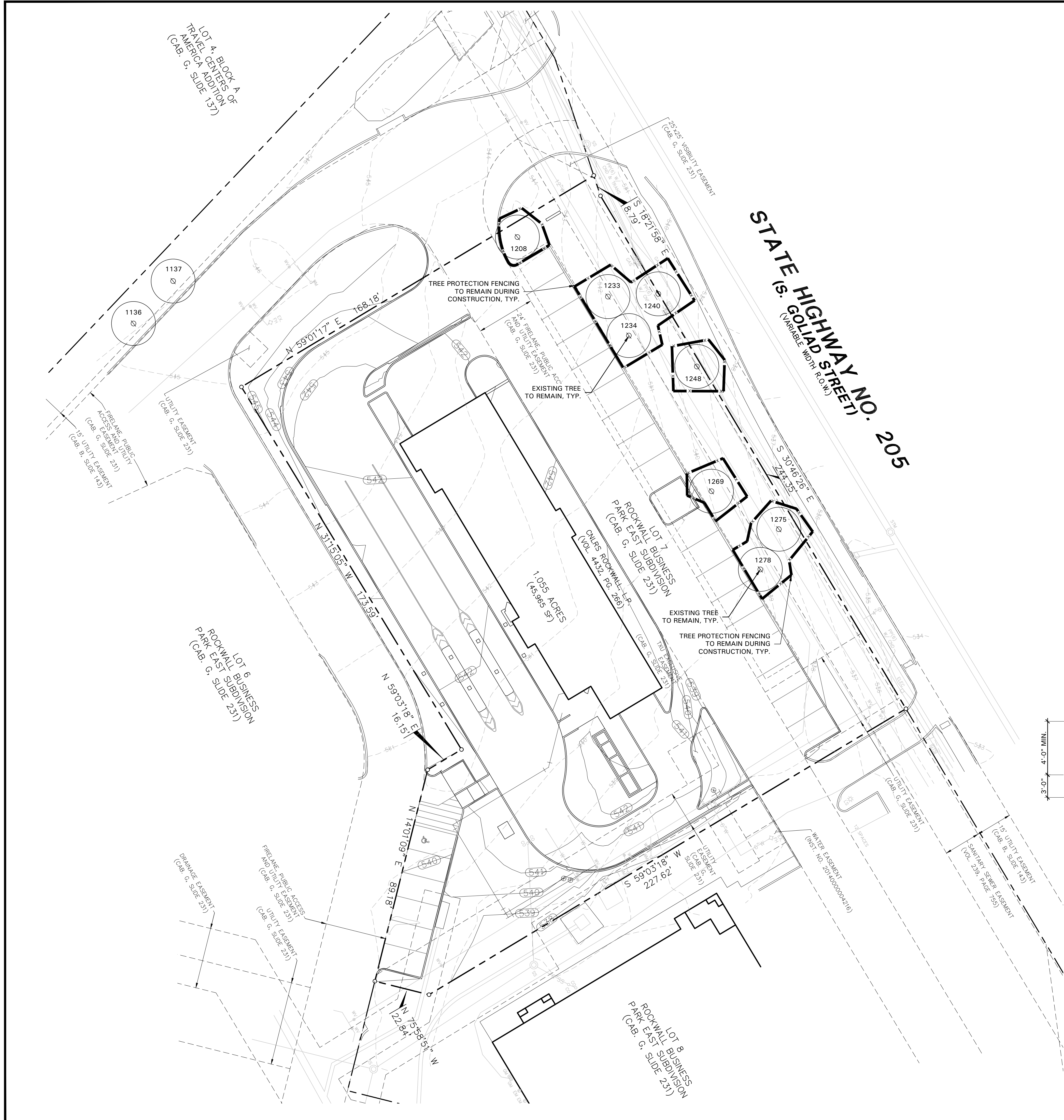
- 4245 North Central Expy
Suite 501
Dallas, Texas 75205
214.865.7192 office



04/28/16

Table containing drawing information: NO. 04/28/2017, DATE, RECORD DRAWINGS, REVISION, Pacheco Koch logo and address (7557 RAMBLER ROAD, SUITE 1400, DALLAS, TX 75231, 972.235.3031), LANDSCAPE SPECIFICATIONS AND DETAILS, ROCKWALL CAR WASH, LOT 7, ROCKWALL BUSINESS PARK EAST, CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS, and a table with columns DESIGN, DRAWN, DATE, SCALE, NOTES, FILE, NO. (Values: KAH, MUA, 11/12/15, L2.02).

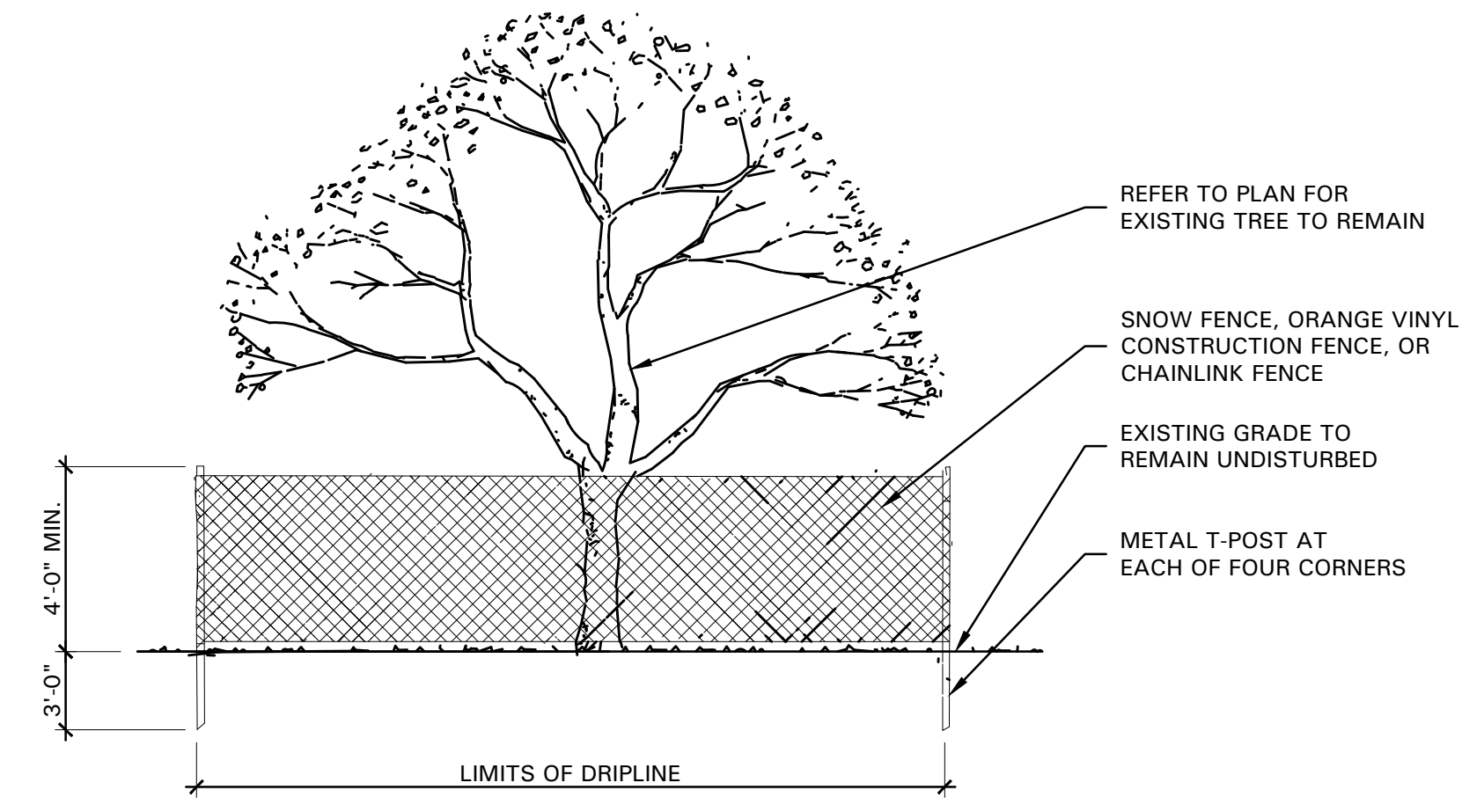
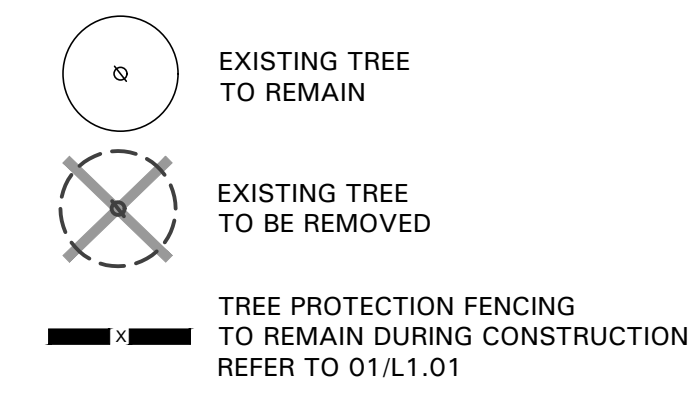
ROCKWALL CAR WASH



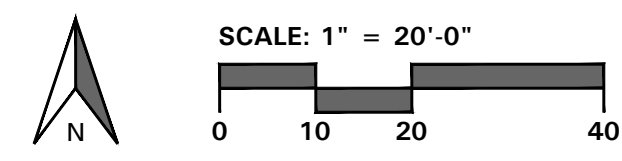
TREE SURVEY FIELD DATA				
No.	Dia. (inches)	Species (common name)	Status	Remarks
1136	6	CYPRESS	TO REMAIN	OFFSITE
1137	6	CYPRESS	TO REMAIN	OFFSITE
1208	10	ASH	TO REMAIN	
1233	8	ASH	TO REMAIN	
1234	8	ASH	TO REMAIN	
1240	10	ASH	TO REMAIN	
1248	6	ASH	TO REMAIN	
1269	6	ASH	TO REMAIN	
1275	6	CEDAR	TO REMAIN	
1278	8	ASH	TO REMAIN	
Total Caliper Inches on Site				62
Total Caliper Inches Removed				0
Total Mitigation Inches Required				0
Total Mitigation Inches Provided				0

- TREE PRESERVATION NOTES**
- EXISTING TREES TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION FROM TREE STRUCTURE DAMAGE AND COMPACTION OF SOIL UNDER AND AROUND DRIP LINE (CANOPY) OF TREE.
 - IF ANY ROOT STRUCTURE IS DAMAGED DURING ADJACENT EXCAVATION / CONSTRUCTION, NOTIFY OWNER'S AUTHORIZED REPRESENTATIVE IMMEDIATELY. IT IS RECOMMENDED THAT A LICENSED ARBORIST BE SECURED FOR THE TREATMENT OF ANY POSSIBLE TREE WOUNDS.
 - NO DISTURBANCE OF THE SOIL GREATER THAN 4" SHALL BE LOCATED CLOSER TO THE TREE TRUNK THAN 1/2 THE DISTANCE OF THE DRIP LINE TO THE TREE TRUNK. A MINIMUM OF 75% OF THE DRIP LINE AND ROOT ZONE SHALL BE PRESERVED AT NATURAL GRADE.
 - ANY FINE GRADING DONE WITHIN THE CRITICAL ROOT ZONES OF THE PROTECTED TREES MUST BE DONE WITH LIGHT MACHINERY SUCH AS A BOBCAT OR LIGHT TRACTOR. NO EARTH MOVING EQUIPMENT WITH TRACKS IS ALLOWED WITHIN THE CRITICAL ROOT ZONE OF THE TREES.
 - NO MATERIALS INTENDED FOR USE IN CONSTRUCTION OR WASTE MATERIALS ACCUMULATED DUE TO EXCAVATION OR DEMOLITION SHALL BE PLACED WITHIN THE LIMITS OF THE DRIP LINE OF ANY TREE.
 - NO EQUIPMENT MAY BE CLEANED OR TOXIC SOLUTIONS, OR OTHER LIQUID CHEMICALS, SHALL BE DEPOSITED WITHIN THE LIMITS OF THE DRIP LINE OF A TREE. INCLUDES BUT NOT LIMITED TO: PAINT, OIL, SOLVENTS, ASPHALT, CONCRETE, MORTAR, PRIMERS, ETC.
 - NO SIGNS, WIRES OR OTHER ATTACHMENTS, OTHER THAN THOSE OF A PROTECTIVE NATURE, SHALL BE ATTACHED TO ANY TREE.
 - NO VEHICULAR / CONSTRUCTION EQUIPMENT TRAFFIC OR PARKING IS ALLOWED WITHIN THE LIMITS OF THE DRIP LINE OF TREES.
 - BORING OF UTILITIES MAY BE PERMITTED UNDER PROTECTED TREES IN CERTAIN CIRCUMSTANCES. THE MINIMUM LENGTH OF THE BORE SHALL BE THE WIDTH OF THE TREE'S CANOPY AND SHALL BE A MINIMUM DEPTH OF FORTY-EIGHT (48") INCHES.
 - IRRIGATION TRENCHING WHICH MUST BE DONE WITHIN THE CRITICAL ROOT ZONE OF A TREE SHALL BE DUG BY HAND AND ENTER THE AREA IN A RADIAL MANNER.
 - ALL TREES TO BE REMOVED FROM THE SITE SHALL BE FLAGGED BY THE CONTRACTOR WITH BRIGHT RED VINYL TAPE (3" WIDTH) WRAPPED AROUND THE MAIN TRUNK AT A HEIGHT OF FOUR (4) FEET ABOVE GRADE. FLAGGING SHALL BE APPROVED BY OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO ANY TREE REMOVAL. CONTRACTOR SHALL CONTACT OWNER'S AUTHORIZED REPRESENTATIVE WITH 72 HOURS NOTICE TO SCHEDULE ON-SITE MEETING.
 - ALL TREES TO REMAIN, AS NOTED ON DRAWINGS, SHALL HAVE PROTECTIVE FENCING LOCATED AT THE TREE'S DRIP LINE. THE PROTECTIVE FENCING MAY BE COMPRISED OF SNOW FENCING, ORANGE VINYL CONSTRUCTION FENCING, CHAIN LINK FENCE OR OTHER SIMILAR FENCING WITH A FOUR (4') FOOT APPROXIMATE HEIGHT. THE PROTECTIVE FENCING SHALL BE LOCATED AS INDICATED ON THE TREE PROTECTION DETAIL.
 - WHEN A LOW HANGING LIMB IS BROKEN DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE OWNER'S AUTHORIZED REPRESENTATIVE IMMEDIATELY. UNDER NO CIRCUMSTANCE SHALL THE CONTRACTOR PRUNE ANY PORTION OF THE DAMAGED TREE WITHOUT THE PRIOR APPROVAL BY THE OWNER'S AUTHORIZED REPRESENTATIVE.

EXISTING TREE LEGEND



01 TREE PROTECTIVE FENCING
NOT TO SCALE



RECORD DRAWINGS
CASE NO. SP2015-024

BELLE FIRMA
4245 North Central Expy
Suite 501
Dallas, Texas 75205
214.865.7192 office

04/28/2017		RECORD DRAWINGS	
NO.	DATE	REVISION	
Pacheco Koch 7557 RAMBLER ROAD, SUITE 1400 DALLAS, TX 75231 972.235.3031 TX REG. ENGINEERING FIRM F-14439 TX REG. SURVEYING FIRM LS-10193805			
TREE PRESERVATION PLAN			
ROCKWALL CAR WASH			
LOT 7			
ROCKWALL BUSINESS PARK EAST			
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS			
DESIGN	DRAWN	DATE	SCALE
KAH	MUA	11/12/15	1" = 20'-0"
NOTES	FILE	NO.	
		L1.01	

ROCKWALL CAR WASH

04/28/16

LOT 4, BLOCK A
TRAIL CENTERS OF
AMERICA ADDITION
(CAB. G. SLIDE 137)

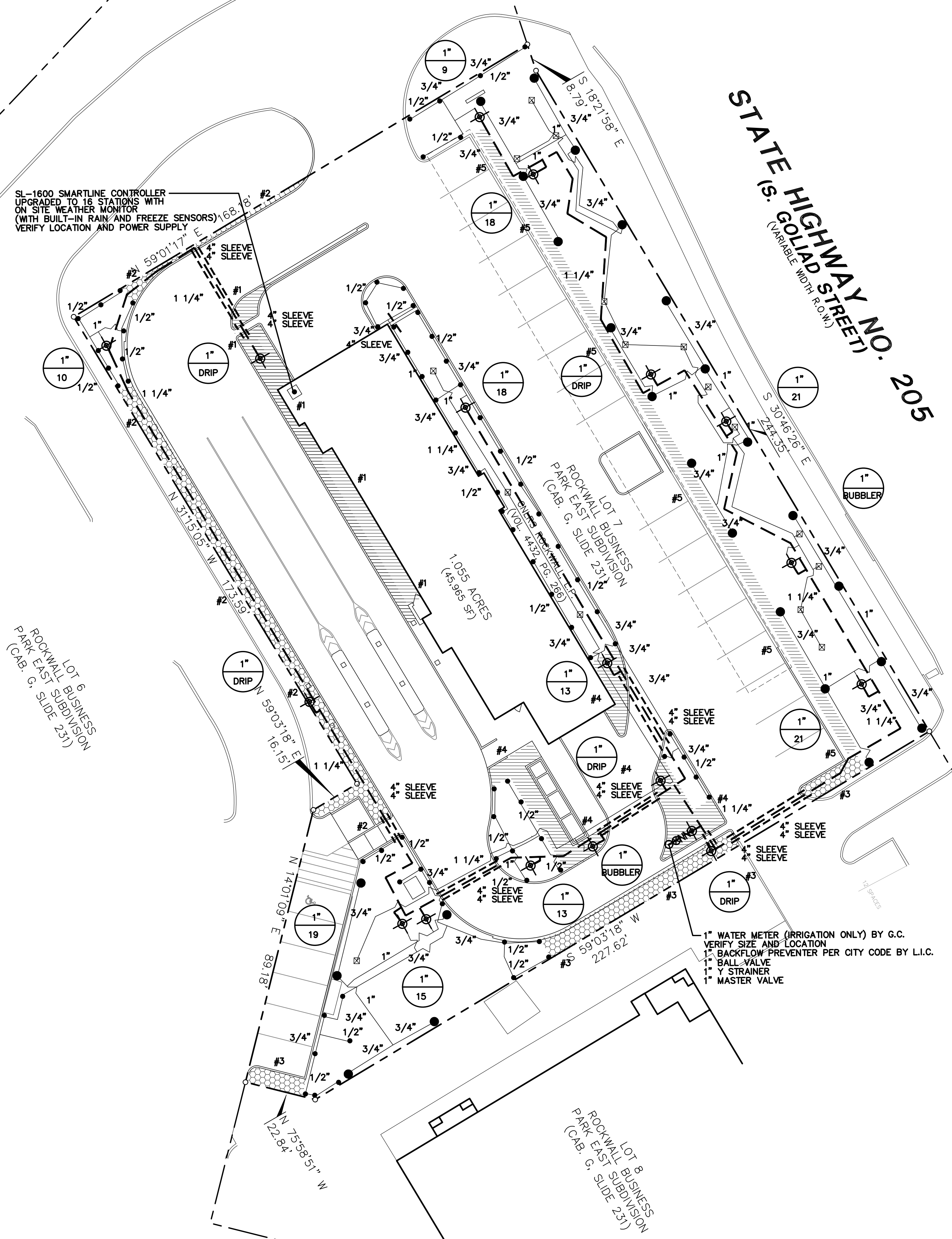
STATE HIGHWAY NO. 205
(S. GOLAD STREET)
(VARIABLE WIDTH R.O.W.)

SL-1600 SMARTLINE CONTROLLER
UPGRADED TO 16 STATIONS WITH
ON SITE WEATHER MONITOR
(WITH BUILT-IN RAIN AND FREEZE SENSORS)
VERIFY LOCATION AND POWER SUPPLY

LOT 6 BUSINESS
PARK EAST SUBDIVISION
(CAB. G. SLIDE 231)

LOT 7 BUSINESS
PARK EAST SUBDIVISION
(CAB. G. SLIDE 231)

LOT 8 BUSINESS
PARK EAST SUBDIVISION
(CAB. G. SLIDE 231)



SLEEVING NOTES

1. SLEEVES SHALL BE FURNISHED AND INSTALLED BY GENERAL CONTRACTOR.
2. SLEEVE MATERIAL SHALL BE SCHEDULE 40 PIPE, SIZE AS INDICATED ON PLAN.
3. CONTRACTOR SHALL LAY SLEEVES AND CONDUITS AT TWENTY-FOUR (24") INCHES BELOW FINISH GRADE OF THE TOP OF PAVEMENT.
4. CONTRACTOR SHALL EXTEND SLEEVES ONE (1') FOOT BEYOND EDGE OF ALL PAVEMENT.
5. CONTRACTOR SHALL CAP PIPE ENDS USING PVC CAPS.
6. CONTRACTOR SHALL FURNISH OWNER AND IRRIGATION CONTRACTOR WITH AN 'AS-BUILT' DRAWING SHOWING ALL SLEEVE LOCATIONS.

IRRIGATION NOTES

1. THE IRRIGATION CONTRACTOR SHALL COORDINATE INSTALLATION OF THE IRRIGATION SYSTEM WITH THE LANDSCAPE CONTRACTOR SO THAT ALL PLANT MATERIAL WILL BE WATERED IN ACCORDANCE WITH THE INTENT OF THE PLANS AND SPECIFICATIONS.
2. ALL SPRINKLER EQUIPMENT NUMBERS REFERENCE THE WEATHERMATIC EQUIPMENT CATALOG UNLESS OTHERWISE INDICATED.
3. TEN DAYS PRIOR TO START OF CONSTRUCTION, IRRIGATION CONTRACTOR SHALL VERIFY STATIC WATER PRESSURE. IF STATIC PRESSURE IS LESS THAN 65 P.S.I., NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY. DO NOT WORK UNTIL NOTIFIED TO DO SO BY OWNER.
4. SLEEVES SHALL BE FURNISHED AND INSTALLED BY GENERAL CONTRACTOR. SLEEVE MATERIAL SHALL BE SCHEDULE 40, SIZE AS INDICATED ON PLAN. REFER TO SLEEVING NOTES.
5. ALL MAIN LINE AND LATERAL LINE PIPING IN PLANTING AND LAWN AREAS SHALL HAVE A MINIMUM OF 12 INCHES OF COVER. ALL PIPING UNDER PAVING SHALL HAVE A MINIMUM OF 18 INCHES OF COVER. CONTRACTOR TO VERIFY LOCAL FREEZE DEPTHS AND ADJUST DEPTH OF COVER ACCORDINGLY.
6. LAWN SPRAY HEADS SHALL BE WEATHERMATIC LX-4 INSTALLED PER DETAIL SHOWN.
7. ROTOR HEADS SHALL BE WEATHERMATIC TURBO INSTALLED PER DETAIL SHOWN. (WITH BUILT-IN CHECK VALVE)
8. NOZZLES SHALL BE WEATHERMATIC 5500 SERIES, UNLESS OTHERWISE NOTED. IRRIGATION CONTRACTOR SHALL SELECT THE PROPER ARC AND RADIUS FOR EACH NOZZLE TO ENSURE 100% AND PROPER COVERAGE OF ALL LAWN AREAS AND PLANT MATERIAL. NO WATER SHALL SPRAY ON BUILDING.
9. ALL NOZZLES IN PARKING LOT ISLANDS AND PLANTING BEDS SHALL BE LOW ANGLE NOZZLES TO MINIMIZE OVER SPRAY ON PAVEMENT SURFACES.
10. ELECTRIC CONTROL VALVES SHALL BE WEATHERMATIC 11000 SERIES INSTALLED PER DETAIL SHOWN. SIZE OF VALVES AS SHOWN ON PLAN. VALVES SHALL BE INSTALLED IN VALVE BOXES LARGE ENOUGH TO PERMIT MANUAL OPERATION, REMOVAL OF SOLENOID AND / OR VALVE COVER WITHOUT ANY EARTH EXCAVATION.
11. QUICK COUPLING VALVES SHALL BE WEATHERMATIC QV75 INSTALLED PER DETAIL SHOWN. SWING JOINTS SHALL BE CONSTRUCTED USING 3/4" SCHEDULE 80 ELBOWS. CONTRACTOR SHALL SUPPLY OWNER WITH THREE (3) CH75 COUPLERS AND THREE (3) #10HSL SWIVEL HOSE ELLS AS PART OF THIS CONTRACT.
12. ALL 24 VOLT VALVE WIRING TO BE UF 14 GAUGE SINGLE CONDUCTOR. ALL WIRE SPLICES ARE TO BE PERMANENT AND WATERPROOF.
13. AUTOMATIC CONTROLLER SHALL BE INSTALLED AT LOCATION SHOWN. POWER (120V) SHALL BE LOCATED IN A JUNCTION BOX WITHIN FIVE (5') FEET OF CONTROLLER, LOCATION BY OTHER TRADES. RAIN AND FREEZE SENSORS SHALL BE INSTALLED WITH EACH CONTROLLER.
14. THE DESIGN PRESSURE IS 65 PSI.
15. ELECTRICAL SPLICES AT EACH VALVE AND CONTROLLER ONLY.
16. IRRIGATION IN TEXAS IS REGULATED BY: THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ)
MC-178 / PO BOX 13087
AUSTIN, TEXAS 78711-3087
17. TCEQ'S WEBSITE IS WWW.TCEQ.STATE.TX.US.

IRRIGATION LEGEND

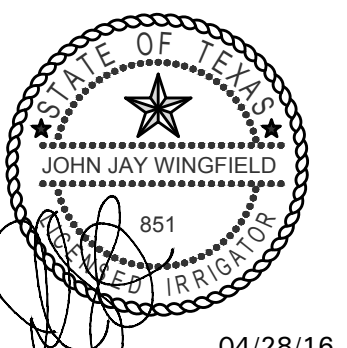
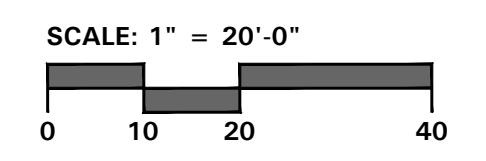
- WEATHERMATIC LX-4 POP-UP LAWN HEAD
- MP HUNTER MP ROTATOR NOZZLE
- WEATHERMATIC TURBO ROTARY FC
- WEATHERMATIC TURBO ROTARY PC
- ⊗ WEATHERMATIC 106.5 BUBBLER (2 PER TREE, TYP.)
- ⊕ WEATHERMATIC 11000 SERIES ELECTRIC VALVE
- ▲ WEATHERMATIC QV75 QUICK COUPLER
- CONTROLLER, SIZE AS INDICATED
- ⊖ WATER METER, SIZE AS INDICATED WITH D.C.A., SIZE AS INDICATED
- PVC SCHEDULE 40 SLEEVING
- - - PVC CLASS 200 MAINLINE
- - - PVC CLASS 200 LATERAL LINE
- (XXX) VALVE SIZE
- (XXX) GPM
- ▨ NETAFIM TECHLINE#TDL6-1210 (18" LATERAL SPACING, 12" EMITTER SPACING) PVC LATERAL PIPING SIZED AS REQUIRED INSTALL ALL EQUIPMENT ACCORDING TO MANUFACTURERS SPECIFICATIONS
- ▨ NETAFIM TECHLINE#TDL6-1210 (18" LATERAL SPACING, 12" EMITTER SPACING) PVC LATERAL PIPING SIZED AS REQUIRED INSTALL ALL EQUIPMENT ACCORDING TO MANUFACTURERS SPECIFICATIONS
- ⊕ (XXX) DRIP NETAFIM DISC FILTER #DF100-080 NETAFIM PRESSURE REGULATOR #PRV15025 INSTALL ALL EQUIPMENT ACCORDING TO MANUFACTURERS SPECIFICATIONS

BUBBLER PIPING CHART

NUMBER OF BUBBLERS	SIZE OF PIPE
1 - 5	1/2"
6 - 10	3/4"
11 - 20	1"
21 - 30	1 1/4"
31 - 40	1 1/2"

SMARTLINE CERTIFIED DESIGN

1. THIS IRRIGATION DESIGN FEATURES SMARTLINE CONTROLLER AND WEATHER MONITOR TECHNOLOGY AND UTILIZES 'ET' BASED WATER CONSERVATION AUTO ADJUSTING SCHEDULING.
2. THE IRRIGATION CONTRACTOR MUST PROGRAM THE CONTROLLER BY SELECTING THE PROPER SPRINKLER TYPE, PLANT TYPE, SOIL TYPE, SLOPE AND SUN / SHADE EXPOSURE FOR EACH ZONE.
3. THE IRRIGATION CONTRACTOR MUST CONTACT THE IRRIGATION DESIGNER FOR APPROVAL OF CONTROLLER SETTINGS.
4. THE IRRIGATION DESIGNER IS JOHN WINGFIELD (972) 513-3859.
5. ALL EQUIPMENT MUST BE INSTALLED AS SPECIFIED. NO EQUIPMENT SUBSTITUTIONS WILL BE PERMITTED.



RECORD DRAWINGS

CASE NO. SP2015-024



- 4245 North Central Expy
- Suite 501
- Dallas, Texas 75205
- 214.865.7192 office

NO.	DATE	REVISION
04/28/2017		RECORD DRAWINGS

Pacheco Koch 7557 RAMBLER ROAD, SUITE 1400
DALLAS, TX 75231 972.235.3031
TX REG. ENGINEERING FIRM F-14439
TX REG. SURVEYING FIRM LS-10193805

IRRIGATION PLAN						
ROCKWALL CAR WASH						
LOT 7						
ROCKWALL BUSINESS PARK EAST						
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
JJW	JJW	11/12/15	1" = 20'-0"			L3.01

ROCKWALL CAR WASH

SECTION 32 8423 - UNDERGROUND IRRIGATION SLEEVES AND UTILITY CONDUITS

PART 1 - GENERAL

1.1 DESCRIPTION

A. Provide underground irrigation sleeves as indicated on the drawings.

1.2 RELATED WORK SPECIFIED ELSEWHERE

A. Section 32 8424 - Irrigation System

1.3 REFERENCED STANDARDS

- A. American Society for Testing and Materials:
- ASTM - D2441 Poly (Vinyl Chloride) (PVC) Plastic Pipe (SD R-PR)
 - ASTM - D2466 Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Socket Type, Schedule 40.
 - ASTM - D2564 Solvent Cements for Poly Vinyl Chloride Plastic Pipe and Fittings.

PART 2 - MATERIALS

2.1 DEFINITIONS

A. Sleeve - A pipe within which another pipe is placed for carrying water or other utilities to be installed.
 B. Wire Sleeves - A pipe used to carry low voltage irrigation wires for operation of the electric solenoid valves.

2.2 GENERAL

- A. Polyvinyl Chloride Pipe (PVC) - Manufactured in accordance with standards noted herein:
- Marking and Identification - Permanently marked with SDR number, ASTM standard number, and the NSF (National Sanitation Foundation) seal.
 - Solvent - As recommended by manufacturer to make solvent-welded joints. Thoroughly clean pipe and fittings before applying solvent.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Coverage - Provide twenty-four inches (24") minimum cover over top of sleeve from finish grade.
 B. Sleeve Extensions - Extend sleeves one foot (1') past edge of pavement or concrete walls. Install 90 degree elbow on each sleeve end and add additional length of same size pipe to extend above finish grade by twelve inches (12"). Cap pipe ends using duct tape.

3.2 BACKFILL

A. Compaction - Place backfill over sleeves in six (6") inch lifts. Tamp firmly into place taking care not to damage sleeve. Complete backfill and compaction to prevent any future settlement. Compact to 85% Standard Proctor.
 B. Damage - Repair any damage resulting from improper compaction including pavement repair and replacement.

END OF SECTION

SECTION 32 8424 - IRRIGATION SYSTEM

PART 1 - GENERAL

1.1 SCOPE

A. Provide complete sprinkler installation as detailed and specified herein, includes furnishing all labor, material, tools, equipment, and related items for the complete and proper

installation of the irrigation system as indicated by the Drawings. All costs associated with this installation, including fees for testing and inspections of the system components are the responsibility of the installer of this irrigation system.

B. Work includes but is not limited to:

- Trenching and backfill.
- Installation of automatic controlled system.
- Upon completion of installation, supply as-built drawings showing details of construction including location of mainline piping, manual and automatic valves, electrical supply to valves, and specifically the exact location of automatic valves.

C. All sleeves as shown on plans shall be furnished by General Contractor. Meter and power source shall be provided by General Contractor.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Refer to Irrigation Plans for controller, head, and valve locations.
 B. Section 32 8423 - Underground Irrigation Sleeves and Utility Conduits
 C. Section 32 9300 - Landscape
 D. Refer to Landscape Plans, notes, details, bidding requirements, special provisions, and schedules for additional requirements.

1.3 APPLICABLE STANDARDS

- A. American Standard for Testing and Materials (ASTM) - Latest edition.
- D2241 Poly (Vinyl Chloride) (PVC) Plastic Pipe (SDR-PR)
 - D2464 Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Threaded, Schedule 80
 - D2455 Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40
 - D2467 Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Socket Type, Schedule 80
 - D2564 Solvent Cements for Poly (Vinyl Chloride) (PVC) Plastic Pipe and Fittings
 - D2287 Flexible Poly Vinyl Chloride (PVC) Plastic Pipe
 - F656 Poly Vinyl Chloride (PVC) Solvent Weld Primer
 - D2855 Making Solvent - Cemented Joints with Poly (Vinyl Chloride) (PVC) Pipe and Fittings

1.4 MAINTENANCE AND GUARANTEE

A. The Contractor shall guarantee materials and workmanship for one (1) calendar year after final acceptance by Owner.
 B. Guarantee is limited to repair and replacement of defective materials or workmanship, including repair of backfill settlement.
 C. Provide maintenance of system, including raising and lowering of heads to compensate for lawn growth, cleaning and adjustment of heads, and raising and lowering of shrub heads to compensate for shrub growth for one (1) year after completion of installation.

1.5 SUBMITTALS

A. Procedure: Comply with Division I requirements.
 B. Product Data: The Contractor shall submit five (5) copies of equipment manufacturer's 'cut sheets' and shop drawings for approval by Owner Authorized Representative prior to installation, including, but not limited to the following: sprinkler head, pipe, controller, valves, backflow prevention devices, valve boxes, wire, conduit, fittings, and all other types of fixtures proposed to be installed on the job. The submittal shall include the manufacturer's name, model number, equipment capacity, and manufacturer's installation recommendations, if applicable, for each proposed item.
 C. No work covered under this section may begin until the

Contractor has submitted the required information. No partial submittal shall be accepted and submittals shall be neatly bound into a brochure and logically organized. After the submittal has been approved, substitutions will not be allowed, except by written consent by the Owner Authorized Representative.

D. Shop drawings include dimensions, elevations, construction details, arrangements and capacity equipment, as well as manufacturer's installation recommendations.

E. Operating and Maintenance Manuals:

- Provide three (3) individually bound manuals detailing operating and maintenance requirements for the irrigation system.
- Manuals shall be delivered to the Owner Authorized Representative no later than ten (10) days prior to completion of the irrigation system.
- Provide descriptions of all installed materials and systems in sufficient detail to permit maintenance personnel to understand, operate, and maintain the equipment.
- Provide the following in each manual:
 - Index sheet with Contractor's name, address, telephone number, and contact name.
 - Duration of guarantee period. Include warranties and guarantees extended to the Owner by the manufacturer of all equipment.
 - Equipment list providing the following for each item:
 - Manufacturer's name
 - Make and model number
 - Name and address of local part's representative
 - Spare parts list in detail
 - Details operating and maintenance instructions for major equipment.

F. Project Record Documents:

- Comply with Division I requirements.
- Locate by written dimension, routing of mainline piping, remote control valves, and quick coupling valves. Locate mainlines by single dimensions from permanent site features provided they run parallel to these elements. Locate valves, intermediate electrical connections, and quick couplers by two dimensions from a permanent site feature at approximately 70 degrees to each other.
- When dimensioning is complete, transpose work to bond paper.

G. Quick Coupler Keys: Provide three (3) coupler keys with boiler drains attached using brass reducer.
 H. Controller Keys: Provide three (3) sets of keys to controller enclosure(s).

I. Use of materials differing in quality, size, or performance from those specified shall only be allowed upon written approval of the Landscape Architect. The decision shall be based on comparative ability of material or article to perform fully all purposes of mechanics and general design considered to be possessed by item specified.

J. Bidders desiring to make a substitution for specified sprinklers shall submit manufacturer's catalog sheet showing full specification of each type sprinkler proposed as a substitute, including discharge in GPM maximum allowable operating pressure at sprinkler.

K. Approval of substitute sprinkler shall not relieve Irrigation Contractor of his responsibility to demonstrate that final installed sprinkler system shall operate according to intent of originally designed and specified system.

L. It is the responsibility of the Irrigation Contractor to demonstrate that final installed sprinkler system shall operate according to intent of originally designed and specified system. If Irrigation Contractor notes any problems in head spacing or potential coverage, it is his responsibility to notify the Landscape Architect in writing, before proceeding with

work. Irrigation Contractor guarantees 100% coverage of all areas to be irrigated.

1.6 TESTING

- A. Perform testing required with other trades, including earthwork, paving, plumbing, electrical, etc., to avoid unnecessary cutting, patching, and boring.
 B. Water Pressure: This irrigation system has been designed to operate with a minimum static water pressure indicated on Drawings. The Contractor shall take a pressure reading at each water meter prior to beginning construction. Confirm findings to Owner Authorized Representative in writing. If static pressure varies from pressure stated on drawings, do not start work until notified to do so by Owner Authorized Representative.

1.7 COORDINATION

- A. Coordinate installation with other trades, including earthwork, paving, and plumbing to avoid unnecessary cutting, patching and boring.
 B. Coordinate to ensure that electrical power source is in place.
 C. Coordinate system installation with work specified in other sections and coordinate with Landscape Contractor to ensure plant material is uniformly watered in accordance with intent shown on drawings.

PART 2 - PRODUCTS

2.1 GENERAL

A. Mainline: Mainlines are the piping from water source to operating valves. This portion of piping is subject to surges being a closed portion of sprinkler system. Hydrant lines are considered a part of sprinkler main.
 B. Lateral Piping: Lateral piping is that portion of piping from operating valve to sprinkler heads. This portion of piping is not subject to surges, being an "open end" portion of sprinkler system.

2.2 POLY VINYL CHLORIDE PIPE (PVC PIPE)

A. PVC pipe shall be manufactured in accordance with commercial standards noted herein.
 B. Marking and Identification: PVC pipe shall be continuously and permanently marked with the following information: manufacturer's name, pipe size, type of pipe, and material, SDR number, product standard number, and the NSF (National Sanitation Foundation) seal.

C. PVC Pipe Fittings: Shall be of the same material as the PVC pipe specified and shall be compatible with PVC pipe furnished.

2.3 COPPER TUBING

A. Hard, straight lengths of domestic manufacture only. Do not use copper tube of foreign extrusion or any so-called irrigation tubing (thin wall).

2.4 COPPER TUBE FITTINGS

A. Cast brass or wrought copper, sweat - solder type.

2.5 WIRE

- A. Type UF with 4/64" thick waterproof insulation which is Underwriter's Laboratory approved for direct underground burial when used in a National Electric Code Class II Circuit (30 volts AC or less).
 B. Wire Connectors: Waterproof splice kit connectors. Type DBY by 3M.

2.6 SCHEDULE 80 PVC NIPPLES

A. Composed of Standard Schedule 40 PVC Fittings and PVC

meeting noted standards. No clamps or wires may be used. Nipples for heads and shrub risers to be nominal one-half inch (1/2") diameter by eight (8") inches long, where applicable.

B. Polyethylene nipples six (6") inches long shall be used on all pop-up spray heads.

2.7 MATERIALS - SEE IRRIGATION PLAN

- A. Sprinkler heads in lawn area as specified on plan.
 B. PVC Pipe: Class 200, SDR 21
 C. Copper Tubing (City Connection): Type "M"
 D. 24V Wire: Size 14, Type UF
 E. Electric valves: Shall be all plastic construction as indicated on plans.
 F. Backflow Prevention Device: Refer to drawing requirements and flow valve. Coordinate exact location with General Contractor.

PART 3 - EXECUTION

3.1 INSTALLATION - GENERAL

A. Staking: Before installation is started, place a stake where each sprinkler is to be located, in accordance with drawing. Staking shall be approved by Owner Authorized Representative before proceeding with work.
 B. Excavations: Excavations are unclassified and include earth, loose rock, rock or any combination thereof, in wet or dry state. Backfill trenches with material removed, provided that the earth is suitable for compaction and contains no lumps, clods rock, debris, etc. Special backfill specifications, if furnished take preference over this general specification.

C. Backfill: Flood or hand-tamp to prevent after settling. Hand rake trenches and adjoining area to leave grade in as good or better condition than before installation.
 D. Piping Layout: Piping layout is diagrammatic. Route piping around trees and shrubs in such a manner as to avoid damage to plantings. Do not dig within ball of newly planted trees or shrubs. In areas where existing trees are present, trenches shall be adjusted on-site to provide a minimum clearance of four (4) feet between the drip line of any tree or trench. The Contractor shall notify the Owner Authorized Representative in writing of a planned change in trench routing from that shown on the drawings.

3.2 PIPE INSTALLATION

A. Sprinkler Mains: Install a four (4") inch wide minimum trench with a minimum of eighteen (18") inches of cover.
 B. Lateral Piping: Install a four (4") inch wide minimum trench deep enough to allow for installation of sprinkler heads and valves, but in no case, with less than twelve (12") of cover.
 C. Trenching: Remove lumber, rubbish, and large rocks from trenches. Provide firm, uniform bearing for entire length of each pipe line to prevent uneven settlement. Wedging or blocking of pipe shall not be permitted. Remove foreign matter or dirt from inside of pipe before welding, and keep piping clean by approved means during and after laying of pipe.

3.3 PVC PIPE AND FITTING ASSEMBLY

A. Solvent: Use only solvent recommended by manufacturer to make solvent-welded joints. Thoroughly clean pipe and fittings of dirt, dust and moisture before applying solvent.
 B. PVC to metal connection: Work metal connections first. Use a non-hardening pipe dope such as Permatex No. 2 on threaded PVC adapters into which pipe may be welded.

3.4 COPPER TUBING AND FITTING ASSEMBLY

A. Clean pipe and fitting thoroughly and lightly sand pipe connections to remove residue from pipe. Attach fittings to tubing in an approved manner using 50-50 soft solid core solder.

3.5 POP-UP SPRAY HEADS

A. Supply pop-up spray heads in accordance with materials list and plan. Attach sprinkler to lateral piping with a semi-flexible polyethylene nipple not less than three (3") inches or more than six (6") inches long.

3.6 VALVES

A. Supply valves in accordance with materials list and size according to drawings. Install valves in a level position in accordance with manufacturer's specifications. See plan for typical installation of electric valve and valve box.

3.7 WIRING

A. Supply wire from the automatic sprinkler controls to the valves. No conduit will be required for UF wire unless otherwise noted on the plan. Wire shall be tucked under the piping.
 B. A separate wire is required from the control to each electric valve. A common neutral wire is also required from each control to each of the valves served by each particular control.
 C. Bundle multiple wires and tape them together at ten (10') foot intervals. Install ten (10') inch expansion coils at not more than one hundred (100') foot intervals. Make splices waterproof.

3.8 AUTOMATIC SPRINKLER CONTROLS

A. Supply in accordance with Irrigation Plan. Install according to manufacturer's recommendations.

3.9 TESTING

A. Sprinkler Mains: Test sprinkler main only for a period of twelve (12) to fourteen (14) hours under normal pressure. If leaks occur, replace joint or joints and repeat test.
 B. Complete tests prior to backfilling. Sufficient backfill material may be placed in trenches between fittings to ensure stability of line under pressure. In each case, leave fittings and couplings open to visual inspection for full period of test.

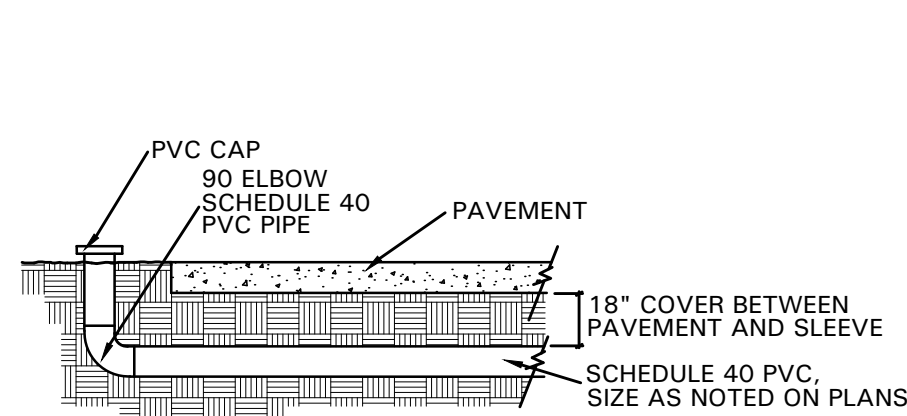
3.10 FINAL ADJUSTMENT

A. After installation has been completed, make final adjustment of sprinkler system in preparation for Owner Authorized Representative's final inspection.
 B. Completely flush system to remove debris from lines by removing nozzle from heads on end of lines and turning on system.
 C. Check sprinklers for proper operation and proper alignment for direction of throw.
 D. Check each section of spray heads for operating pressure and balance to other sections by use of flow adjustment on top of each valve.
 E. Check nozzling for proper coverage. Prevailing wind conditions may indicate that arch of angle of spray should be other than shown on drawings. In this case, change nozzles to provide correct coverage and furnish data to Owner Authorized Representative with each change.

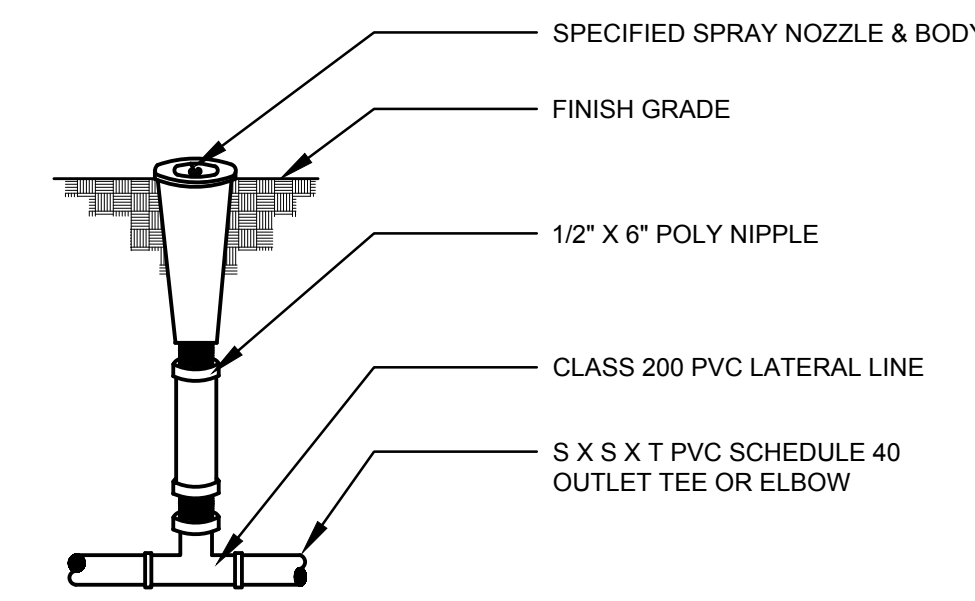
3.11 SYSTEM DEMONSTRATION

A. Instruct Owner's personnel in operation and maintenance of system including adjusting of sprinkler heads. Use operation and maintenance manual for basis of demonstration.

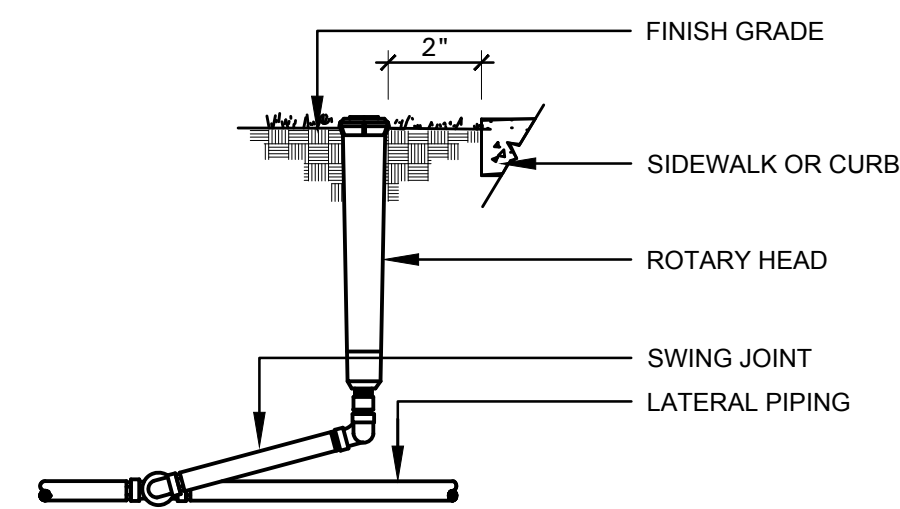
END OF SECTION



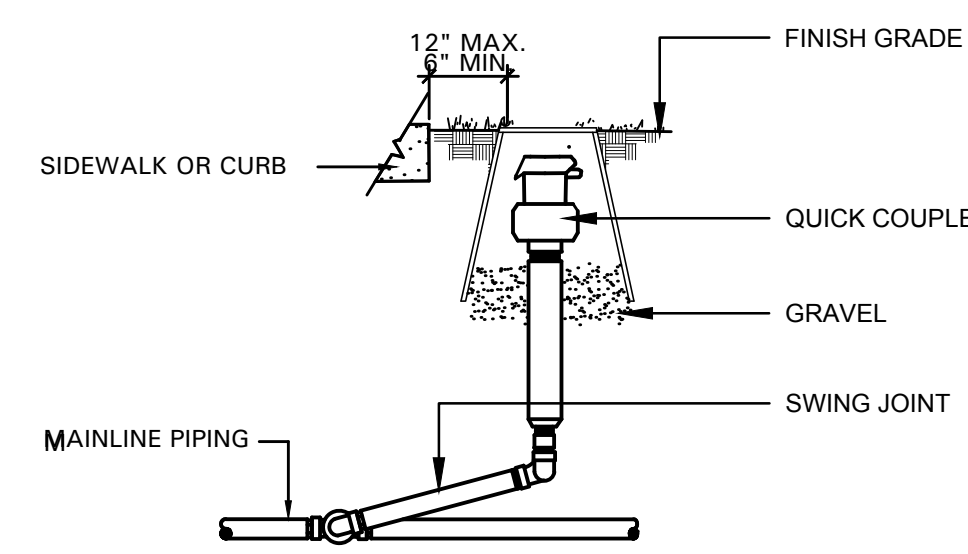
01 SLEEVE DETAIL
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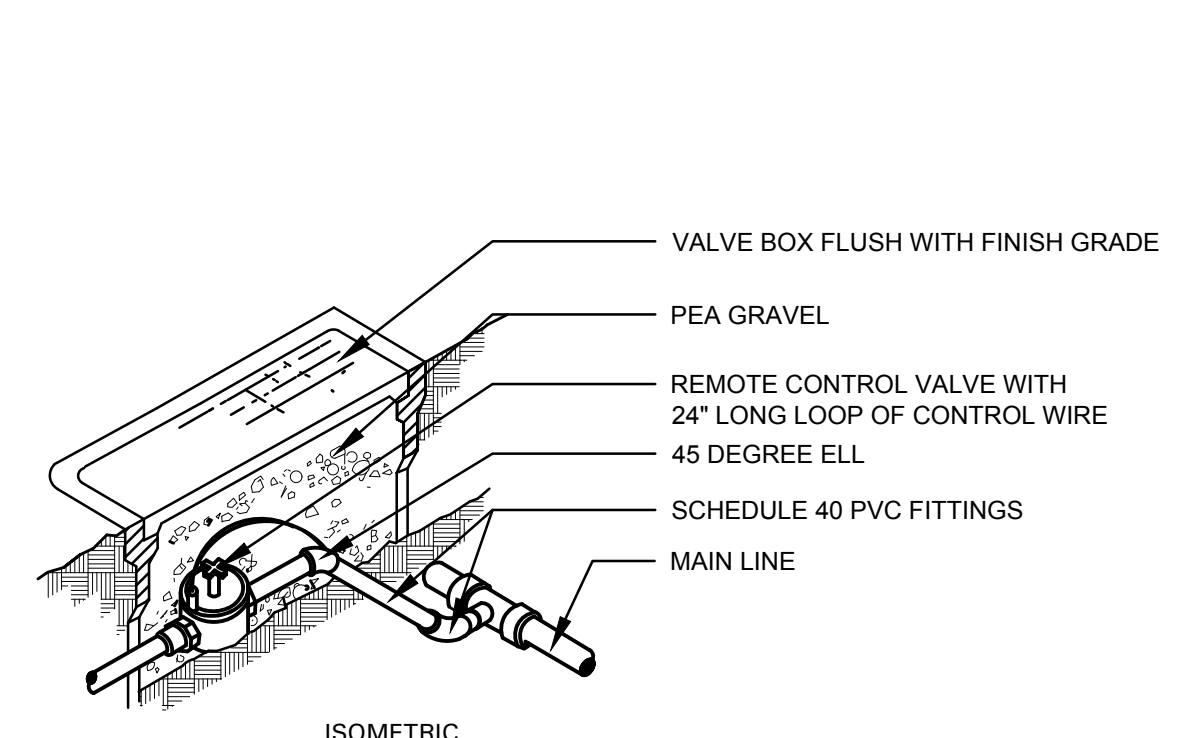
02 POP-UP LAWN SPRAY ASSEMBLY
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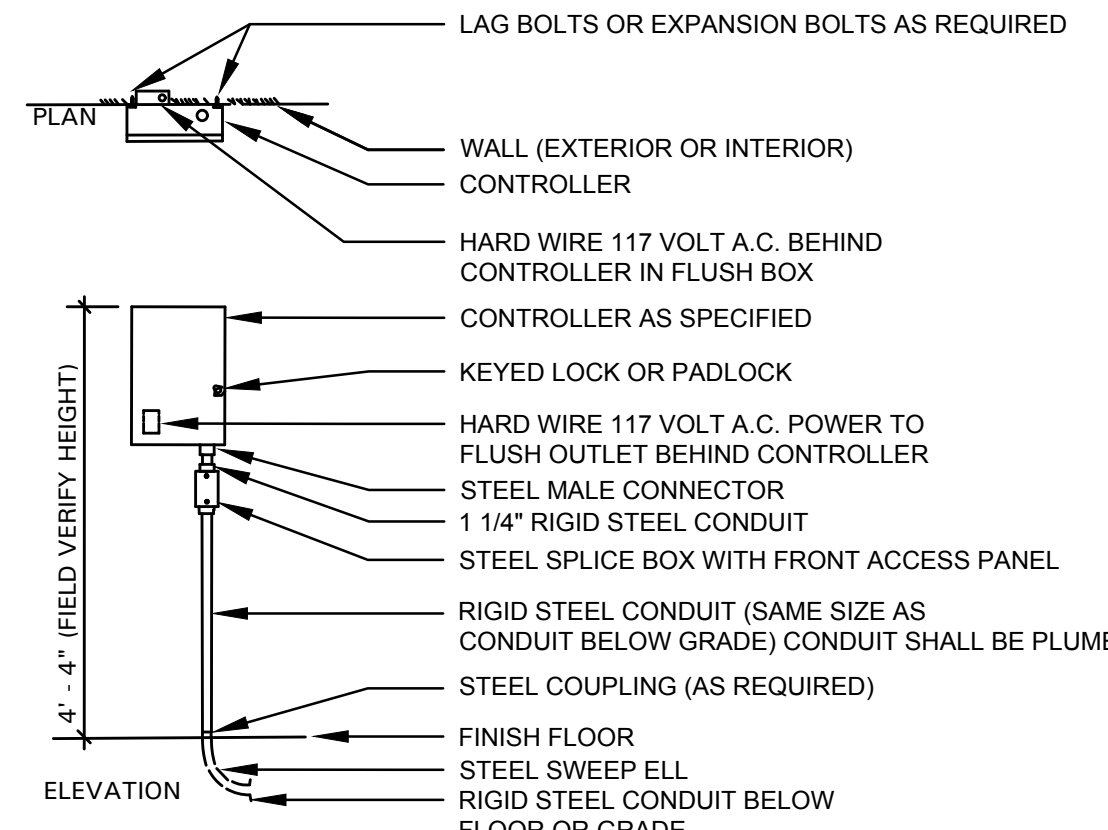
03 ROTARY HEAD
NOT TO SCALE



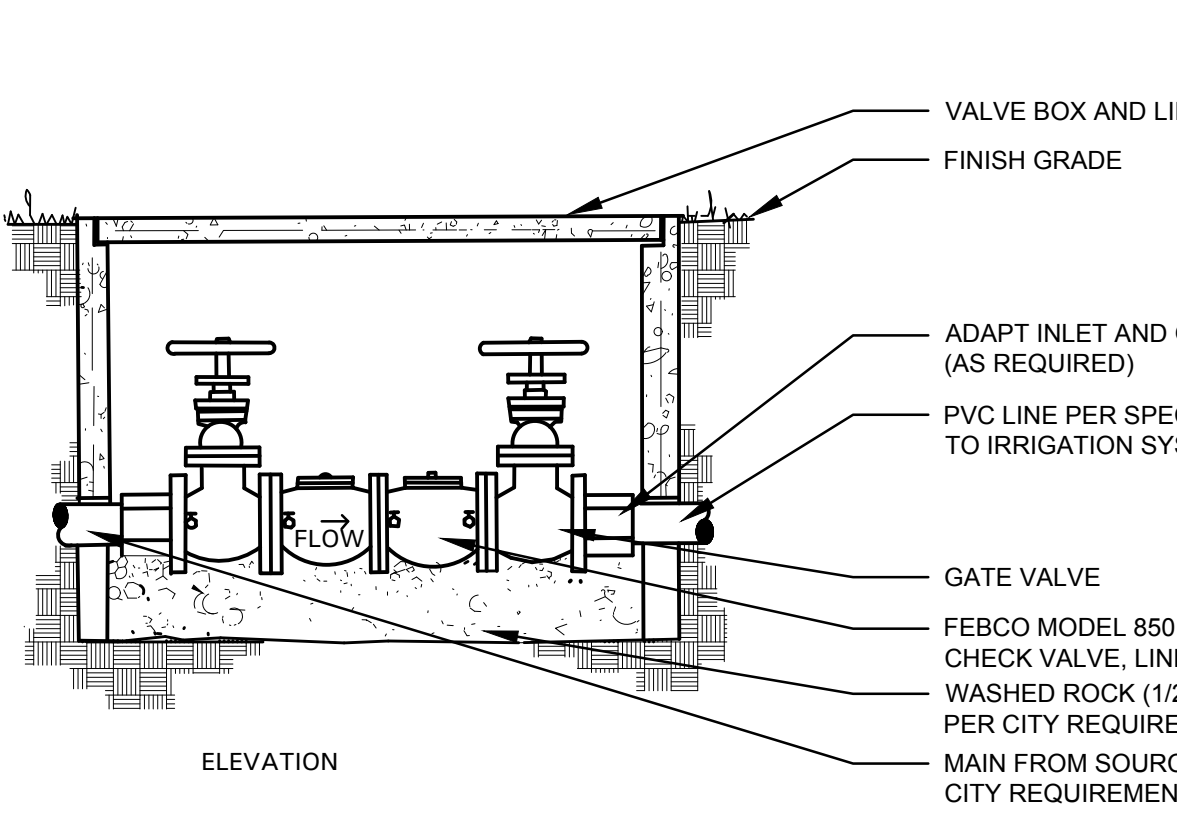
04 QUICK COUPLER
NOT TO SCALE



05 REMOTE CONTROL VALVE
NOT TO SCALE



06 WALL MOUNTED CONTROLLER
NOT TO SCALE



07 BACKFLOW PREVENTER
NOT TO SCALE

RECORD DRAWINGS

CASE NO. SP2015-024



4245 North Central Expy
Suite 501
Dallas, Texas 75205
214.865.7192 office

04/28/2017 RECORD DRAWINGS REVISION
Pacheco Koch 7557 RAMBLER ROAD, SUITE 1400 DALLAS, TX 75231 972.235.3031
 TX REG. ENGINEERING FIRM F-14439 TX REG. SURVEYING FIRM LS-10193905
IRRIGATION SPECIFICATIONS AND DETAILS
ROCKWALL CAR WASH
LOT 7
ROCKWALL BUSINESS PARK EAST
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

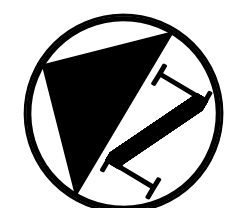
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
JWJ	JWJ	11/12/15				L3.02

04/28/16

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.

LEGEND

- BL BOLLARD
 - EM₁₀ ELECTRIC METER
 - PP POWER POLE
 - LS LIGHT STANDARD
 - WM WATER METER
 - WV WATER VALVE
 - ICV IRRIGATION CONTROL VALVE
 - PH FIRE HYDRANT
 - CH CLEANOUT
 - MH MANHOLE
 - TSC TRAFFIC SIGNAL CONTROL
 - TSP TRAFFIC SIGNAL POLE
 - FP FLAG POLE
 - FL FLOOD LIGHT
 - TS TRAFFIC SIGN
 - IRS 1/2"-INCH IRON ROD
 - IRS W/"PACHECO KOCH" CAP SET
- (C.M.) CONTROLLING MONUMENT
 - PROPERTY LINE
 - FENCE
 - OVERHEAD UTILITY LINE
 - UNDERGROUND ELECTRIC LINE
 - UNDERGROUND TELEPHONE LINE
 - UNDERGROUND CABLE LINE
 - UNDERGROUND WATER LINE
 - UNDERGROUND SEWER LINE
 - 613 EXIST CONTOUR
 - 612.39 EXIST SPOT ELEVATION
 - 612.39 EXIST TOP OF CURB ELEVATION
 - 612.39 EXIST GUTTER ELEVATION
 - DEMOLITION AREA

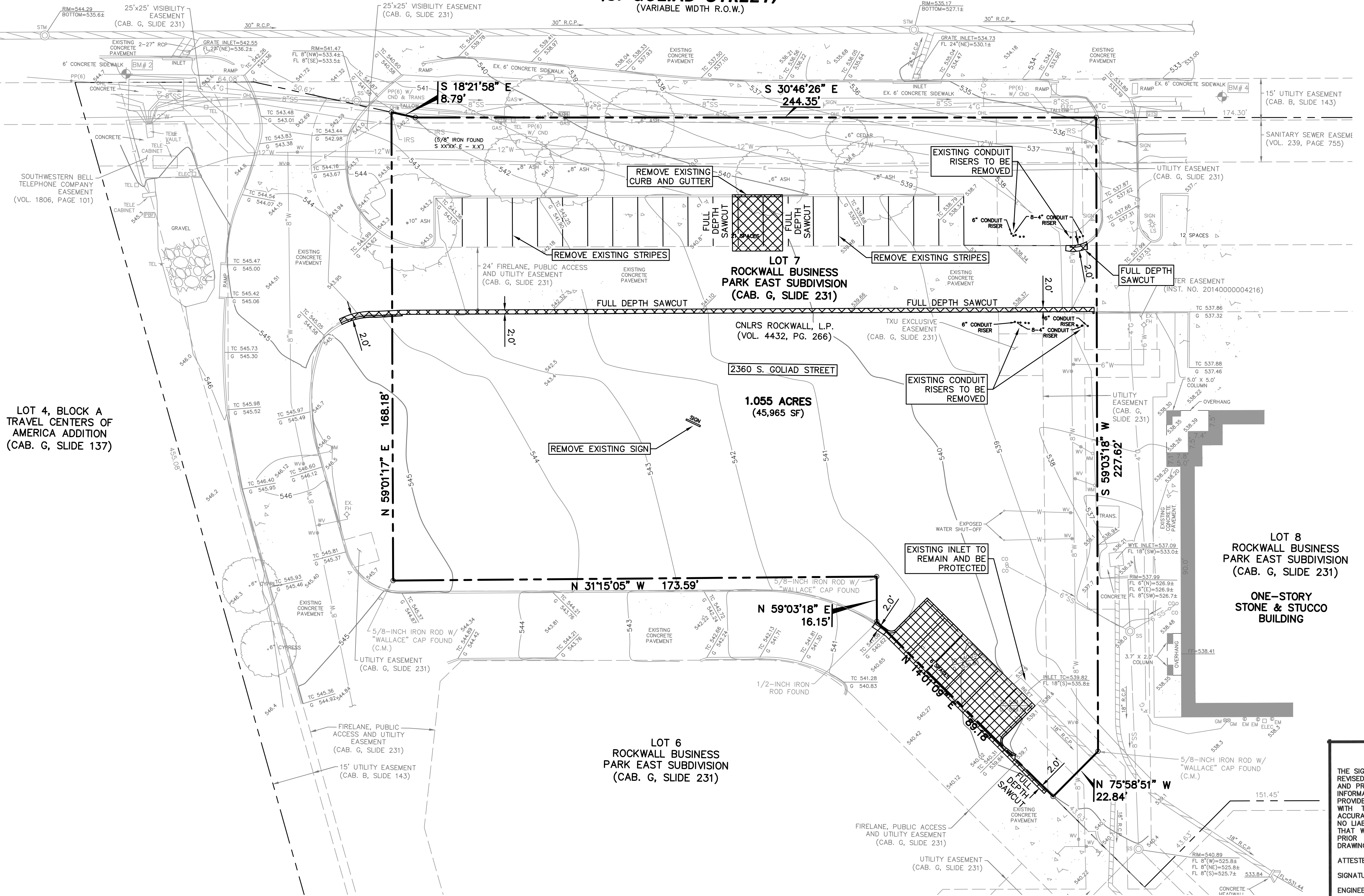


REFERENCE LANDSCAPE PLANS FOR TREE REMOVAL AND PROTECTION

**STATE HIGHWAY NO. 205
(S. GOLIAD STREET)**
(VARIABLE WIDTH R.O.W.)

DEMOLITION GENERAL NOTES

1. CONTRACTOR IS TO REVIEW ALL GENERAL NOTES PRIOR TO BEGINNING WORK.
2. REMOVE ALL EXISTING PAVEMENT AND STRUCTURES WITHIN THE LIMITS OF DEMOLITION UNLESS OTHERWISE NOTED.
3. SAWCUT AND REMOVE ALL EXISTING DRIVE APPROACHES (WITHIN THE LIMITS OF DEMOLITION) TWO FEET FROM BACK OF CURB, SIDEWALKS, PAVEMENT, AND UTILITIES WITHIN THE PUBLIC RIGHT-OF-WAY ARE TO REMAIN UNLESS OTHERWISE NOTED.
4. CONSULT THE DIMENSIONAL CONTROL PLAN TO VERIFY THE PORTION OF EXISTING CONCRETE CURBS AND PAVEMENT WHICH ARE TO REMAIN.
5. CONTRACTOR TO COORDINATE WITH LOCAL POWER, TELEPHONE, CABLE, AND GAS COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITIES.
6. ALL UTILITIES SHOULD BE CUT AND PLUGGED IN ACCORDANCE WITH THEIR RESPECTIVE UTILITY COMPANY REQUIREMENTS AND PRIOR TO DEMOLITION OF ANY EXISTING BUILDINGS.
7. CONTRACTOR TO PLUG ALL EXISTING EXPOSED ENDS OF ABANDONED UTILITIES.
8. CONTRACTOR TO DETERMINE SOURCE OF ALL EXPOSED UTILITIES AND, IF REQUIRED, RECONNECT TO PROPOSED UTILITIES.
9. CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND LEGAL DISPOSAL OF ALL THE UNSUITABLE MATERIALS FROM THE PROJECT SITE. CONTRACTOR SHALL CONTACT ALL LOCAL AUTHORITIES TO DETERMINE DISPOSAL REQUIREMENTS.
10. ALL TREES ON THE PROPERTY SHALL BE PROTECTED AGAINST DAMAGE DURING DEMOLITION OPERATIONS UNLESS OTHERWISE NOTED. THE TREE PROTECTION SHALL BE PLACED AROUND TREES PRIOR TO ANY DEMOLITION OR GRADING. TREE PROTECTION SHALL REMAIN UNTIL ALL WORK IS COMPLETED. REFER TO LANDSCAPE PLANS FOR TREE REMOVAL AND PROTECTION DETAILS.
11. ANY DAMAGE DONE TO EXISTING TREE CROWNS OR ROOT SYSTEMS SHALL BE REPAIRED IMMEDIATELY BY AN APPROVED TREE SURGEON AT THE OWNER'S DIRECTION. ROOTS EXPOSED AND/OR DAMAGED DURING DEMOLITION AND/OR GRADING OPERATIONS SHALL BE CUT OFF CLEANLY INSIDE THE EXPOSED OR DAMAGED AREA, CUT SURFACES PAINTED WITH AN APPROVED TREE PAINT, AND TOPSOIL AND MULCH PLACED OVER THE EXPOSED ROOT AREA IMMEDIATELY.
12. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING AND MAINTAINING EROSION CONTROL MEASURES ON THE SITE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS UNTIL THE SITE HAS BEEN STABILIZED.
13. CONTRACTOR IS RESPONSIBLE FOR GRADING ALL DISTURBED AREAS TO ALLOW FOR POSITIVE DRAINAGE. GRADING SLOPES ARE NOT TO EXCEED 4:1, UNLESS OTHERWISE NOTED.
14. AREAS EXCAVATED FOR FOUNDATION OR UNDERGROUND STRUCTURE REMOVAL SHALL BE BACK-FILLED AND COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY.
15. CONTRACTOR IS RESPONSIBLE FOR SECURITY OF THE SITE DURING DEMOLITION ACTIVITIES AND UNTIL SUBSTANTIAL COMPLETION.
16. ALL WORK, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION ISSUED BY THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS AND CITY STANDARD CONSTRUCTION SPECIFICATIONS.
17. THE HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING SUBSURFACE UTILITIES HAVE BEEN DETERMINED FROM DATA RECORDED BY OTHERS. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL UTILITY MAINS, MANHOLES, CLEANOUTS, VALVE BOXES, AND FIRE HYDRANTS, ETC. IN THE AREA OF DEMOLITION.
18. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS REGARDING TRENCH SAFETY.
19. BARRICADING AND PROJECT SIGNS SHALL CONFORM TO TEXAS DEPARTMENT OF TRANSPORTATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND LATEST UPDATES.
20. CONTRACTOR SHALL MAINTAIN EXISTING PAVEMENT AND ACCESS TO FIRE HYDRANTS ON SITE UNTIL THE BUILDINGS AND STRUCTURES IN THAT AREA HAVE BEEN DEMOLISHED AND REMOVED.
21. CONTRACTOR WILL PROVIDE ON-SITE PARKING FOR WORKERS. VEHICLE PARKING WILL NOT BE ALLOWED WITHIN THE PUBLIC RIGHT-OF-WAY.
22. CONTRACTOR WILL BE RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING ADEQUATE DUST CONTROL MEASURES DURING DEMOLITION ACTIVITIES.
23. CONTRACTOR IS TO COORDINATE DEMOLITION ACTIVITIES WITH THE HAZARDOUS MATERIAL ABATEMENT CONTRACTORS' ACTIVITIES, IF APPLICABLE.
24. THE CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING ALL TEMPORARY UTILITY SERVICES REQUIRED TO COMPLETE THE SCOPE OF WORK.
25. IF REQUIRED DUE TO CONSTRUCTION, POWER POLES TO BE BRACED OR RELOCATED AT CONTRACTOR'S EXPENSE.



LOT 4, BLOCK A TRAVEL CENTERS OF AMERICA ADDITION (CAB. G, SLIDE 137)

LOT 6 ROCKWALL BUSINESS PARK EAST SUBDIVISION (CAB. G, SLIDE 231)

LOT 7 ROCKWALL BUSINESS PARK EAST SUBDIVISION (CAB. G, SLIDE 231)

LOT 8 ROCKWALL BUSINESS PARK EAST SUBDIVISION (CAB. G, SLIDE 231)

ONE-STORY STONE & STUCCO BUILDING

RECORD DRAWING

THE SIGNED AND SEALED CONSTRUCTION DOCUMENT HAS BEEN REVISED TO REFLECT CONSTRUCTION RECORDS MAINTAINED AND PROVIDED BY THE CONTRACTOR FOR THIS PROJECT. THE INFORMATION SHOWN ON THIS RECORD DRAWING, WHICH WAS PROVIDED BY THE CONTRACTOR, OR OTHERS NOT ASSOCIATED WITH THE DESIGN ENGINEER, CANNOT BE VERIFIED FOR ACCURACY OR COMPLETENESS. PACHECO KOCH SHALL ASSUME NO LIABILITY FOR ANY CHANGES MADE DURING CONSTRUCTION THAT WERE NOT SPECIFICALLY APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION. THE SEALED CONSTRUCTION DRAWINGS ARE ON FILE AT THE OFFICES OF PACHECO KOCH.

ATTESTED BY: *[Signature]*
 SIGNATURE: _____
 ENGINEER OF RECORD: A. GREGORY GERBIG
 CONTRACTOR: FRANCIS COMMERCIAL
 DATE REVISED: 04/28/2017

NO.	DATE	REVISION
04/28/2017	RECORD DRAWINGS	

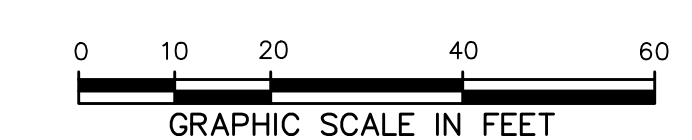
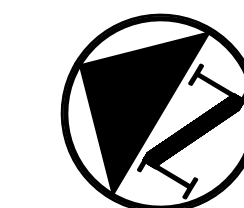
Pacheco Koch
 7557 RAMBLER ROAD, SUITE 1400
 DALLAS, TX 75231 972.235.3031
 TX REG. ENGINEERING FIRM F-14439
 TX REG. SURVEYING FIRM LS-10193905

DEMOLITION PLAN
SPEEDY BEE CAR WASH
2360 S. GOLIAD STREET
LOT 7, ROCKWALL BUSINESS PARK EAST
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
AGG	ADR	MAR 2016	1"=20'			C1.1

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SPEEDY BEE CAR WASH, ROCKWALL BUSINESS PARK EAST



LEGEND

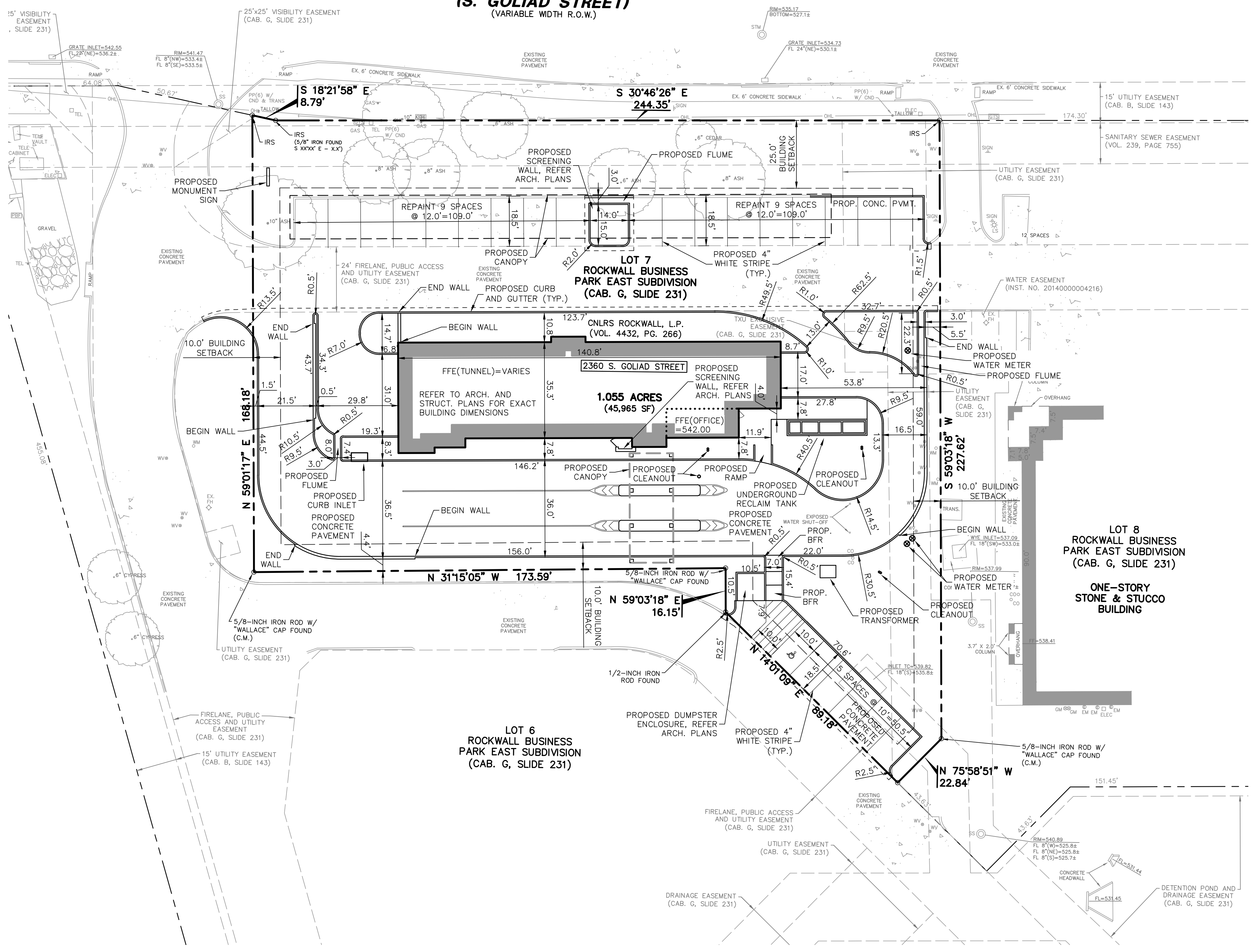
B.	BOLLARD
EM	ELECTRIC METER
PP	POWER POLE
LS	LIGHT STANDARD
WM	WATER METER
WV	WATER VALVE
ICV	IRRIGATION CONTROL VALVE
FH	FIRE HYDRANT
CO	CLEANOUT
MH	MANHOLE
TSC	TRAFFIC SIGNAL CONTROL
TSP	TRAFFIC SIGNAL POLE
TELE	TELEPHONE BOX
FL	FLOOD LIGHT
FLP	FLAG POLE
SIGN	TRAFFIC SIGN
IRS	1/2-INCH IRON ROD
(C.M.)	W/PACHECO KOCH" CAP SET
---	CONTROLLING MONUMENT
---	PROPERTY LINE
---	FENCE
⊙	COORDINATE DESIGNATION
X	PROPOSED FENCE

**STATE HIGHWAY NO. 205
(S. GOLIAD STREET)
(VARIABLE WIDTH R.O.W.)**

ALL DIMENSIONS ARE TO
BACK-OF-CURB UNLESS
OTHERWISE NOTED.

GENERAL NOTES

- ALL WORK, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION ISSUED BY THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS 3RD EDITION AND THE CITY OF ROCKWALL STANDARD CONSTRUCTION SPECIFICATIONS.
- PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL BE FAMILIAR WITH THE PLANS, ALL NOTES, THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION ISSUED BY THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS 3RD EDITION, THE CITY STANDARDS FOR CONSTRUCTION, AND ANY OTHER APPLICABLE STANDARDS AND SPECIFICATIONS RELEVANT TO THE PROPER COMPLETION OF THE WORK SPECIFIED. FAILURE ON THE PART OF THE CONTRACTOR TO BE FAMILIAR WITH ALL STANDARDS AND SPECIFICATIONS PERTAINING TO THIS WORK SHALL IN NO WAY RELIEVE THE CONTRACTOR OF RESPONSIBILITY OF PERFORMING THE WORK IN ACCORDANCE WITH ALL SUCH APPLICABLE STANDARDS AND SPECIFICATIONS.
- THE HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING SUBSURFACE UTILITIES HAVE BEEN DETERMINED FROM DATA RECORDED BY OTHERS. CONTRACTOR SHALL VERIFY THAT NECESSARY CROSSING CLEARANCES BETWEEN EXISTING AND PROPOSED UTILITIES EXIST PRIOR TO CONSTRUCTION OF ANY SUCH CROSSINGS. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL UTILITIES IN THE CONSTRUCTION OF THIS PROJECT. CONTRACTOR TO VERIFY SIZE AND LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION, AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
- IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL MANHOLES, CLEANOUTS, VALVE BOXES, AND FIRE HYDRANTS, ETC. CONTRACTOR TO ADJUST TO PROPER GRADE PRIOR TO AND AFTER THE PLACING OF PERMANENT PAVING AND GRADING. UTILITIES MUST BE MAINTAINED AT PROPER GRADE DURING THE CONSTRUCTION OF THE PAVING FOR THIS DEVELOPMENT.
- PROTECT AND MAINTAIN ROADWAY TRAFFIC THROUGHOUT THE PROJECT, PROVIDING A MINIMUM OF ONE (1) LANE OPEN IN EACH DIRECTION;
 - PROVIDE AND MAINTAIN INTERIM ACCESS FROM ROADWAYS CURRENTLY IN USE TO ALL DRIVEWAYS AND INTERSECTING STREETS OR ALLEYS;
 - MAINTAIN NORMAL PROJECT DRAINAGE UNTIL NEW DRAINAGE FACILITIES ARE FUNCTIONAL, INCLUDING, WHERE NECESSARY, INTERIM REPLACEMENT OF EXISTING DRAINAGE STRUCTURES REMOVED FOR CONSTRUCTION OF NEW DRAINAGE FACILITIES;
 - MAINTAIN ALL WORK AND MATERIAL STORAGE AREAS IN ORDERLY CONDITION, FREE OF DEBRIS AND WASTE. UPON COMPLETION OF CONSTRUCTION, CLEAN UP THE PROJECT AND ADJACENT AFFECTED AREAS TO AN ACCEPTABLE CONDITION AS PROVIDED IN THE GENERAL CONDITIONS.
- PRIOR TO COMMENCEMENT OF CONSTRUCTION, BONDS AND THREE-WAY CONTRACTS SHALL BE SUBMITTED TO THE CITY AS REQUIRED.
- THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS REGARDING TRENCH SAFETY.
- REFER TO ARCHITECTURAL AND STRUCTURAL PLANS TO VERIFY ALL BUILDING DIMENSIONS.
- REFER TO ARCHITECTURAL PLANS FOR DETAILED BUILDING ENTRANCE LAYOUTS, RAMPS, LANDSCAPE, AND SIDEWALKS.
- BARRICADING AND PROJECT SIGNS SHALL CONFORM TO THE TEXAS DEPARTMENT OF TRANSPORTATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND LATEST UPDATES.
- EXACT SAWCUT PAVEMENT REMOVAL AND REPLACEMENT LIMITS WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE CITY PAVEMENT REPAIR MANUAL AND INCLUDED IN THE BASE BID.
- CONTRACTOR WILL PROVIDE ON-SITE PARKING FOR WORKERS. VEHICLE PARKING WILL NOT BE ALLOWED WITHIN THE PUBLIC RIGHT-OF-WAY.



RECORD DRAWING

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ATTESTED BY: *[Signature]*
 SIGNATURE: _____
 ENGINEER OF RECORD: A. GREGORY GERBIG
 CONTRACTOR: FRANCIS COMMERCIAL
 DATE REVISED: 04/28/2017

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.

NO.	DATE	REVISION
04/28/2017	RECORD DRAWINGS	

Pacheco Koch
 7557 RAMBLER ROAD, SUITE 1400
 DALLAS, TX 75231 972.235.3031
 TX REG. ENGINEERING FIRM F-14439
 TX REG. SURVEYING FIRM LS-10193805

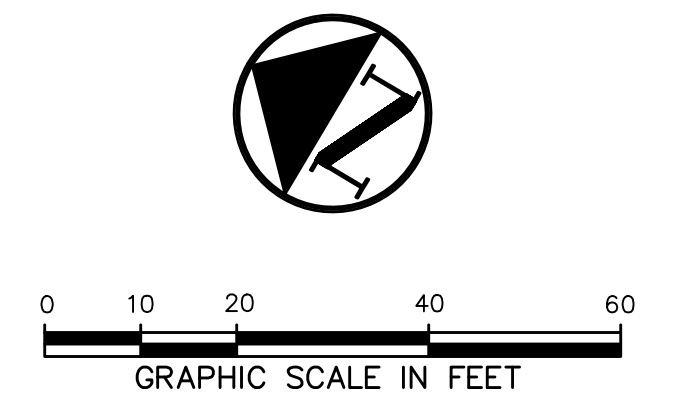
DIMENSIONAL CONTROL PLAN
SPEEDY BEE CAR WASH
2360 S. GOLIAD STREET
LOT 7, ROCKWALL BUSINESS PARK EAST
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
AGG	ADR	MAR 2016	1"=20'			C2.1

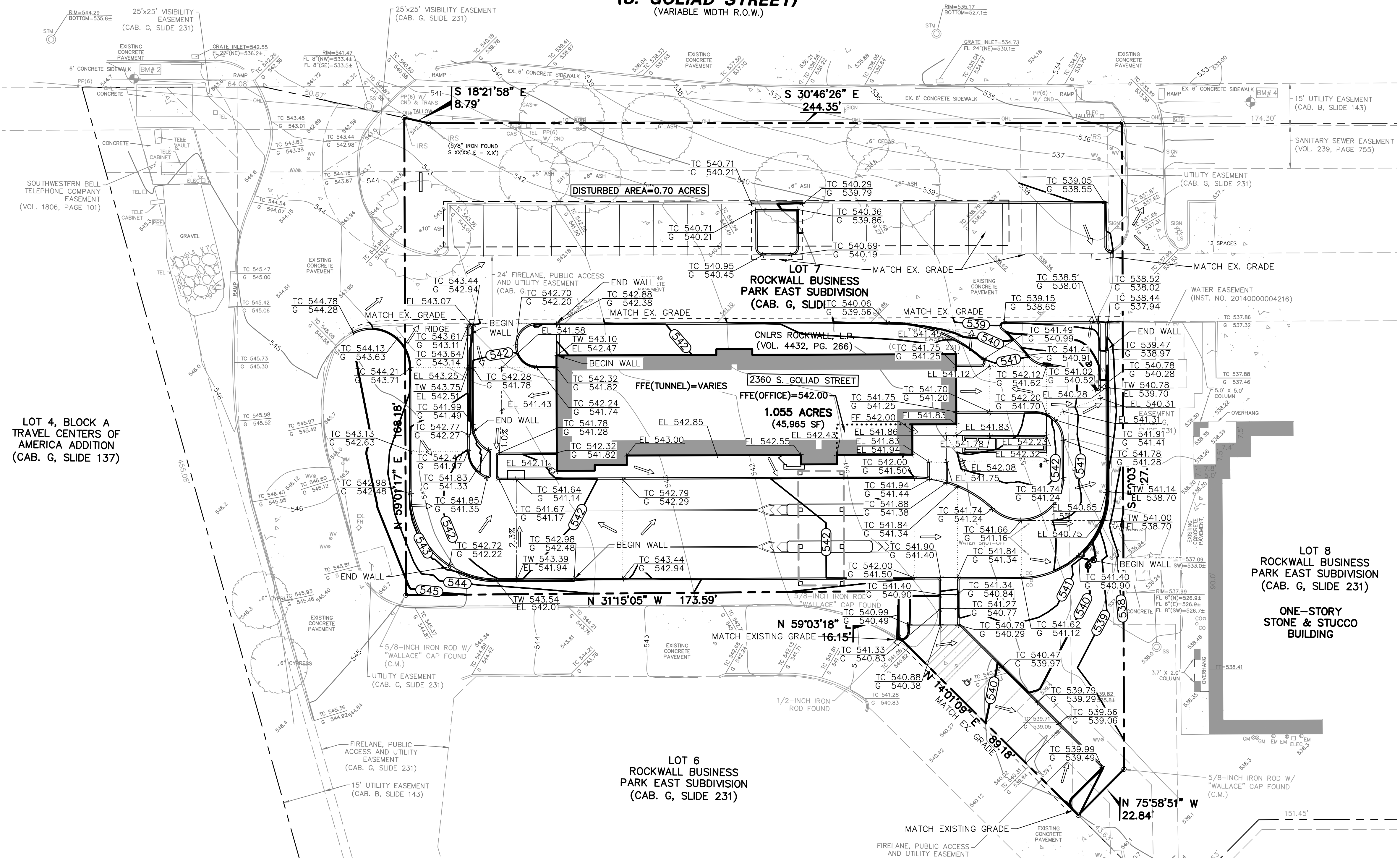
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LEGEND

- B. BOLLARD
- EM. ELECTRIC METER
- PP. POWER POLE
- LS. LIGHT STANDARD
- WM. WATER METER
- WV. WATER VALVE
- ICV. IRRIGATION CONTROL VALVE
- FH. FIRE HYDRANT
- CO. CLEANOUT
- MH. MANHOLE
- TSC. TRAFFIC SIGNAL CONTROL
- TSP. TRAFFIC SIGNAL POLE
- TELE. TELEPHONE BOX
- FL. FLOOD LIGHT
- FP. FLAG POLE
- SIGN. TRAFFIC SIGN
- IRS. 1/2-INCH IRON ROD
- (C.M.) W/"PACHECO KOCH" CAP SET
- PROPERTY LINE
- FENCE
- OVERHEAD UTILITY LINE
- 613. EXIST CONTOUR
- 612.39. EXIST SPOT ELEVATION
- TC 612.39. EXIST TOP OF CURB ELEVATION
- G 611.89. EXIST GUTTER ELEVATION
- 400. PROPOSED CONTOUR
- TC 614.50. PROPOSED TOP OF CURB ELEVATION
- G 614.00. PROPOSED GUTTER ELEVATION
- EL 614.25. PROPOSED SPOT ELEVATION
- M.G. MATCH EXISTING GRADE
- TW 620.50. PROPOSED TOP OF WALL ELEVATION
- EL 614.00. PROPOSED GROUND ELEVATION AT BOTTOM OF WALL
- X. PROPOSED SWALE
- PROPOSED FENCE
- PROPOSED DRAINAGE FLOW DIRECTION



**STATE HIGHWAY NO. 205
(S. GOLIAD STREET)
(VARIABLE WIDTH R.O.W.)**



GRADING & DRAINAGE GENERAL NOTES

1. REFER TO GEOTECHNICAL REPORT PREPARED BY REED ENGINEERING GROUP DATED 01/16/2007 FOR REQUIREMENTS REGARDING FILL COMPACTION AND MOISTURE CONTENT.
2. UNLESS NOTED, ALL FILL IS TO BE COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY WITHIN 3% OF OPTIMUM MOISTURE CONTENT. FILL TO BE PLACED IN MAXIMUM LIFTS OF 6 INCHES WITH A SHEEP'S FOOT ROLLER.
3. SIDEWALKS AND ACCESSIBLE ROUTES SHALL HAVE A RUNNING SLOPE NO GREATER THAN 5% (UNLESS OTHERWISE NOTED) AND A CROSS SLOPE NO GREATER THAN 2%.
4. GRADING OF ALL HANDICAPPED SPACES AND ROUTES TO CONFORM TO FEDERAL, STATE, AND LOCAL GUIDELINES.
5. ALL PROPOSED AND EXISTING GRADES IN NON-PAVED AREAS ARE "FINISHED GRADE" (i.e. IN LANDSCAPE BEDS, TOP OF MULCH/BEDDING MATERIAL SHALL MATCH PROPOSED FINISHED GRADE).
6. UNLESS NOTED, STORM DRAIN LINES SHALL BE OF THE FOLLOWING MATERIALS AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS:
 - 6.A. RCP C-76, CLASS III
 - 6.B. ADS N-12
 - 6.C. HANCOR HI-0
 - 6.D. CONTECH ALUMINIZED ULTRA FLOW
7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ASSURE PIPE STABILITY DURING CONSTRUCTION.
8. UNLESS NOTED, GRATE INLETS TO BE "HANSON PIPE AND PRECAST" CATCH BASIN SIZED AS SHOWN, OR APPROVED EQUAL.
9. FINAL PAVING, CURB, AND SIDEWALK ELEVATIONS SHALL BE PLACED AT PLUS OR MINUS 0.03 FOOT.
10. REFER TO LANDSCAPE SPECIFICATIONS FOR SEEDING AND SODDING REQUIREMENTS.
11. ANY CONCRETE, ROCK, OR MATERIAL DEEMED BY THE ENGINEER TO BE UNSUITABLE FOR SUBGRADE SHALL BE DISPOSED OF OFFSITE AT CONTRACTOR'S EXPENSE.
12. TRENCH BACKFILL MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF NCTCOG 3RD EDITION ITEM 504.2 AND SHALL BE MECHANICALLY COMPACTED IN 6-INCH LIFTS TO THE TOP OF SUBGRADE TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY IN ACCORDANCE WITH NCTCOG 3RD EDITION ITEM 504.5 UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN THE STANDARD CITY SPECIFICATIONS.
13. EMBEDMENT SHALL CONFORM TO THE REQUIREMENTS OF NCTCOG 3RD EDITION ITEM 504.5 UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN THE STANDARD CITY SPECIFICATIONS.
14. A ROUND MANHOLE COVER MEETING CITY SPECIFICATIONS SHALL BE PLACED IN ALL INLET TOPS NEAR THE OUTLET PIPE.
15. ALL CONCRETE FOR INLETS AND DRAINAGE STRUCTURES SHALL CONFORM TO 4200 PSI (MIN. 7 SACK MIX) UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN STANDARD CITY SPECIFICATIONS.
16. CRUSHED STONE BEDDING OR APPROVED EQUAL SHALL BE PROVIDED BY THE CONTRACTOR WHEN ROCK IS ENCOUNTERED IN TRENCHES. THERE SHALL BE NO ADDITIONAL PAY ITEM FOR CRUSHED STONE BEDDING.
17. IF REQUIRED DUE TO CONSTRUCTION, POWER POLES TO BE BRACED OR RELOCATED AT CONTRACTOR'S EXPENSE.
18. CONTRACTOR IS RESPONSIBLE FOR GRADING ALL DISTURBED AREAS TO ALLOW FOR POSITIVE DRAINAGE. GRADING SLOPES ARE NOT TO EXCEED 4:1, UNLESS OTHERWISE NOTED.
19. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL MANHOLES, CLEANOUTS, VALVE BOXES, AND FIRE HYDRANTS, ETC. CONTRACTOR TO ADJUST TO PROPER LINE AND GRADE PRIOR TO AND AFTER THE PLACING OF PERMANENT PAVING AND GRADING. UTILITIES MUST BE MAINTAINED TO PROPER LINE AND GRADE DURING THE CONSTRUCTION OF THE PAVING FOR THIS DEVELOPMENT.

LOT 4, BLOCK A
TRAVEL CENTERS OF
AMERICA ADDITION
(CAB. G, SLIDE 137)

LOT 8
ROCKWALL BUSINESS
PARK EAST SUBDIVISION
(CAB. G, SLIDE 231)

ONE-STORY
STONE & STUCCO
BUILDING

LOT 6
ROCKWALL BUSINESS
PARK EAST SUBDIVISION
(CAB. G, SLIDE 231)

BENCH MARK LIST

RO05-1	CONCRETE MONUMENT WITH BRASS CAP FOUND IN THE MEDIAN OF SUMMIT RIDGE DRIVE, ±50' WEST OF THE CENTERLINE OF F.M. 740 (RIDGE ROAD) (CITY OF ROCKWALL CONTROL MONUMENT).	ELEV=578.63
BM# 2	✕ CUT SET ON A CONCRETE SIDEWALK ON THE SOUTHWEST SIDE OF S.H. 205 (S. GOLIAD STREET), ±420' SOUTHEAST OF THE INTERSECTION OF S.H. 205 AND S.H. 276.	ELEV=544.02
BM# 4	✕ CUT SET ON A CONCRETE SIDEWALK ON THE SOUTHWEST SIDE OF S.H. 205 (S. GOLIAD STREET), ±180' NORTHWEST OF THE INTERSECTION OF S.H. 205 AND E. RALPH HALL PARKWAY.	ELEV=533.22

NOTE:
ALL WALLS NOT TO BE SMOOTH FACE...TO BE ROCK,
STONE, OR FORM LINED TO LOOK LIKE STONE.

RECORD DRAWING

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ATTESTED BY: *[Signature]*
ENGINEER OF RECORD: A. GREGORY GERBIG
CONTRACTOR: FRANCIS COMMERCIAL
DATE REVISED: 04/28/2017

NO.	DATE	REVISION
04/28/2017	RECORD DRAWINGS	

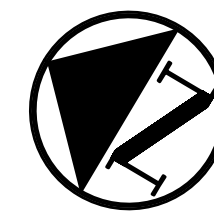
Pacheco Koch
7557 RAMBLER ROAD, SUITE 1400
DALLAS, TX 75231 972.235.3031
TX REG. ENGINEERING FIRM F-14439
TX REG. SURVEYING FIRM LS-10193905

GRADING PLAN
SPEEDY BEE CAR WASH
2360 S. GOLIAD STREET
LOT 7, ROCKWALL BUSINESS PARK EAST
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
AGG	ADR	MAR 2016	1"=20'			C3.1

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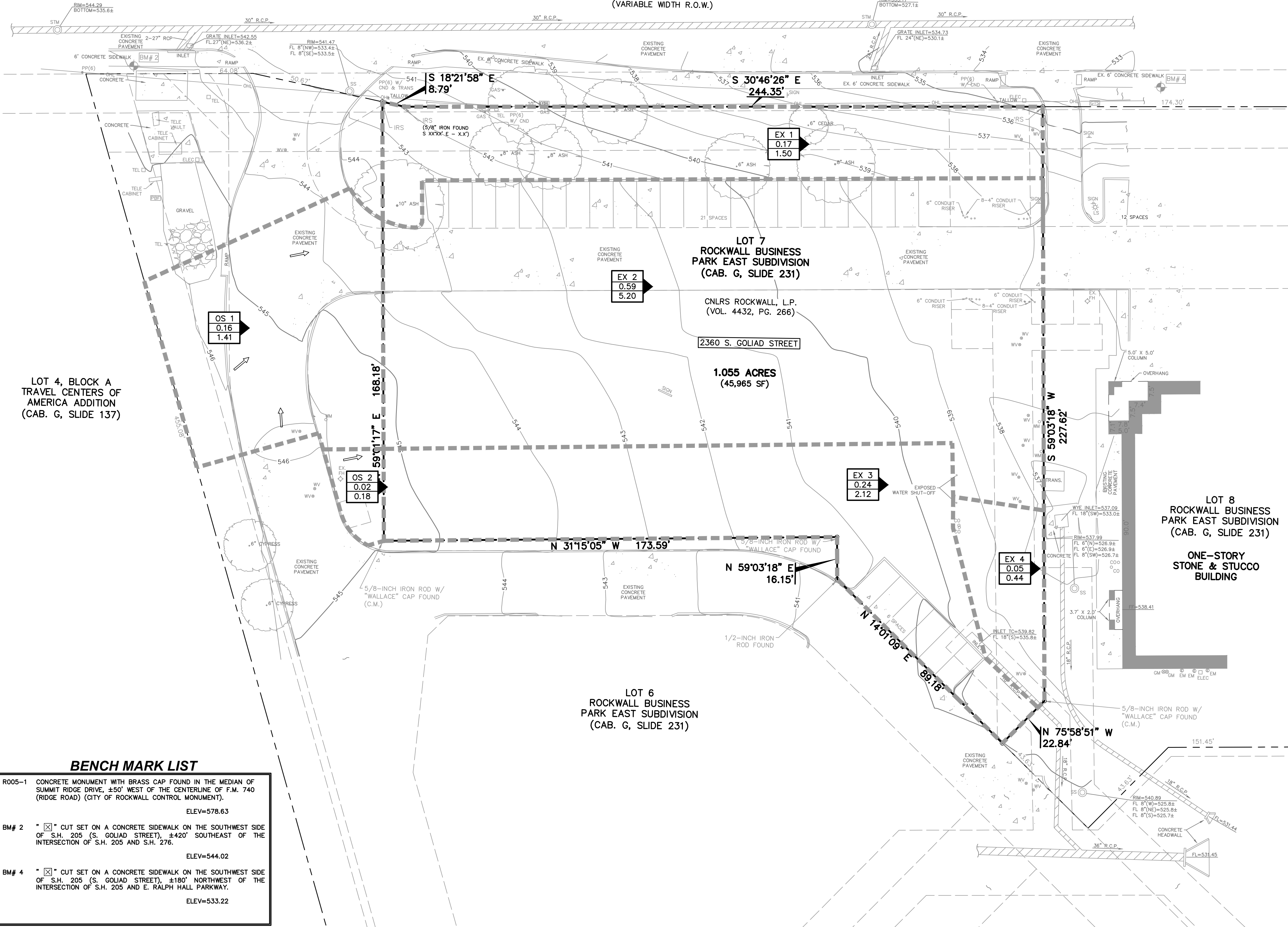
SPEEDY BEE CAR WASH, ROCKWALL BUSINESS PARK EAST



LEGEND

- B. BOLLARD
 - EM. ELECTRIC METER
 - PP. POWER POLE
 - LS. LIGHT STANDARD
 - WM. WATER METER
 - WV. WATER VALVE
 - ICV. IRRIGATION CONTROL VALVE
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 - TSC. TRAFFIC SIGNAL CONTROL
 - TSP. TRAFFIC SIGNAL POLE
 - TELE. TELEPHONE BOX
 - FL. FLOOD LIGHT
 - FP. FLAG POLE
 - TR. TRAFFIC SIGN
- PROPERTY LINE
 - x- FENCE
 - - - EXISTING DRAINAGE DIVIDE
 - EX 8 1.00 7.99 EXISTING DRAINAGE AREA ID
 - Q100 AREA IN ACRES
 - Q100 IN CUBIC FEET PER SECOND

**STATE HIGHWAY NO. 205
(S. GOLIAD STREET)
(VARIABLE WIDTH R.O.W.)**



EXISTING DRAINAGE CRITERIA:
Q=(C)(I)(A)

DRAINAGE AREA MAP							COMMENTS
DRAINAGE AREA ID	AREA (acres)	C	Tc (minutes)	STORM FREQUENCY	I ₁₀₀ (inch/hour)	Q ₁₀₀ (cfs)	
EX 1	0.17	0.90	10	100	9.80	1.50	DRAINS OFFSITE TO S.H. 205
EX 2	0.59	0.90	10	100	9.80	5.20	DRAINS TO EXIST. CURB INLET
EX 3	0.24	0.90	10	100	9.80	2.12	DRAINS TO EXIST. WYE INLET
EX 4	0.05	0.90	10	100	9.80	0.44	DRAINS TO EXIST. CURB INLET
OS 1	0.16	0.90	10	100	9.80	1.41	DRAINS TO EXIST. CURB INLET
OS 2	0.02	0.90	10	100	9.80	0.18	DRAINS TO EXIST. CURB INLET

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CONTRACTOR: FRANCIS COMMERCIAL
DATE REVISED: 04/28/2017

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BENCH MARK LIST

- RO05-1 CONCRETE MONUMENT WITH BRASS CAP FOUND IN THE MEDIAN OF SUMMIT RIDGE DRIVE, ±50' WEST OF THE CENTERLINE OF F.M. 740 (RIDGE ROAD) (CITY OF ROCKWALL CONTROL MONUMENT).
ELEV=578.63
- BM# 2 "X" CUT SET ON A CONCRETE SIDEWALK ON THE SOUTHWEST SIDE OF S.H. 205 (S. GOLIAD STREET), ±420' SOUTHEAST OF THE INTERSECTION OF S.H. 205 AND S.H. 276.
ELEV=544.02
- BM# 4 "X" CUT SET ON A CONCRETE SIDEWALK ON THE SOUTHWEST SIDE OF S.H. 205 (S. GOLIAD STREET), ±180' NORTHWEST OF THE INTERSECTION OF S.H. 205 AND E. RALPH HALL PARKWAY.
ELEV=533.22

NO.	DATE	REVISION
1	04/28/2017	RECORD DRAWINGS

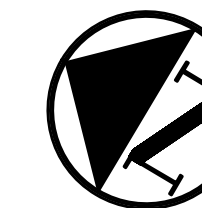
Pacheco Koch
7557 RAMBLER ROAD, SUITE 1400
DALLAS, TX 75231 972.235.3031
TX REG. ENGINEERING FIRM F-14439
TX REG. SURVEYING FIRM LS-10193805

EXISTING DRAINAGE AREA MAP
SPEEDY BEE CAR WASH
2360 S. GOLIAD STREET
LOT 7, ROCKWALL BUSINESS PARK EAST
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
AGG	ADR	MAR 2016	1"=20'			C4.1

AREWOLDS 4/27/2017 5:56 PM
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SPEEDY BEE CAR WASH, ROCKWALL BUSINESS PARK EAST



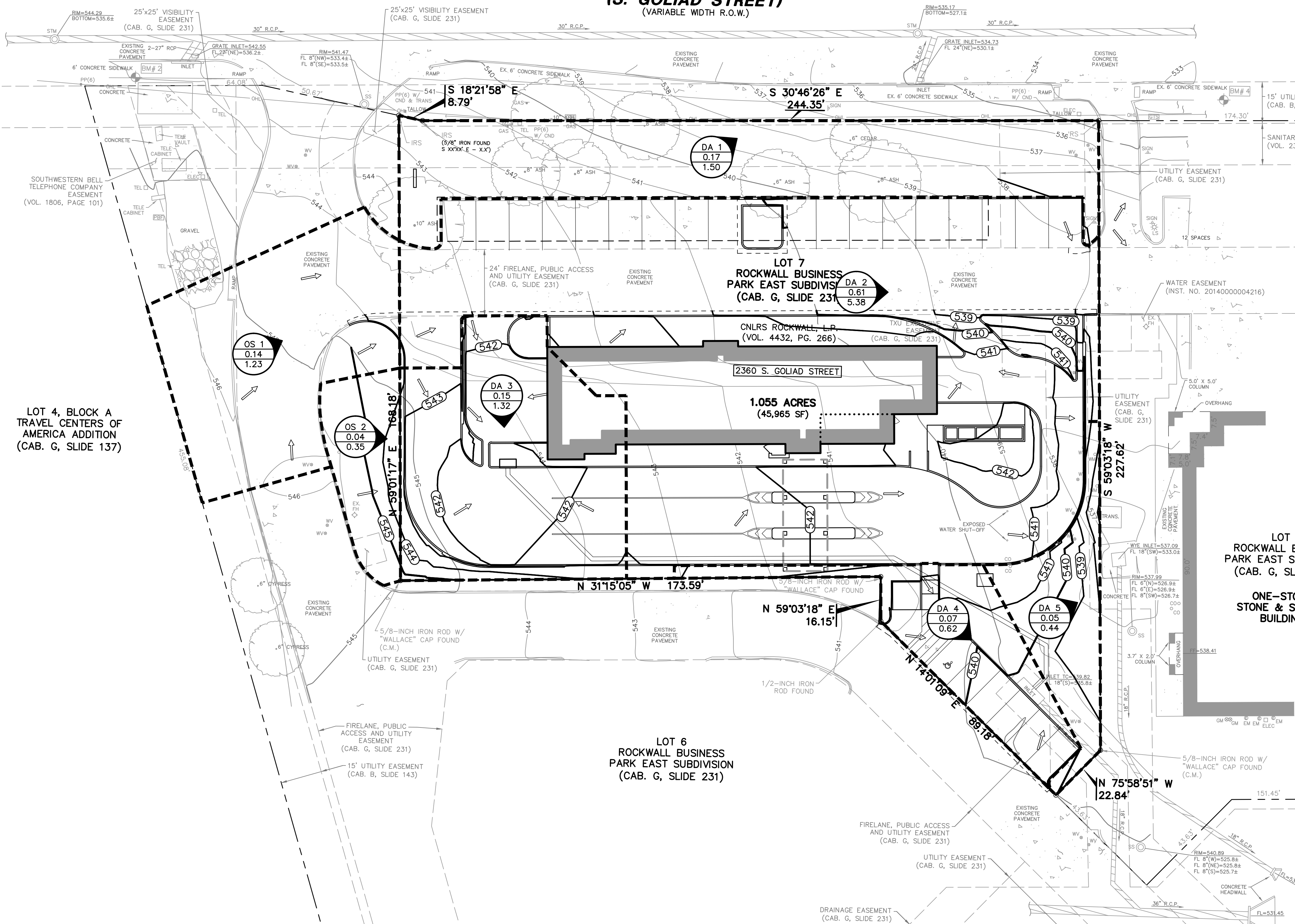
STATE HIGHWAY NO. 205 (S. GOLIAD STREET) (VARIABLE WIDTH R.O.W.)

LEGEND

- BL BOLLARD
 - EM ELECTRIC METER
 - PP POWER POLE
 - LS LIGHT STANDARD
 - WM WATER METER
 - WV WATER VALVE
 - ICV IRRIGATION CONTROL VALVE
 - FH FIRE HYDRANT
 - CO CLEANOUT
 - MH MANHOLE
 - TSC TRAFFIC SIGNAL CONTROL
 - TSP TRAFFIC SIGNAL POLE
 - TELE TELEPHONE POLE
 - FL FLOOD LIGHT
 - FP FLAG POLE
 - SI SIGN
- PROPERTY LINE
 - x- FENCE
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AREA IN ACRES
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PROPOSED DRAINAGE CRITERIA:
Q=(C)(I)(A)

DRAINAGE AREA MAP							
DRAINAGE AREA ID	AREA (acres)	C	T _c (minutes)	STORM FREQUENCY	I ₁₀₀ (inch/hour)	Q ₁₀₀ (cfs)	COMMENTS
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DA 2	0.61	0.90	10	100	9.80	5.38	DRAINS OFFSITE TO EXIST. CURB INLET
DA 3	0.15	0.90	10	100	9.80	1.32	DRAINS TO PROPOSED CURB INLET
DA 4	0.07	0.90	10	100	9.80	0.62	DRAINS TO EXISTING CURB INLET
DA 5	0.05	0.90	10	100	9.80	0.44	DRAINS TO EXISTING WYE INLET
OS 1	0.14	0.90	10	100	9.80	1.23	DRAINS TO DA 2
OS 2	0.04	0.90	10	100	9.80	0.35	DRAINS TO DA 3



LOT 4, BLOCK A TRAVEL CENTERS OF AMERICA ADDITION (CAB. G, SLIDE 137)

LOT 8 ROCKWALL BUSI PARK EAST SUBD (CAB. G, SLIDE 231)
ONE-STORY STONE & STUC BUILDING

LOT 6 ROCKWALL BUSINESS PARK EAST SUBDIVISION (CAB. G, SLIDE 231)

BENCH MARK LIST

R005-1	CONCRETE MONUMENT WITH BRASS CAP FOUND IN THE MEDIAN OF SUMMIT RIDGE DRIVE, ±50' WEST OF THE CENTERLINE OF F.M. 740 (RIDGE ROAD) (CITY OF ROCKWALL CONTROL MONUMENT).	ELEV=578.63
BM# 2	✕ CUT SET ON A CONCRETE SIDEWALK ON THE SOUTHWEST SIDE OF S.H. 205 (S. GOLIAD STREET), ±420' SOUTHEAST OF THE INTERSECTION OF S.H. 205 AND S.H. 276.	ELEV=544.02
BM# 4	✕ CUT SET ON A CONCRETE SIDEWALK ON THE SOUTHWEST SIDE OF S.H. 205 (S. GOLIAD STREET), ±180' NORTHWEST OF THE INTERSECTION OF S.H. 205 AND E. RALPH HALL PARKWAY.	ELEV=533.22

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RECORD DRAWING

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ATTESTED BY:
SIGNATURE: *[Signature]*
ENGINEER OF RECORD: A. GREGORY GERBIG
CONTRACTOR: FRANCIS COMMERCIAL
DATE REVISED: 04/28/2017

NO.	DATE	REVISION
1	04/28/2017	RECORD DRAWINGS

Pacheco Koch
7557 RAMBLER ROAD, SUITE 1400
DALLAS, TX 75231 972.235.3031
TX REG. ENGINEERING FIRM F-14439
TX REG. SURVEYING FIRM LS-10193805

PROPOSED DRAINAGE AREA MAP

SPEEDY BEE CAR WASH

2360 S. GOLIAD STREET

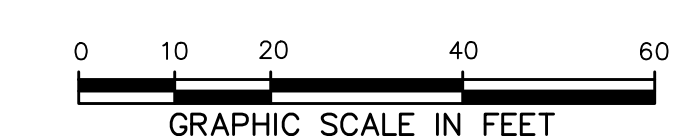
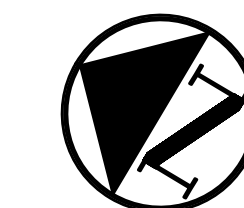
LOT 7, ROCKWALL BUSINESS PARK EAST

CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
AGG	ADR	MAR 2016	1"=20'			C4.2

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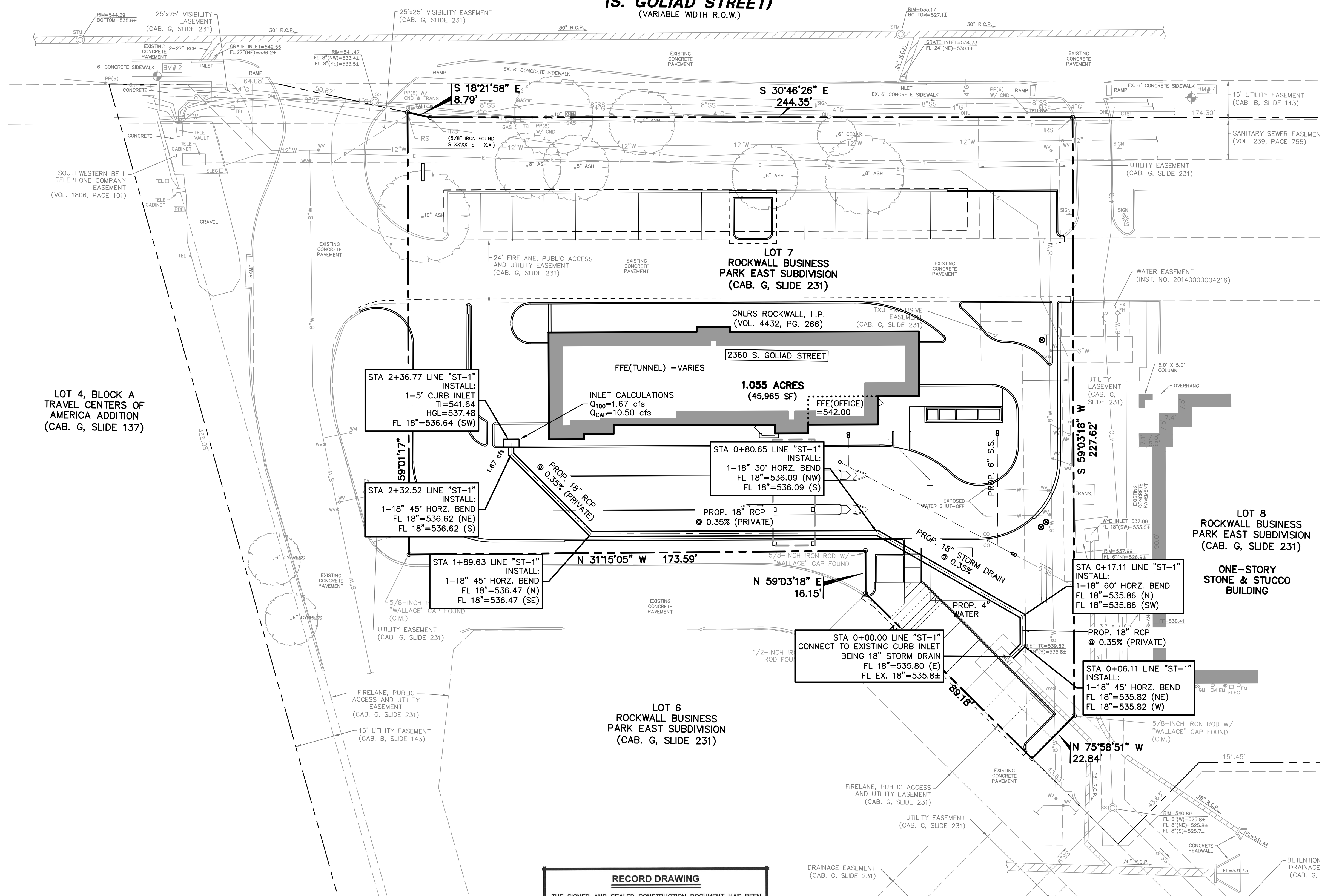
SPEEDY BEE CAR WASH, ROCKWALL BUSINESS PARK EAST



STATE HIGHWAY NO. 205 (S. GOLIAD STREET) (VARIABLE WIDTH R.O.W.)

LEGEND

B.	BOLLARD
EM	ELECTRIC METER
PP	POWER POLE
LS	LIGHT STANDARD
WM	WATER METER
WV	WATER VALVE
ICV	IRRIGATION CONTROL VALVE
PH	FIRE HYDRANT
CO	CLEANOUT
MH	MANHOLE
TSC	TRAFFIC SIGNAL CONTROL
TSP	TRAFFIC SIGNAL POLE
TELE	TELEPHONE BOX
FL	FLOOD LIGHT
FP	FLAG POLE
TR	TRAFFIC SIGN
IRS	1/2-INCH IRON ROD
(C.M.)	W/"PACHECO KOCH" CAP SET
---	CONTROLLING MONUMENT
---	PROPERTY LINE
---	FENCE
---	OVERHEAD UTILITY LINE
---	UNDERGROUND ELECTRIC LINE
---	UNDERGROUND TELEPHONE LINE
---	UNDERGROUND CABLE LINE
---	UNDERGROUND WATER LINE
---	UNDERGROUND CABLE LINE



GRADING & DRAINAGE GENERAL NOTES

- REFER TO GEOTECHNICAL REPORT PREPARED BY REED ENGINEERING GROUP DATED 01/16/2007 FOR REQUIREMENTS REGARDING FILL COMPACTION AND MOISTURE CONTENT.
- UNLESS NOTED, ALL FILL IS TO BE COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY WITHIN 3% OF OPTIMUM MOISTURE CONTENT. FILL TO BE PLACED IN MAXIMUM LIFTS OF 6 INCHES.
- SIDEWALKS AND ACCESSIBLE ROUTES SHALL HAVE A RUNNING SLOPE NO GREATER THAN 5% (UNLESS OTHERWISE NOTED) AND A CROSS SLOPE NO GREATER THAN 2%.
- GRADING OF ALL HANDICAPPED SPACES AND ROUTES TO CONFORM TO FEDERAL, STATE, AND LOCAL GUIDELINES.
- ALL PROPOSED AND EXISTING GRADES IN NON-PAVED AREAS ARE "FINISHED GRADE" (i.e. IN LANDSCAPE BEDS, TOP OF MULCH/BEDDING MATERIAL SHALL MATCH PROPOSED FINISHED GRADE).
- UNLESS NOTED, STORM DRAIN LINES SHALL BE OF THE FOLLOWING MATERIALS AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS:
 - RCP C-76, CLASS III
 - ADS N-12
 - HANCOR HI-Q
 - CONTECH ALUMINIZED ULTRA FLOW
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ASSURE PIPE STABILITY DURING CONSTRUCTION OR APPROVED EQUAL.
- UNLESS NOTED, GRATE INLETS TO BE "HANSON PIPE AND PRECAST" CATCH BASIN SIZED AS SHOWN.
- FINAL PAVING, CURB, AND SIDEWALK ELEVATIONS SHALL BE PLACED AT PLUS OR MINUS 0.03 FOOT.
- REFER TO LANDSCAPE SPECIFICATIONS FOR SEEDING AND SODDING REQUIREMENTS.
- ANY CONCRETE, ROCK, OR MATERIAL DEEMED BY THE ENGINEER TO BE UNSUITABLE FOR SUBGRADE SHALL BE DISPOSED OF OFFSITE AT CONTRACTOR'S EXPENSE.
- TRENCH BACKFILL MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF NCTCOG 3RD EDITION ITEM 504.2 AND SHALL BE MECHANICALLY COMPACTED IN 6-INCH LIFTS TO THE TOP OF SUBGRADE TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY IN ACCORDANCE WITH NCTCOG 3RD EDITION ITEM 504.5 UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN THE STANDARD CITY SPECIFICATIONS.
- EMBEDMENT SHALL CONFORM TO THE REQUIREMENTS OF NCTCOG 3RD EDITION ITEM 504.5 UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN THE STANDARD CITY SPECIFICATIONS.
- A ROUND MANHOLE COVER MEETING CITY SPECIFICATIONS SHALL BE PLACED IN ALL INLET TUPS NEAR THE OUTLET PIPE.
- ALL CONCRETE FOR INLETS AND DRAINAGE STRUCTURES SHALL CONFORM TO 4200 PSI (MIN. 7 SACK MIX) UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN STANDARD CITY SPECIFICATIONS.
- CRUSHED STONE BEDDING OR APPROVED EQUAL SHALL BE PROVIDED BY THE CONTRACTOR WHEN ROCK IS ENCOUNTERED IN TRENCHES. THERE SHALL BE NO ADDITIONAL PAY ITEM FOR CRUSHED STONE BEDDING.
- IF REQUIRED DUE TO CONSTRUCTION, POWER POLES TO BE BRACED OR RELOCATED AT CONTRACTOR'S EXPENSE.
- CONTRACTOR IS RESPONSIBLE FOR GRADING ALL DISTURBED AREAS TO ALLOW FOR POSITIVE DRAINAGE. GRADING SLOPES ARE NOT TO EXCEED 4:1, UNLESS OTHERWISE NOTED.

LOT 4, BLOCK A
TRAVEL CENTERS OF
AMERICA ADDITION
(CAB. G, SLIDE 137)

LOT 7
ROCKWALL BUSINESS
PARK EAST SUBDIVISION
(CAB. G, SLIDE 231)

LOT 8
ROCKWALL BUSINESS
PARK EAST SUBDIVISION
(CAB. G, SLIDE 231)

ONE-STORY
STONE & STUCCO
BUILDING

LOT 6
ROCKWALL BUSINESS
PARK EAST SUBDIVISION
(CAB. G, SLIDE 231)

RECORD DRAWING

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ATTESTED BY:
SIGNATURE: *[Signature]*
ENGINEER OF RECORD: A. GREGORY GERBIG
CONTRACTOR: FRANCIS COMMERCIAL
DATE REVISED: 04/28/2017

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.

BENCH MARK LIST

ROOS-1	CONCRETE MONUMENT WITH BRASS CAP FOUND IN THE MEDIAN OF SUMMIT RIDGE DRIVE, ±50' WEST OF THE CENTERLINE OF F.M. 740 (RIDGE ROAD) (CITY OF ROCKWALL CONTROL MONUMENT).	ELEV=578.63
BM# 2	"X" CUT SET ON A CONCRETE SIDEWALK ON THE SOUTHWEST SIDE OF S.H. 205 (S. GOLIAD STREET), ±420' SOUTHEAST OF THE INTERSECTION OF S.H. 205 AND S.H. 276.	ELEV=544.02
BM# 4	"X" CUT SET ON A CONCRETE SIDEWALK ON THE SOUTHWEST SIDE OF S.H. 205 (S. GOLIAD STREET), ±180' NORTHWEST OF THE INTERSECTION OF S.H. 205 AND E. RALPH HALL PARKWAY.	ELEV=533.22

NO.	DATE	REVISION
04/28/2017	RECORD DRAWINGS	

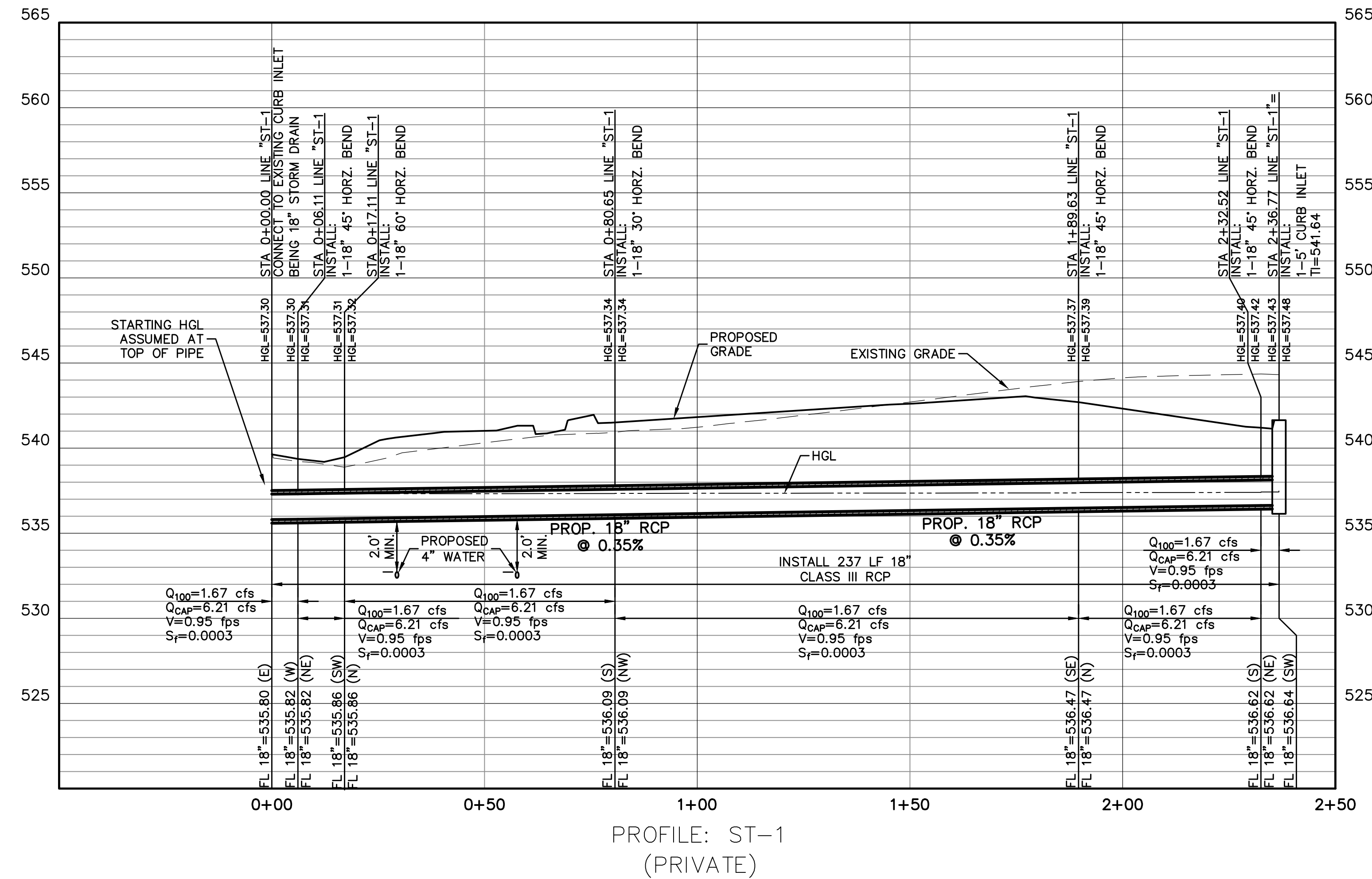
Pacheco Koch
7557 RAMBLER ROAD, SUITE 1400
DALLAS, TX 75231 972.235.3031
TX REG. ENGINEERING FIRM F-14439
TX REG. SURVEYING FIRM LS-10193005

STORM SEWER PLAN
SPEEDY BEE CAR WASH
2360 S. GOLIAD STREET
LOT 7, ROCKWALL BUSINESS PARK EAST
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
AGG	ADR	MAR 2016	1"=20'			C5.1

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SPEEDY BEE CAR WASH, ROCKWALL BUSINESS PARK EAST



Line ST-	1																						
Downstream Station	Upstream Station	Q (cfs)	Pipe Type	Size Box (W x H) Pipe (")	'n' Value	Design Slope (ft/ft)	Upstream Junction Type (1)	Connect or FL	Dwn HGL	Up HGL	Up HGL Jump	Dwn FL	Up FL	V (fps)	V2/2g (ft)	Sf	Qcap (cfs)	Dn (ft)	Dp (ft)	Vp (fps)	Vp2/2g (ft)	Partial Station (2)	Partial Elevation (3)
0+00.00	0+06.11	1.67	Pipe	18"	0.013	0.0035	Bend - 45°	Softfits	537.30	537.30	537.31	535.80	535.82	0.95	0.01	0.0003	6.21	0.53	1.48	0.95	0.01	N/A	N/A
0+06.11	0+17.11	1.67	Pipe	18"	0.013	0.0035	Bend - 60°	Softfits	537.31	537.31	537.32	535.82	535.86	0.95	0.01	0.0003	6.21	0.53	1.45	0.95	0.01	N/A	N/A
0+17.11	0+80.65	1.67	Pipe	18"	0.013	0.0035	Bend - 30°	Softfits	537.32	537.34	537.34	535.86	536.08	0.95	0.01	0.0003	6.21	0.53	1.25	1.06	0.02	N/A	N/A
0+80.65	1+89.63	1.67	Pipe	18"	0.013	0.0035	Bend - 45°	Softfits	537.34	537.37	537.39	536.08	536.46	0.95	0.01	0.0003	6.21	0.53	0.91	1.49	0.03	N/A	N/A
1+89.63	2+32.52	1.67	Pipe	18"	0.013	0.0035	Bend - 45°	Softfits	537.39	537.40	537.42	536.46	536.61	0.95	0.01	0.0003	6.21	0.53	0.79	1.78	0.05	N/A	N/A
2+32.52	2+36.77	1.67	Pipe	18"	0.013	0.0035	Inlet	Softfits	536.64	537.42	537.43	536.61	536.63	0.95	0.01	0.0003	6.21	0.53	0.80	1.75	0.05	N/A	N/A

INLET CALCULATION TABLE

NO.	INLET LOCATION	DESIGN STORM FREQUENCY (YRS)	AREA RUNOFF Q=CIA					CARRY-OVER FROM UPSTREAM INLET (CFS)	TOTAL GUTTER FLOW (CFS)	GUTTER CAPACITY (CFS)	GUTTER SLOPE (FT/100FT)	CROWN TYPE	SELECTED INLET		CARRY-OVER TO DOWNSTREAM INLET (CFS)
			TIME OF CONC. (MIN)	INTENSITY "i" (IN/HR)	RUNOFF COEFF. "c"	AREA (AC)	"Q" (CFS)						LENGTH (FEET)	TYPE	
1	STA 2+36.77 LINE "ST-1"	100	10	9.80	0.90	0.19	1.67	0	1.67	22	0.01	NONE	5	I-A (CURB INLET SAG)	0

BENCH MARK LIST

- R005-1** CONCRETE MONUMENT WITH BRASS CAP FOUND IN THE MEDIAN OF SUMMIT RIDGE DRIVE, ±50' WEST OF THE CENTERLINE OF (RIDGE ROAD) (CITY OF ROCKWALL CONTROL MONUMENT).
ELEV=578.63
- BM# 2** * [X] CUT SET ON A CONCRETE SIDEWALK ON THE SOUTHWEST SIDE OF S.H. 205 (S. GOLIAD STREET), ±420' SOUTHEAST OF THE INTERSECTION OF S.H. 205 AND S.H. 276.
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- BM# 4** * [X] CUT SET ON A CONCRETE SIDEWALK ON THE SOUTHWEST SIDE OF S.H. 205 (S. GOLIAD STREET), ±180' NORTHWEST OF THE INTERSECTION OF S.H. 205 AND E. RALPH HALL PARKWAY.
ELEV=533.22

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ATTESTED BY: *[Signature]*
ENGINEER OF RECORD: A. GREGORY GERBIG
CONTRACTOR: FRANCIS COMMERCIAL
DATE REVISED: 04/28/2017

NO.	DATE	REVISION
04/28/2017	RECORD DRAWINGS	

Pacheco Koch
7557 RAMBLER ROAD, SUITE 1400
DALLAS, TX 75231 972.235.3031
TX REG. ENGINEERING FIRM F-14439
TX REG. SURVEYING FIRM LS-10193805

STORM SEWER PROFILE & HYDRAULIC CALCULATIONS

SPEEDY BEE CAR WASH
2360 S. GOLIAD STREET
LOT 7, ROCKWALL BUSINESS PARK EAST
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
AGG	ADR	MAR 2016				C5.2

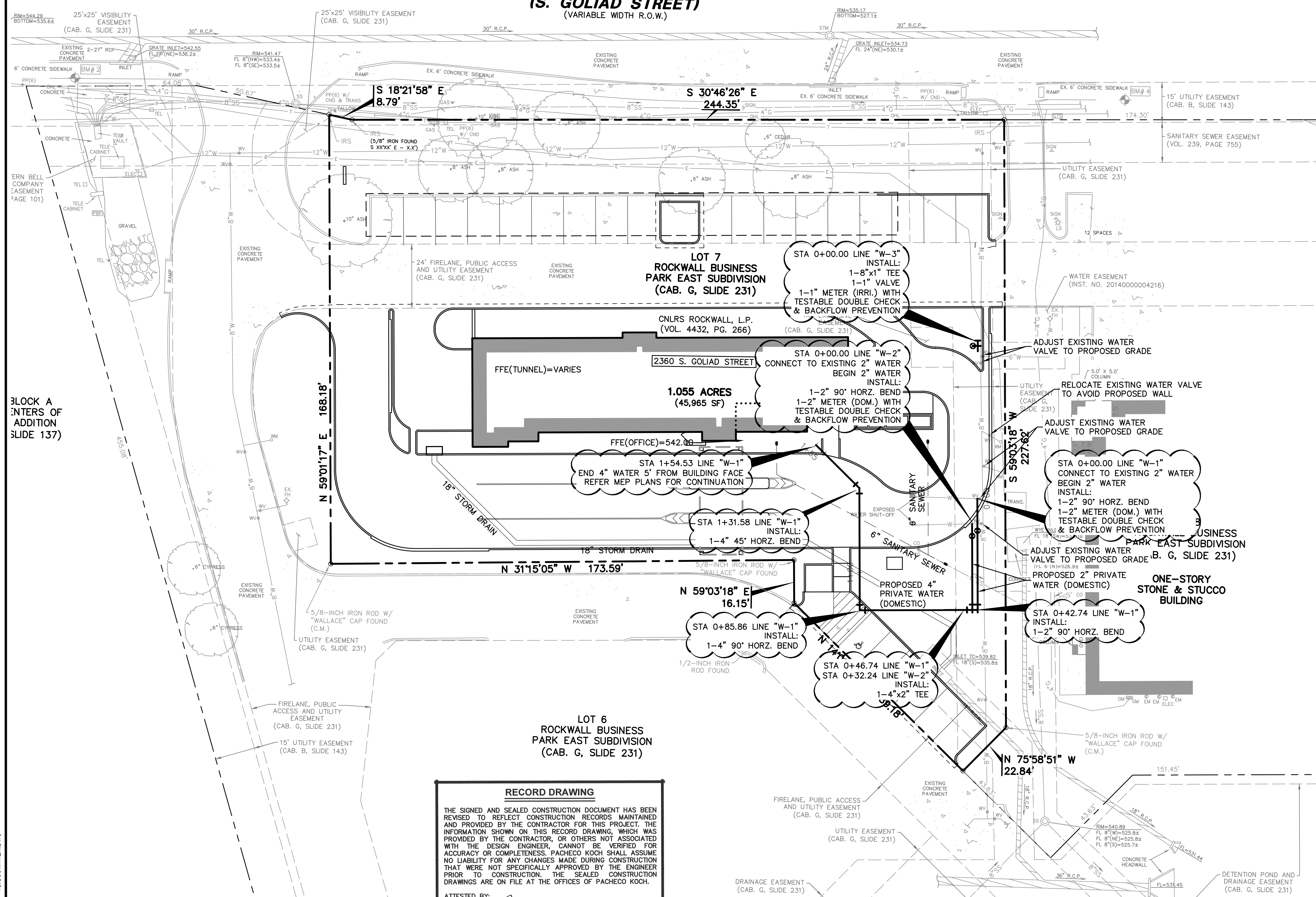
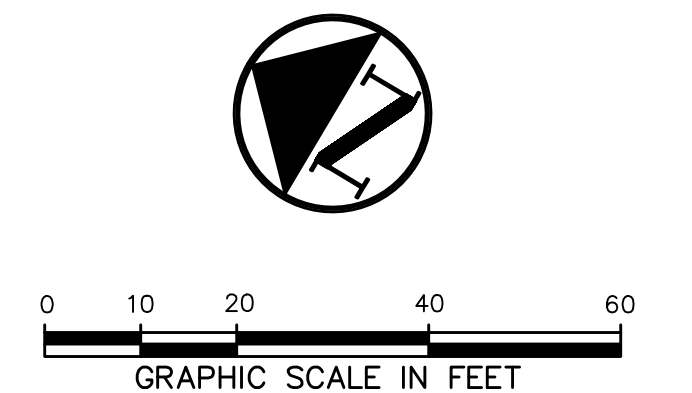
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SPEEDY BEE CAR WASH, ROCKWALL BUSINESS PARK EAST

STATE HIGHWAY NO. 205 (S. GOLIAD STREET) (VARIABLE WIDTH R.O.W.)

LEGEND

- BL BOLLARD
- EM ELECTRIC METER
- PP POWER POLE
- LS LIGHT STANDARD
- WM WATER METER
- WV WATER VALVE
- ICV IRRIGATION CONTROL VALVE
- FH FIRE HYDRANT
- CL CLEANOUT
- MH MANHOLE
- TSC TRAFFIC SIGNAL CONTROL
- TSP TRAFFIC SIGNAL POLE
- TELE TELEPHONE BOX
- FL FLOOD LIGHT
- FP FLAG POLE
- TR TRAFFIC SIGN
- IRS 1/2-INCH IRON ROD
- (C.M.) W/"PACHECO KOCH" CAP SET
- CONTROLLING MONUMENT
- PROPERTY LINE
- FENCE
- OVERHEAD UTILITY LINE
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND TELEPHONE LINE
- UNDERGROUND CABLE LINE
- UNDERGROUND WATER LINE
- UNDERGROUND CABLE LINE
- EXIST. CONTOUR



WATER & SANITARY SEWER GENERAL NOTES

1. ALL WATER MAINS SHALL BE PVC C900, DR 14, CLASS 200.
2. WATER AND SANITARY SEWER SERVICES SHALL MEET PLUMBING CODE REQUIREMENTS.
3. ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF 48 INCHES BELOW IMPROVED FINISHED GRADE, UNLESS OTHERWISE NOTED.
4. SANITARY SEWER PIPE SHALL BE PVC SDR-35.
5. WHEN WATER MAINS AND SANITARY SEWERS ARE INSTALLED, THEY SHALL BE INSTALLED NO CLOSER TO EACH OTHER THAN NINE FEET IN ALL DIRECTIONS AND PARALLEL LINES MUST BE INSTALLED IN SEPARATE TRENCHES. WHERE THE NINE FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, THE FOLLOWING GUIDELINES SHALL APPLY:
 - 5.A. WHERE A SANITARY SEWER PARALLELS A WATERLINE, THE SEWER SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON, OR PVC MEETING ASTM SPECIFICATIONS WITH A PRESSURE RATING OF 150 PSI FOR BOTH THE PIPE AND JOINTS. THE VERTICAL SEPARATION SHALL BE A MINIMUM OF TWO FEET BETWEEN OUTSIDE DIAMETERS AND THE HORIZONTAL SEPARATION SHALL BE A MINIMUM OF FOUR FEET BETWEEN OUTSIDE DIAMETERS. THE SEWER SHALL BE LOCATED BELOW THE WATERLINE.
 - 5.B. WHERE A SANITARY SEWER CROSSES A WATERLINE AND THE SEWER IS CONSTRUCTED OF CAST IRON, DUCTILE IRON, OR PVC WITH A MINIMUM PRESSURE RATING OF 150 PSI, AN ABSOLUTE MINIMUM DISTANCE OF 12 INCHES BETWEEN OUTSIDE DIAMETERS SHALL BE MAINTAINED AND WATERLINE SHALL BE ENCASED.
 - 5.C. WHERE A SANITARY SEWER CROSSES UNDER A WATERLINE AND THE SEWER IS CONSTRUCTED OF ABS TRUSS PIPE, SIMILAR SEMI-RIGID PLASTIC COMPOSITE PIPE, CLAY PIPE, OR CONCRETE PIPE WITH GASKETED JOINTS, A MINIMUM TWO FOOT SEPARATION DISTANCE SHALL BE MAINTAINED. IN ADDITION, THE SEWER SHALL BE LOCATED BELOW THE WATERLINE WHERE POSSIBLE AND ONE LENGTH OF THE SEWER PIPE MUST BE CENTERED ON THE WATERLINE.
 - 5.D. WHERE A SANITARY SEWER CROSSES OVER A WATERLINE ALL PORTIONS OF THE SEWER WITHIN NINE FEET OF THE WATERLINE SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON, OR PVC PIPE WITH A PRESSURE RATING OF AT LEAST 150 PSI USING APPROPRIATE ADAPTERS. IN LIEU OF THIS PROCEDURE, THE NEW CONVEYANCE MAY BE ENCASED IN A JOINT OF 150 PSI PRESSURE CLASS PIPE AT LEAST 18 FEET LONG AND TWO NOMINAL SIZES LARGER THAN THE NEW CONVEYANCE. THE SPACE AROUND THE CARRIER PIPE SHALL BE SUPPORTED AT FIVE FEET INTERVALS WITH SPACERS OR BE FILLED TO THE SPRING LINE WITH WASHED SAND. THE ENCASEMENT PIPE SHOULD BE CENTERED ON THE CROSSING AND BOTH ENDS SEALED WITH CEMENT GROUT OR MANUFACTURED SEAL.
 - 5.E. THE SANITARY SEWER NEED NOT BE DISTURBED WHERE A NEW WATERLINE IS TO BE INSTALLED PARALLEL TO AN EXISTING SEWER THAT SHOWS NO EVIDENCE OF LEAKAGE AND THE WATERLINE IS INSTALLED ABOVE THE SEWER A MINIMUM OF TWO FEET VERTICALLY AND FOUR FEET HORIZONTALLY.
 - 5.F. THE SANITARY SEWER NEED NOT BE DISTURBED WHERE A NEW WATERLINE IS TO CROSS OVER BY TWO FEET OR MORE AN EXISTING SEWER SHOWING NO EVIDENCE OF LEAKAGE. SHOULD EXCAVATION FOR THE WATERLINE PRODUCE EVIDENCE THAT THE SEWER IS LEAKING, THE SEWER MUST BE REPAIRED OR REPLACED AS DESCRIBED IN SUBPARAGRAPH (6.C) OR (6.D).
6. CONTRACTOR TO VERIFY ALL EXISTING SEWER FLOW LINES BEFORE BEGINNING CONSTRUCTION.
7. CONTRACTOR SHALL TIE A ONE INCH WIDE PIECE OF RED PLASTIC FLAGGING TO THE END OF SEWER SERVICE AND SHALL LEAVE A MINIMUM OF 36 INCHES OF FLAGGING EXPOSED AFTER BACKFILL. AFTER CURB AND PAVING IS COMPLETED, CONTRACTOR SHALL MARK THE LOCATION OF THE SEWER SERVICE ON THE CURB OR ALLEY IN ACCORDANCE WITH THE STANDARD CITY SPECIFICATIONS.
8. ALL SANITARY SEWER LINES SHALL BE TESTED IN ACCORDANCE WITH THE STANDARD CITY SPECIFICATIONS.
9. THE UTILITY CONTRACTOR SHALL INSTALL THE WATER SERVICES TO A POINT TWO FEET BACK OF THE CURB LINE AT A DEPTH OF 12 INCHES. THE METER BOX SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AFTER THE PAVING CONTRACTOR HAS COMPLETED THE FINE GRADING BEHIND THE BACK OF THE CURB. EACH SERVICE LOCATION SHALL BE MARKED ON THE CURB WITH A BLUE LETTER "W" BY THE UTILITY CONTRACTOR AND TIED TO PROPERTY CORNERS ON THE "RECORD DRAWINGS."
10. ALL METER BOXES SHALL BE LOCATED IN NON-TRAFFIC AREAS.
11. TRENCH BACKFILL MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF NCTCOG 3RD EDITION ITEM 504.2 AND SHALL BE MECHANICALLY COMPACTED IN 6-INCH LIFTS TO THE TOP OF SUBGRADE TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY IN ACCORDANCE WITH NCTCOG 3RD EDITION ITEM 504.5 UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN THE STANDARD CITY SPECIFICATIONS.
12. EMBEDMENT SHALL CONFORM TO THE REQUIREMENTS OF NCTCOG 3RD EDITION ITEM 504.5 UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN THE STANDARD CITY SPECIFICATIONS.
13. VALVE BOXES SHALL BE FURNISHED AND SET ON EACH GATE VALVE. AFTER THE FINAL CLEAN-UP AND ALIGNMENT HAS BEEN COMPLETED, THE UTILITY CONTRACTOR SHALL POUR A 24"x24"x6" CONCRETE BLOCK AROUND ALL VALVE BOX TOPS LEVEL WITH THE FINISHED GRADE.
14. CONTRACTOR SHALL RECONNECT ALL EXISTING SERVICES AND MAINTAIN EXISTING SERVICES THROUGHOUT CONSTRUCTION.
15. IF REQUIRED DUE TO CONSTRUCTION, POWER POLES TO BE BRACED OR RELOCATED AT CONTRACTOR'S EXPENSE.

BLOCK A
INTERSECTORS
ADDITION
SLIDE 137)

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SPEEDY BEE CAR WASH, ROCKWALL BUSINESS PARK EAST

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ATTESTED BY:

SIGNATURE:

ENGINEER OF RECORD: A. GREGORY GERBIG

CONTRACTOR: FRANCIS COMMERCIAL

DATE REVISED: 04/28/2017

BENCH MARK LIST	
R005-1	CONCRETE MONUMENT WITH BRASS CAP FOUND IN THE MEDIAN OF SUMMIT RIDGE DRIVE, ±50' WEST OF THE CENTERLINE OF (RIDGE ROAD) (CITY OF ROCKWALL CONTROL MONUMENT). ELEV=578.63
BM# 2	✕ CUT SET ON A CONCRETE SIDEWALK ON THE SOUTHWEST SIDE OF S.H. 205 (S. GOLIAD STREET), ±420' SOUTHEAST OF THE INTERSECTION OF S.H. 205 AND S.H. 276. ELEV=544.02
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NOTE:
CONTRACTOR TO INSTALL: BLUE EMS DISK ON THE WATER LINE AT EVERY CHANGE IN DIRECTION, METER, AND VALVE. GREEN EMS DISKS ON SEWER LINE AT THE DOUBLE CLEANOUT AT EASEMENT LINE (WHERE PUBLIC LINE BECOMES PRIVATE).

NOTE:
PLUMBERS MUST INSTALL WATER SERVICE FROM METER TO THE BUILDING AND PERMITTED THROUGH THE BUILDING DEPT.

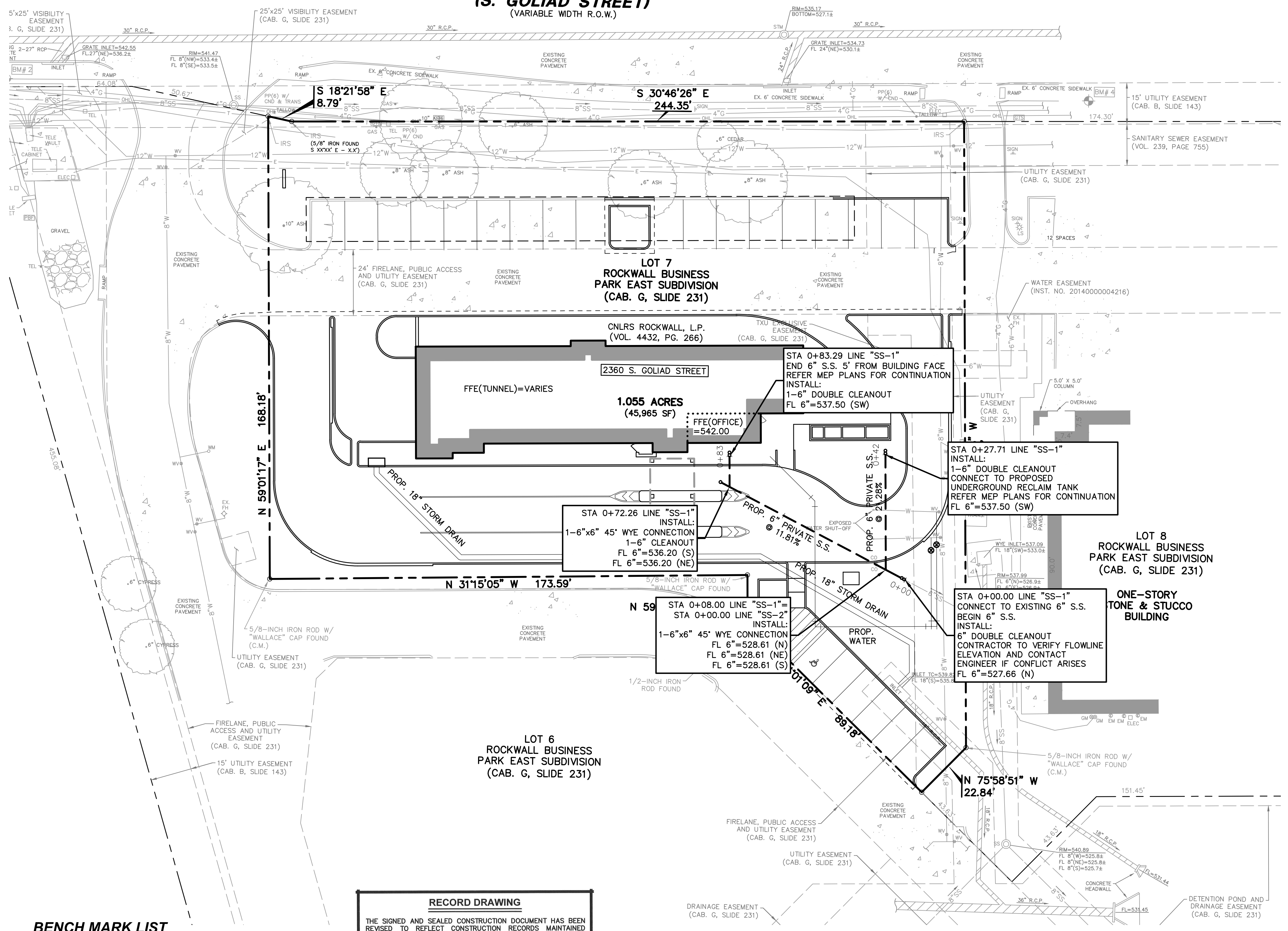
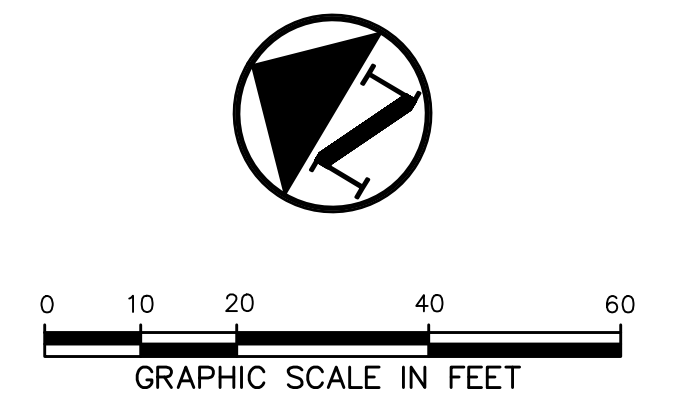
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	04/28/2017	RECORD DRAWINGS	
NO.	DATE	REVISION	
7557 RAMBLER ROAD, SUITE 1400 DALLAS, TX 75231 972.235.3031 TX REG. ENGINEERING FIRM F-14439 TX REG. SURVEYING FIRM LS-10193005			
WATER PLAN			
SPEEDY BEE CAR WASH			
2360 S. GOLIAD STREET			
LOT 7, ROCKWALL BUSINESS PARK EAST			
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS			
DESIGN	DRAWN	DATE	SCALE
AGG	ADR	MAR 2016	1"=20'
NOTES	FILE	NO.	NO.
			C6.1

STATE HIGHWAY NO. 205 (S. GOLIAD STREET) (VARIABLE WIDTH R.O.W.)

LEGEND

- BL BOLLARD
- EM ELECTRIC METER
- PP POWER POLE
- LS LIGHT STANDARD
- WM WATER METER
- WV WATER VALVE
- ICV IRRIGATION CONTROL VALVE
- FH FIRE HYDRANT
- CL CLEANOUT
- MH MANHOLE
- TSC TRAFFIC SIGNAL CONTROL
- TSP TRAFFIC SIGNAL POLE
- TELE TELEPHONE BOX
- FL FLOOD LIGHT
- FP FLAG POLE
- SIGN TRAFFIC SIGN
- IRS 1/2-INCH IRON ROD
- W/PACHECO KOCH" CAP SET
- (C.M.) CONTROLLING MONUMENT
- PROPERTY LINE
- FENCE
- OVERHEAD UTILITY LINE
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND TELEPHONE LINE
- UNDERGROUND CABLE LINE
- UNDERGROUND WATER LINE
- UNDERGROUND CABLE LINE
- EXIST. CONTOUR



WATER & SANITARY SEWER GENERAL NOTES

1. ALL WATER MAINS SHALL BE PVC C900, DR 14, CLASS 200.
2. WATER AND SANITARY SEWER SERVICES SHALL MEET PLUMBING CODE REQUIREMENTS.
3. ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF 48 INCHES BELOW IMPROVED FINISHED GRADE, UNLESS OTHERWISE NOTED.
4. SANITARY SEWER PIPE SHALL BE PVC SDR-35.
5. WHEN WATER MAINS AND SANITARY SEWERS ARE INSTALLED, THEY SHALL BE INSTALLED NO CLOSER TO EACH OTHER THAN NINE FEET IN ALL DIRECTIONS AND PARALLEL LINES MUST BE INSTALLED IN SEPARATE TRENCHES. WHERE THE NINE FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, THE FOLLOWING GUIDELINES SHALL APPLY:
 - 5.A. WHERE A SANITARY SEWER PARALLELS A WATERLINE, THE SEWER SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON, OR PVC MEETING ASTM SPECIFICATIONS WITH A PRESSURE RATING OF 150 PSI FOR BOTH THE PIPE AND JOINTS. THE VERTICAL SEPARATION SHALL BE A MINIMUM OF TWO FEET BETWEEN OUTSIDE DIAMETERS AND THE HORIZONTAL SEPARATION SHALL BE A MINIMUM OF FOUR FEET BETWEEN OUTSIDE DIAMETERS. THE SEWER SHALL BE LOCATED BELOW THE WATERLINE.
 - 5.B. WHERE A SANITARY SEWER CROSSES A WATERLINE AND THE SEWER IS CONSTRUCTED OF CAST IRON, DUCTILE IRON, OR PVC WITH A MINIMUM PRESSURE RATING OF 150 PSI, AN ABSOLUTE MINIMUM DISTANCE OF 12 INCHES BETWEEN OUTSIDE DIAMETERS SHALL BE MAINTAINED AND WATERLINE SHALL BE ENCASED.
 - 5.C. WHERE A SANITARY SEWER CROSSES UNDER A WATERLINE AND THE SEWER IS CONSTRUCTED OF ABS TRUSS PIPE, SIMILAR SEMI-RIGID PLASTIC COMPOSITE PIPE, CLAY PIPE, OR CONCRETE PIPE WITH GASKETED JOINTS, A MINIMUM TWO FOOT SEPARATION DISTANCE SHALL BE MAINTAINED. IN ADDITION, THE SEWER SHALL BE LOCATED BELOW THE WATERLINE WHERE POSSIBLE AND ONE LENGTH OF THE SEWER PIPE MUST BE CENTERED ON THE WATERLINE.
 - 5.D. WHERE A SANITARY SEWER CROSSES OVER A WATERLINE ALL PORTIONS OF THE SEWER WITHIN NINE FEET OF THE WATERLINE SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON, OR PVC PIPE WITH A PRESSURE RATING OF AT LEAST 150 PSI USING APPROPRIATE ADAPTERS. IN LIEU OF THIS PROCEDURE, THE NEW CONVEYANCE MAY BE ENCASED IN A JOINT OF 150 PSI PRESSURE CLASS PIPE AT LEAST 18 FEET LONG AND TWO NOMINAL SIZES LARGER THAN THE NEW CONVEYANCE. THE SPACE AROUND THE CARRIER PIPE SHALL BE SUPPORTED AT FIVE FEET INTERVALS WITH SPACERS OR BE FILLED TO THE SPRING LINE WITH WASHED SAND. THE ENCASEMENT PIPE SHOULD BE CENTERED ON THE CROSSING AND BOTH ENDS SEALED WITH CEMENT GROUT OR MANUFACTURED SEAL.
 - 5.E. THE SANITARY SEWER NEED NOT BE DISTURBED WHERE A NEW WATERLINE IS TO BE INSTALLED PARALLEL TO AN EXISTING SEWER THAT SHOWS NO EVIDENCE OF LEAKAGE AND THE WATERLINE IS INSTALLED ABOVE THE SEWER A MINIMUM OF TWO FEET VERTICALLY AND FOUR FEET HORIZONTALLY.
 - 5.F. THE SANITARY SEWER NEED NOT BE DISTURBED WHERE A NEW WATERLINE IS TO CROSS OVER BY TWO FEET OR MORE AN EXISTING SEWER SHOWING NO EVIDENCE OF LEAKAGE. SHOULD EXCAVATION FOR THE WATERLINE PRODUCE EVIDENCE THAT THE SEWER IS LEAKING, THE SEWER MUST BE REPAIRED OR REPLACED AS DESCRIBED IN SUBPARAGRAPH (5.C) OR (5.D).
6. CONTRACTOR TO VERIFY ALL EXISTING SEWER FLOW LINES BEFORE BEGINNING CONSTRUCTION.
7. CONTRACTOR SHALL TIE A ONE INCH WIDE PIECE OF RED PLASTIC FLAGGING TO THE END OF SEWER SERVICE AND SHALL LEAVE A MINIMUM OF 36 INCHES OF FLAGGING EXPOSED AFTER BACKFILL. AFTER CURB AND PAVING IS COMPLETED, CONTRACTOR SHALL MARK THE LOCATION OF THE SEWER SERVICE ON THE CURB OR ALLEY IN ACCORDANCE WITH THE STANDARD CITY SPECIFICATIONS.
8. ALL SANITARY SEWER LINES SHALL BE TESTED IN ACCORDANCE WITH THE STANDARD CITY SPECIFICATIONS.
9. THE UTILITY CONTRACTOR SHALL INSTALL THE WATER SERVICES TO A POINT TWO FEET BACK OF THE CURB LINE AT A DEPTH OF 12 INCHES. THE METER BOX SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AFTER THE PAVING CONTRACTOR HAS COMPLETED THE FINE GRADING BEHIND THE CURB. EACH SERVICE LOCATION SHALL BE MARKED ON THE CURB WITH A BLUE LETTER "W" BY THE UTILITY CONTRACTOR AND TIED TO PROPERTY CORNERS ON THE "RECORD DRAWINGS."
10. ALL METER BOXES SHALL BE LOCATED IN NON-TRAFFIC AREAS.
11. TRENCH BACKFILL MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF NCTCOG 3RD EDITION ITEM 504.2 AND SHALL BE MECHANICALLY COMPACTED IN 6-INCH LIFTS TO THE TOP OF SUBGRADE TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY IN ACCORDANCE WITH NCTCOG 3RD EDITION ITEM 504.5 UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN THE STANDARD CITY SPECIFICATIONS.
12. EMBEDMENT SHALL CONFORM TO THE REQUIREMENTS OF NCTCOG 3RD EDITION ITEM 504.5 UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN THE STANDARD CITY SPECIFICATIONS.
13. VALVE BOXES SHALL BE FURNISHED AND SET ON EACH GATE VALVE. AFTER THE FINAL CLEAN-UP AND ALIGNMENT HAS BEEN COMPLETED, THE UTILITY CONTRACTOR SHALL POUR A 24"x24"x8" CONCRETE BLOCK AROUND ALL VALVE BOX TOPS LEVEL WITH THE FINISHED GRADE.
14. CONTRACTOR SHALL RECONNECT ALL EXISTING SERVICES AND MAINTAIN EXISTING SERVICES THROUGHOUT CONSTRUCTION.
15. IF REQUIRED DUE TO CONSTRUCTION, POWER POLES TO BE BRACED OR RELOCATED AT CONTRACTOR'S EXPENSE.

BENCH MARK LIST

R005-1	CONCRETE MONUMENT WITH BRASS CAP FOUND IN THE MEDIAN OF SUMMIT RIDGE DRIVE, ±50' WEST OF THE CENTERLINE OF F.M. 740 (RIDGE ROAD) (CITY OF ROCKWALL CONTROL MONUMENT).	ELEV=578.63
BM# 2	* CUT SET ON A CONCRETE SIDEWALK ON THE SOUTHWEST SIDE OF S.H. 205 (S. GOLIAD STREET), ±420' SOUTHWEST OF THE INTERSECTION OF S.H. 205 AND S.H. 276.	ELEV=544.02
BM# 4	* CUT SET ON A CONCRETE SIDEWALK ON THE SOUTHWEST SIDE OF S.H. 205 (S. GOLIAD STREET), ±180' NORTHWEST OF THE INTERSECTION OF S.H. 205 AND E. RALPH HALL PARKWAY.	ELEV=533.22

RECORD DRAWING

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ATTESTED BY:
 SIGNATURE: *[Signature]*
 ENGINEER OF RECORD: A. GREGORY GERBIG
 CONTRACTOR: FRANCIS COMMERCIAL
 DATE REVISED: 04/28/2017

ALL SANITARY SEWER WORK DESIGNATED AS "PRIVATE" IN THIS SET OF PLANS SHALL BE INSTALLED IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE, PERMITTED AND INSPECTED BY THE CITY BUILDING INSPECTION DEPARTMENT AND INSTALLED BY A LICENSED PLUMBER

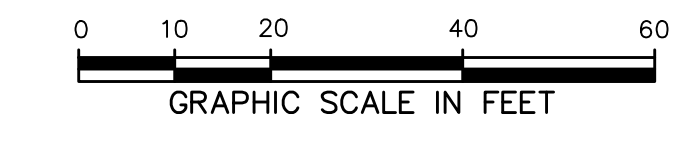
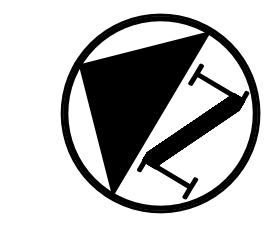
ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN.

	04/28/2017	RECORD DRAWINGS
NO.	DATE	REVISION
SANITARY SEWER PLAN SPEEDY BEE CAR WASH 2360 S. GOLIAD STREET LOT 7, ROCKWALL BUSINESS PARK EAST CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS		
DESIGN	DRAWN	DATE
AGG	ADR	MAR 2016
SCALE	NOTES	FILE
1"=20'		
		NO.
		C6.2

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SPEEDY BEE CAR WASH, ROCKWALL BUSINESS PARK EAST

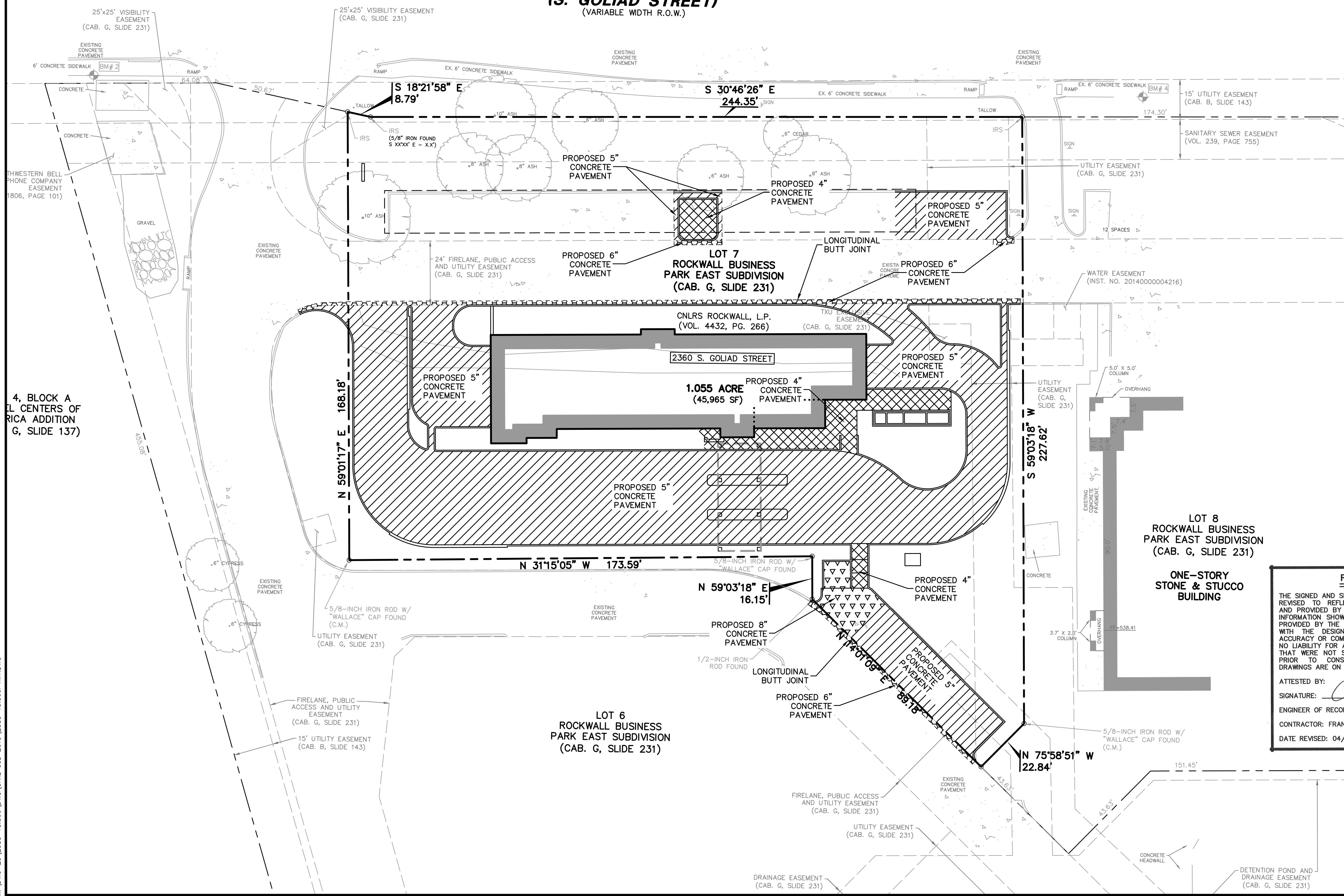
ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN.



LEGEND

B.	BOLLARD
EM	ELECTRIC METER
PP	POWER POLE
LS	LIGHT STANDARD
WM	WATER METER
WV	WATER VALVE
ICV	IRRIGATION CONTROL VALVE
FDH	FIRE HYDRANT
CO	CLEANOUT
MH	MANHOLE
TSC	TRAFFIC SIGNAL CONTROL
TSP	TRAFFIC SIGNAL POLE
TELE	TELEPHONE BOX
FL	FLOOD LIGHT
FP	FLAG POLE
SIGN	TRAFFIC SIGN
IRS	1/2-INCH IRON ROD
(C.M.)	W/PACHECO KOCH" CAP SET
- - -	CONTROLLING MONUMENT
- - -	PROPERTY LINE
- - -	FENCE
[Cross-hatched pattern]	4" REINFORCED CONCRETE (CLASS "A", 5.5-SACK MIX, 3000 PSI)
[Diagonal line pattern]	PARKING AND DRIVE AREAS, 5" REINFORCED CONCRETE PAVEMENT (CLASS "A", 5.5-SACK MIX, 3000 PSI)
[Dotted pattern]	6" REINFORCED CONCRETE PAVEMENT (CLASS "A", 5.5-SACK MIX, 3000 PSI)
[Triangle pattern]	FIRE LANE, 6" REINFORCED CONCRETE PAVEMENT (CLASS "C", 6.5-SACK MIX, 3600 PSI)
[Square pattern]	DUMPSTER AREA, 8" REINFORCED CONCRETE PAVEMENT (CLASS "C", 6.5-SACK MIX, 3600 PSI)

**STATE HIGHWAY NO. 205
(S. GOLIAD STREET)
(VARIABLE WIDTH R.O.W.)**



PAVING GENERAL NOTES

- ALL DIMENSIONS ARE FROM BACK OF CURB UNLESS OTHERWISE NOTED.
- SUBGRADE PREPARATION IN RIGHT OF WAY SHALL CONFORM TO STANDARD CITY SPECIFICATIONS OR TXDOT STANDARD SPECIFICATIONS. NO SAND ALLOWED UNDER ANY PAVING.
- ALL FILL PLACED UNDER PAVING SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY IN 6 INCH LIFTS, UNLESS OTHERWISE NOTED, OR STATED IN GEOTECH REPORT. REFER TO STRUCTURAL SPECIFICATIONS FOR FILL PLACED BENEATH BUILDING AREAS. ALL OTHER FILL AREAS TO BE COMPACTED TO 95% STANDARD PROCTOR.
- THE CONTRACTOR SHALL SUBMIT A JOINT SPACING PLAN TO THE ENGINEER FOR APPROVAL. EXPANSION JOINT SPACING SHALL BE 90' MAXIMUM EACH WAY WITH NO KEYWAYS AND SAWED DUMMY JOINTS SHALL BE 15' EACH WAY, UNLESS OTHERWISE NOTED.
- TRANSVERSE CONSTRUCTION JOINTS SHALL BE USED AT THE END OF EACH DAYS PAVING AND WHERE INTERRUPTIONS SUSPEND OPERATIONS FOR 30 MINUTES OR MORE.
- ALL PAVING TO BE REMOVED SHALL BE SAWCUT TO A NEAT LINE, MINIMUM 1-1/2" DEEP, AND THE PAVEMENT REMOVED IN SUCH A MANNER AS TO PRESERVE THE EXISTING TRANSVERSE REINFORCING STEEL TO THE MAXIMUM EXTENT POSSIBLE.
- ALL CURB AND GUTTER SHALL BE INTEGRAL WITH THE PAVEMENT AND HAVE THE SAME COMPRESSIVE STRENGTH.
- PAVEMENT REINFORCEMENT SHALL BE #3 BARS, SPACED AT 18 INCHES CENTER TO CENTER EACH WAY EXCEPT WHERE OTHERWISE NOTED IN THE PLANS OR GEOTECH REPORT.
- BAR LAPS SHALL BE 30 DIAMETERS IN LENGTH.
- ALL STRIPES SHALL BE 4 INCHES WIDE, UNLESS OTHERWISE NOTED.
- INSTALLATION AND PLACEMENT OF IRRIGATION SLEEVES AND UTILITY CONDUITS SHALL BE IN ACCORDANCE WITH LANDSCAPE ARCHITECT AND MEP PLANS. CONTRACTOR TO VERIFY ALL SLEEVES HAVE BEEN PLACED PRIOR TO PAVING BEING PLACED.
- SIDEWALKS AND ACCESSIBLE ROUTES SHALL HAVE A RUNNING SLOPE NO GREATER THAN 5% (UNLESS OTHERWISE NOTED) AND A CROSS SLOPE NO GREATER THAN 2%.

RECORD DRAWING

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ENGINEER OF RECORD: A. GREGORY GERBIG
CONTRACTOR: FRANCIS COMMERCIAL
DATE REVISED: 04/28/2017

NO.	DATE	REVISION
1	04/28/2017	RECORD DRAWINGS

Pacheco Koch
7557 RAMBLER ROAD, SUITE 1400
DALLAS, TX 75231 972.235.3031
TX REG. ENGINEERING FIRM F-14439
TX REG. SURVEYING FIRM LS-10193805

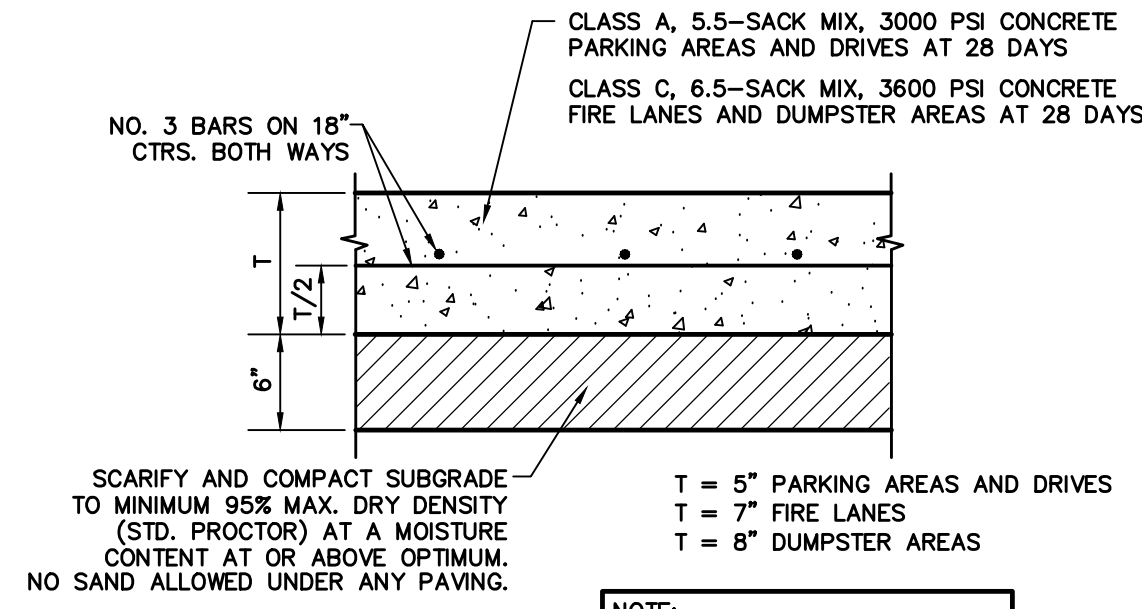
PAVING PLAN

SPEEDY BEE CAR WASH
2360 S. GOLIAD STREET
LOT 7, ROCKWALL BUSINESS PARK EAST
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

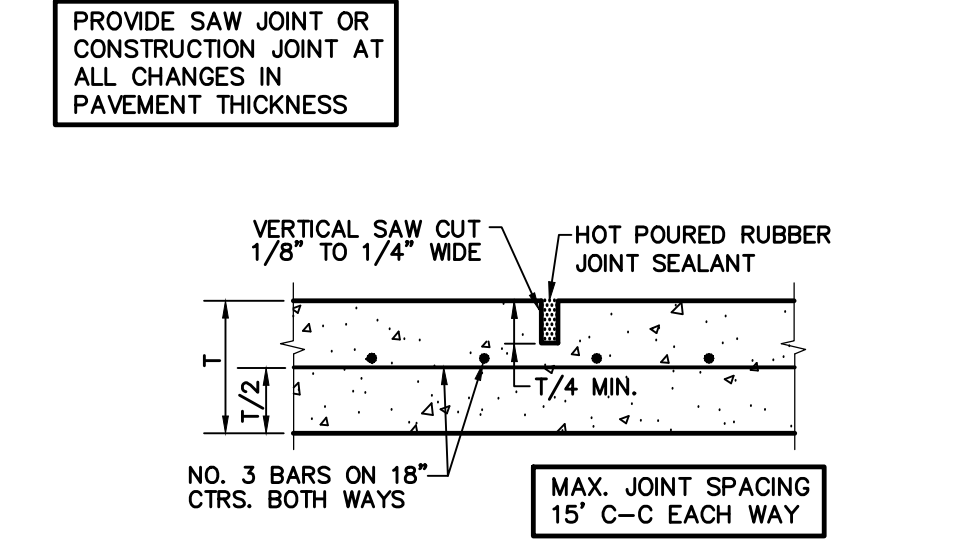
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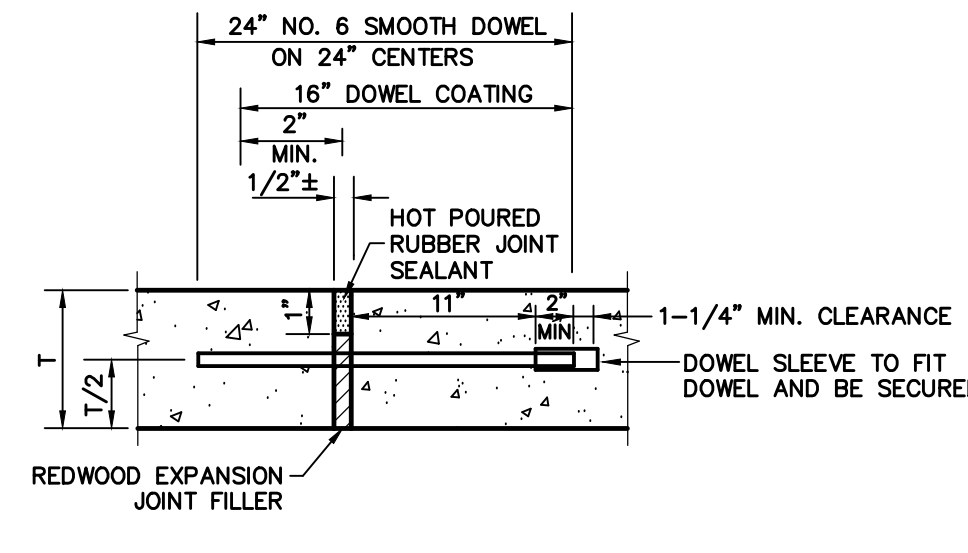
SPEEDY BEE CAR WASH, ROCKWALL BUSINESS PARK EAST



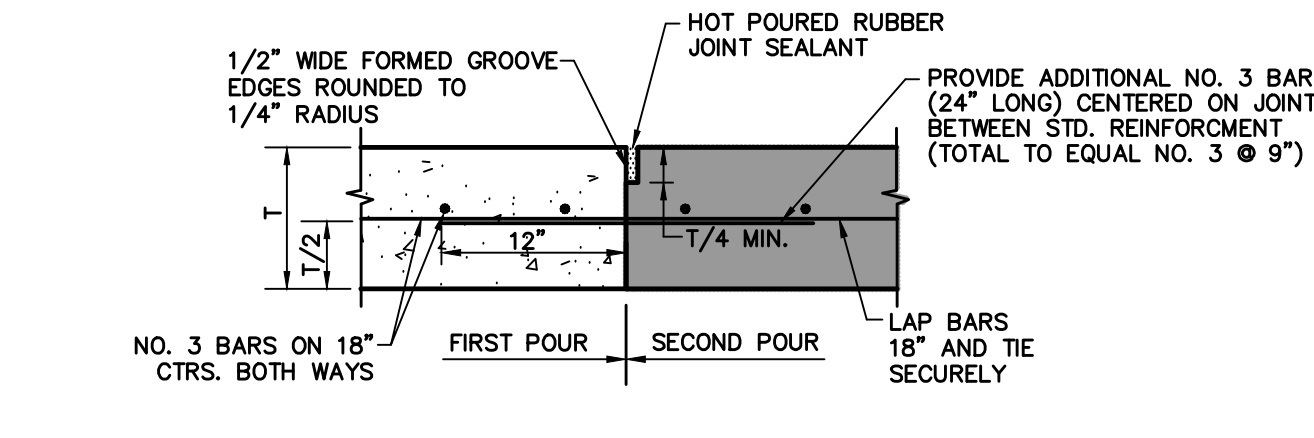
1 CONCRETE PAVEMENT SECTION
NOT TO SCALE



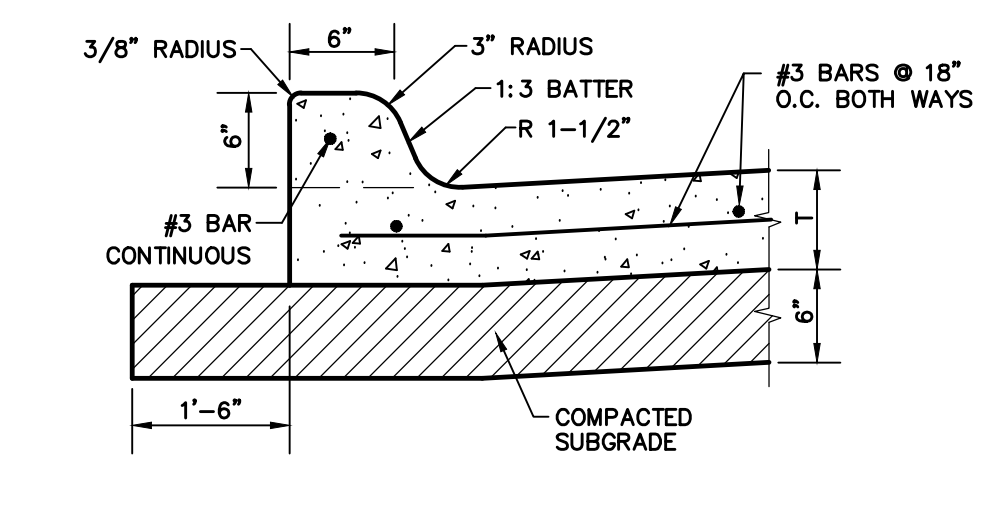
2 SAWED DUMMY JOINT
NOT TO SCALE



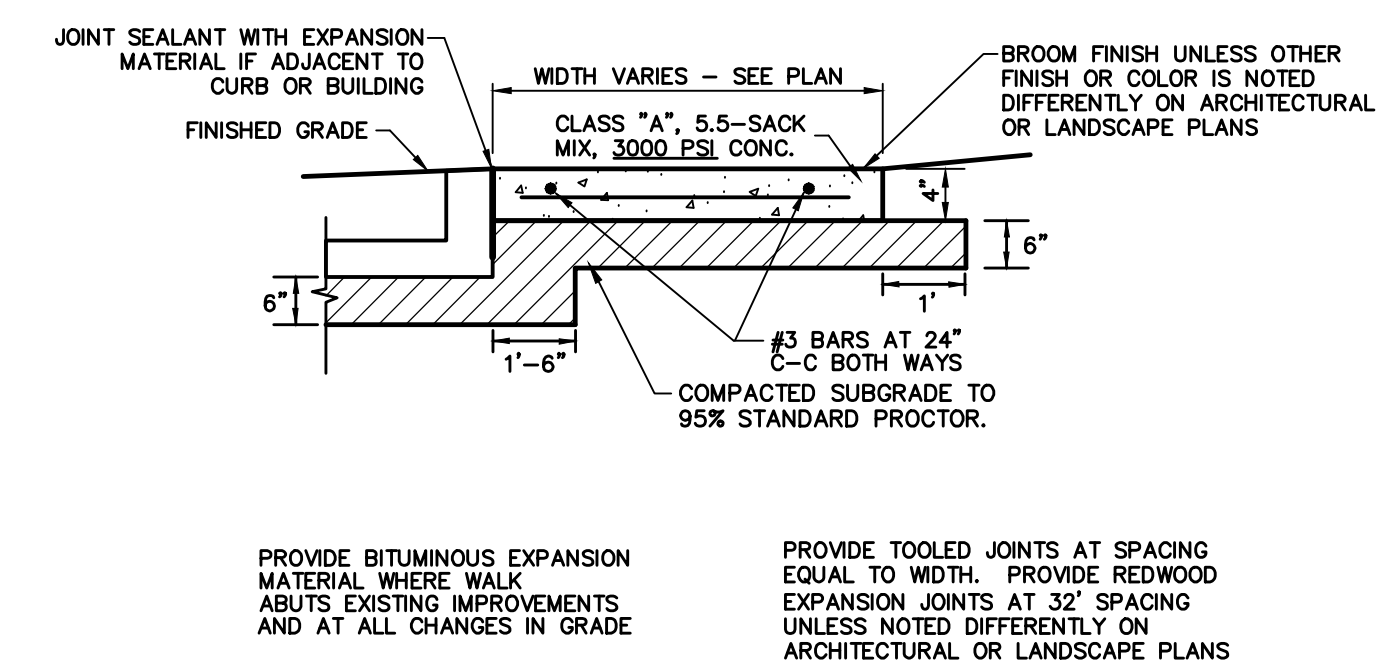
3 EXPANSION JOINT
NOT TO SCALE



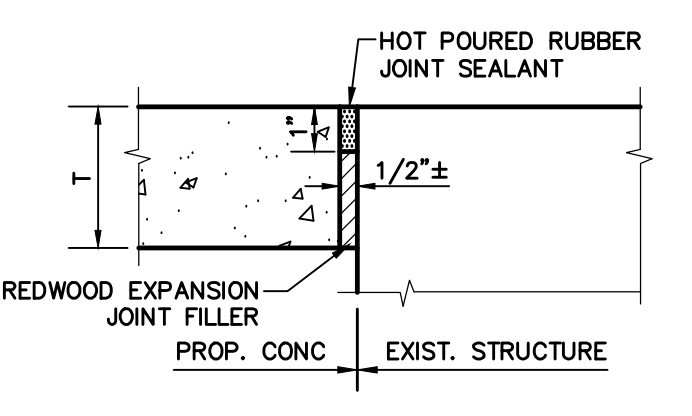
4 CONSTRUCTION JOINT
NOT TO SCALE



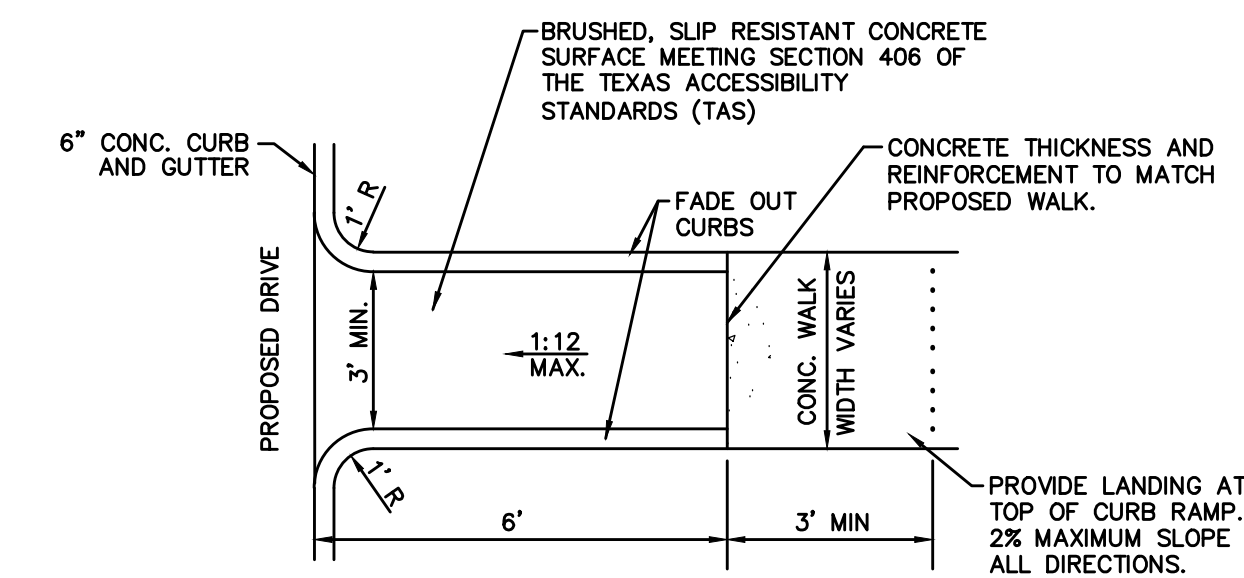
5 INTEGRAL CURB
NOT TO SCALE



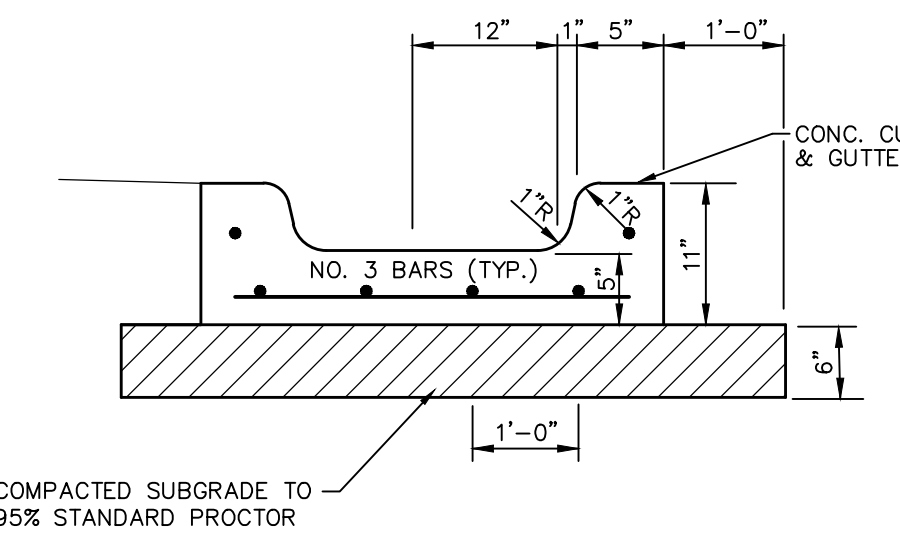
6 CONCRETE WALK PRIVATE
NOT TO SCALE



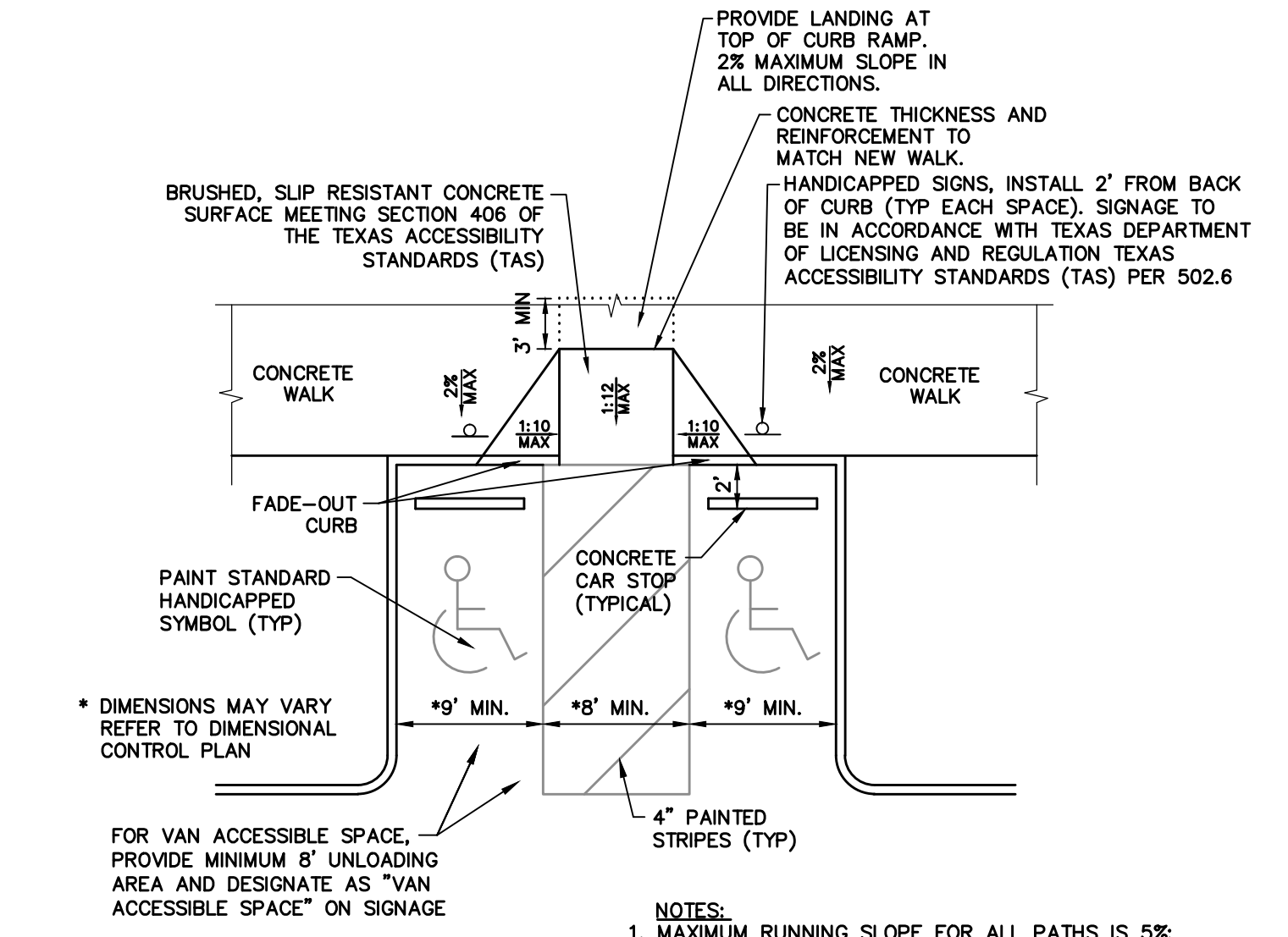
7 ISOLATION JOINT
NOT TO SCALE



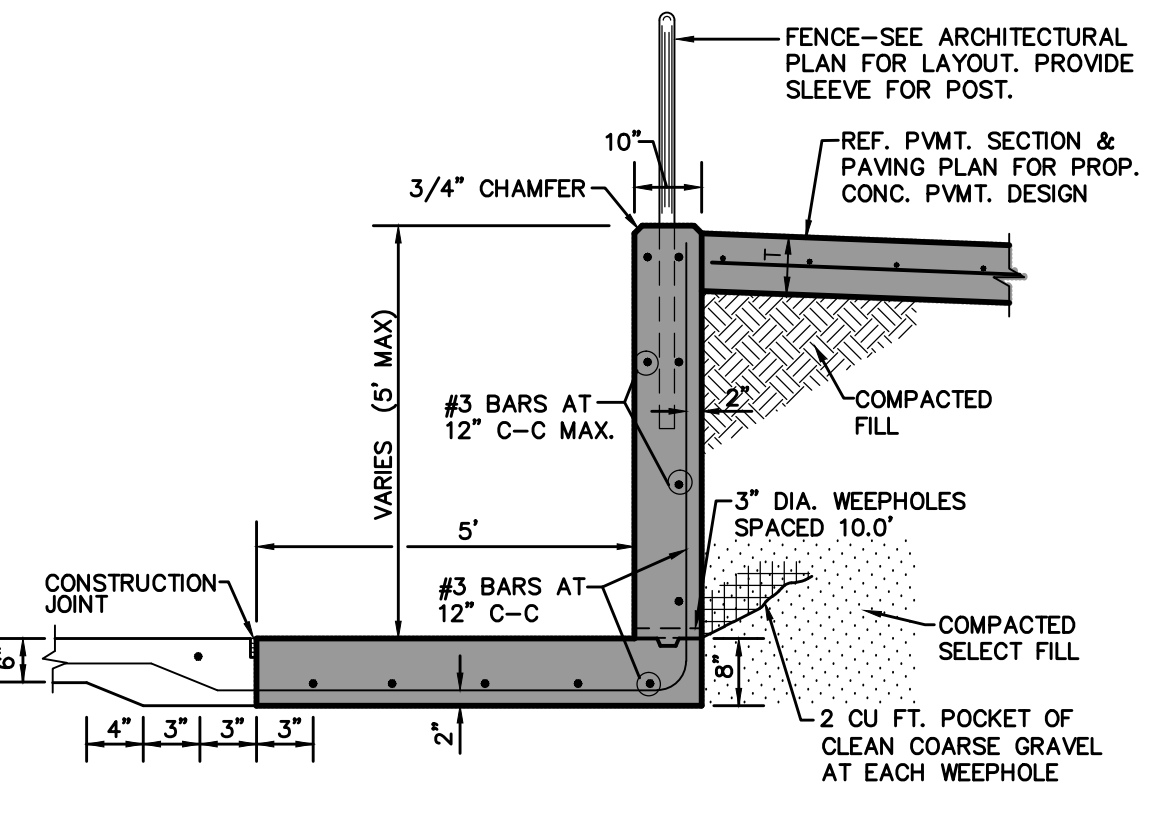
8 SINGLE CURB RAMP
NOT TO SCALE (PRIVATE ONLY)



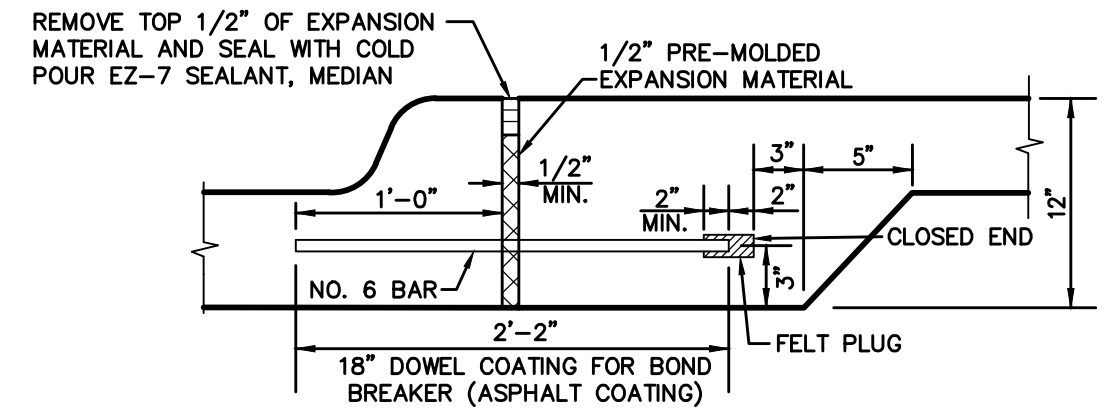
9 FLUME DETAIL
NOT TO SCALE



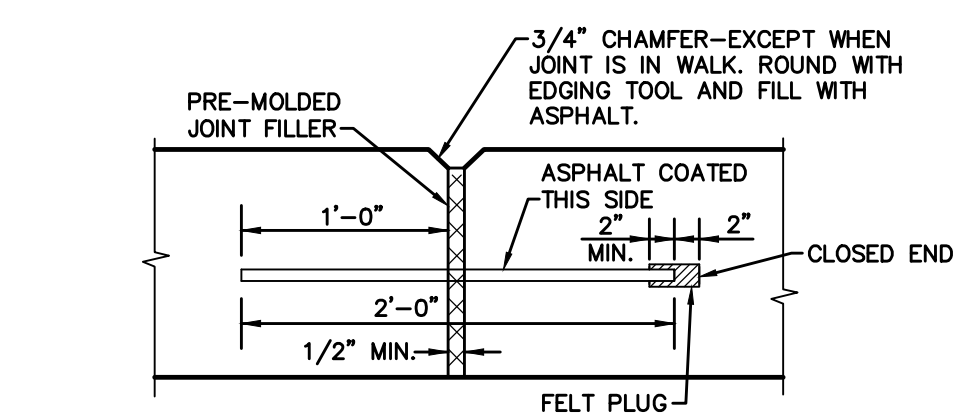
10 90° HANDICAP PARKING & FLARED CURB RAMP
NOT TO SCALE (PRIVATE ONLY)



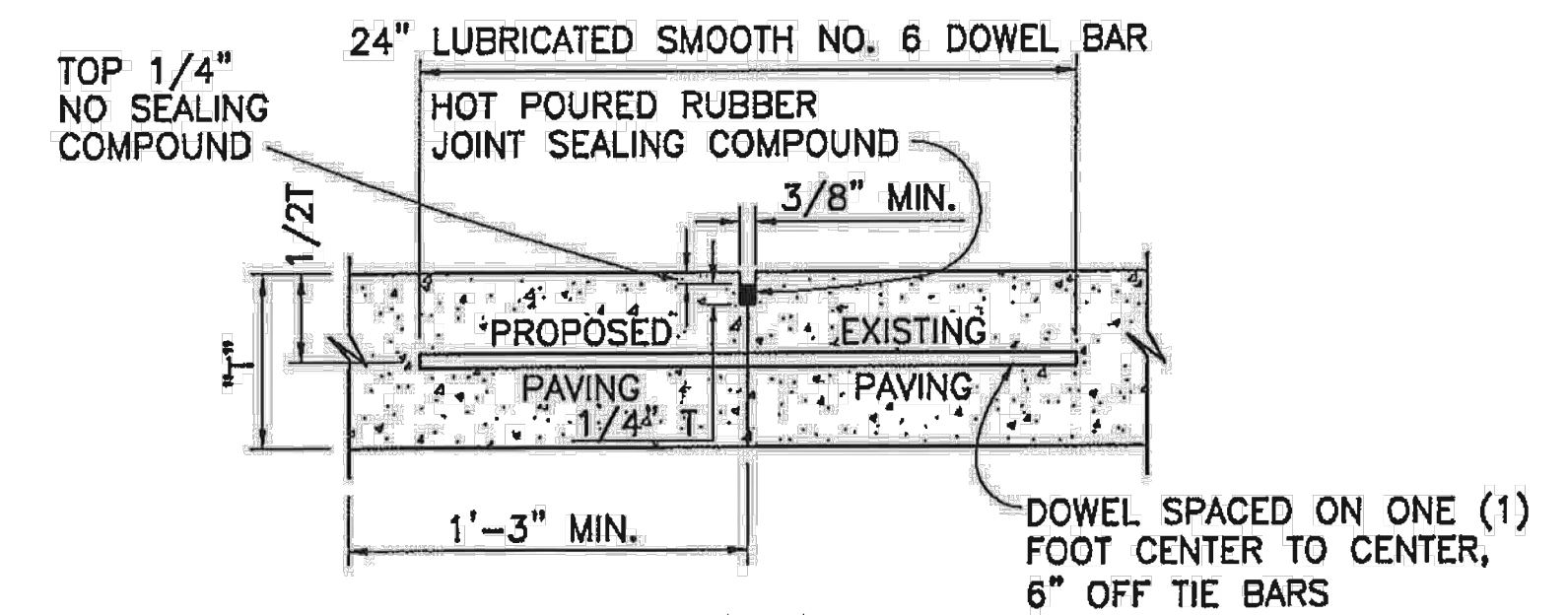
11 RETAINING WALL
NOT TO SCALE



"A" - EXPANSION JOINT AGAINST CURB
FOR WALLS OVER 5 FEET WITH FOOTING ABUTTING BACK OF CURB



"B" - EXPANSION JOINT IN WALL



10 LONGITUDINAL BUTT JOINT
NOT TO SCALE

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PAVING DETAILS
SPEEDY BEE CAR WASH
2360 S. GOLIAD STREET
LOT 7, ROCKWALL BUSINESS PARK EAST
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
AGG	ADR	MAR 2016				C7.2

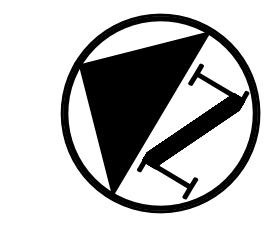
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SPEEDY BEE CAR WASH, ROCKWALL BUSINESS PARK EAST

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LEGEND

- B BOLLARD
- EM ELECTRIC METER
- PP POWER POLE
- LS LIGHT STANDARD
- WM WATER METER
- WV WATER VALVE
- ICV IRRIGATION CONTROL VALVE
- FH FIRE HYDRANT
- CO CLEANOUT
- MH MANHOLE
- TSC TRAFFIC SIGNAL CONTROL
- TSP TRAFFIC SIGNAL POLE
- TEL TELEPHONE BOX
- FL FLOOD LIGHT
- FP FLAG POLE
- SI SIGN
- IRS 1/2-INCH IRON ROD
- (C.M.) W/"PACHECO KOCH" CAP SET
- PROPERTY LINE
- - - FENCE
- - - OVERHEAD UTILITY LINE
- 61.3 EXIST CONTOUR
- (450) PROPOSED CONTOUR



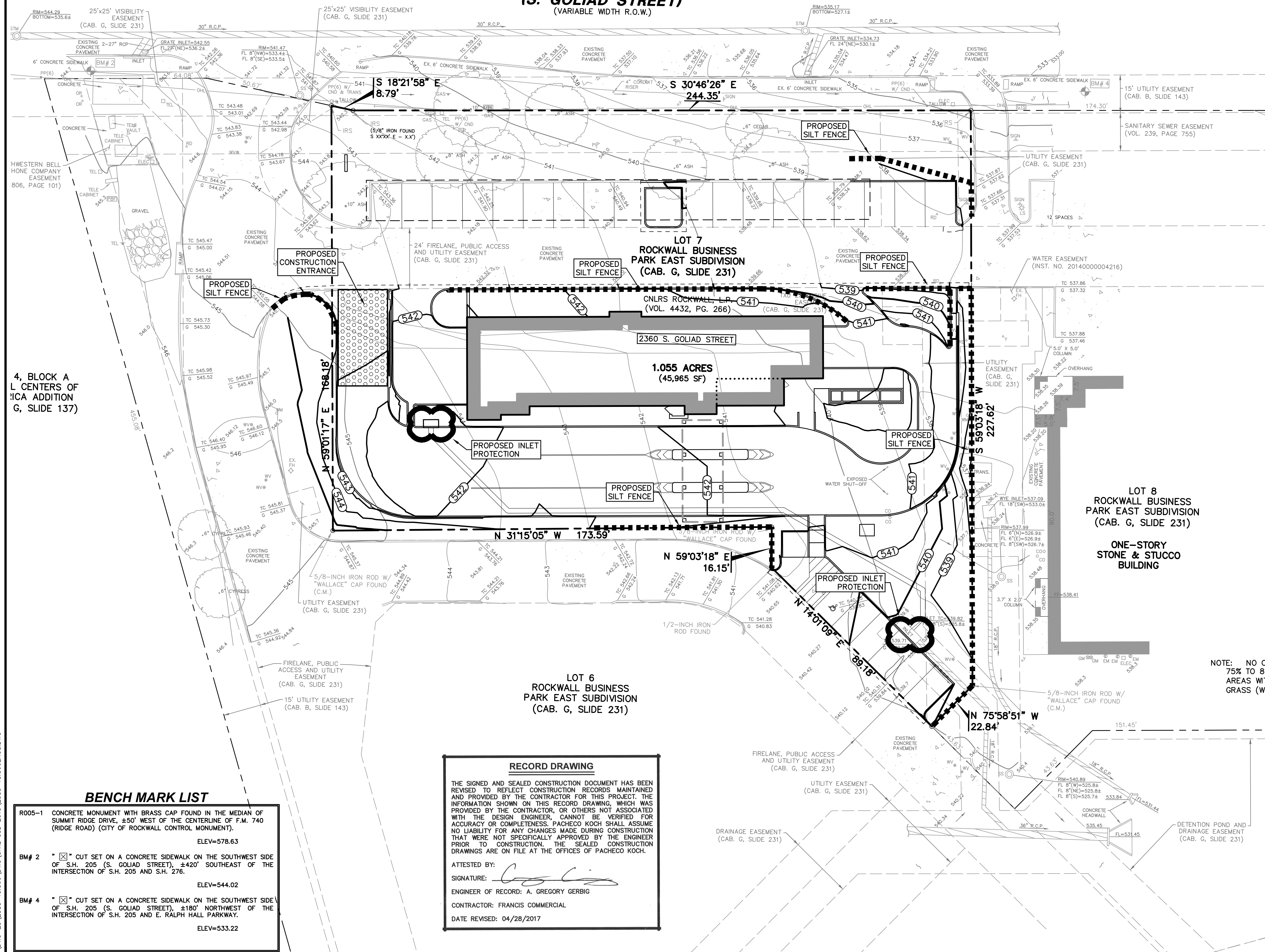
- PROPOSED DRAINAGE FLOW DIRECTION
- ▢ PROPOSED CONSTRUCTION ENTRANCE
- ☪ INLET PROTECTION
- ▬ SILT FENCE (LIMITS OF DISTURBED AREA)

POLLUTION CONTROL GENERAL NOTES

1. THIS PLAN HAS BEEN PREPARED TO PROVIDE MEANS TO PREVENT OR MINIMIZE POLLUTION OF STORM WATER.
2. THE CONSTRUCTION ACTIVITY INCLUDED IN THIS PLAN WILL INCLUDE:
 - 2.A. CLEARING AND GRUBBING
 - 2.B. ROUGH GRADING
 - 2.C. FINAL GRADING
 - 2.D. UTILITY INSTALLATION
 - 2.E. PAVEMENT INSTALLATION
 - 2.F. BUILDING CONSTRUCTION
3. THE TOTAL ESTIMATED LAND AREA TO BE DISTURBED IS 0.70 ACRES.
4. THE ESTIMATED RUNOFF COEFFICIENT UPON COMPLETION OF THE PROJECT IS 0.90.
5. THE STORM WATER EXITING THE SITE IS COLLECTED IN AN EXISTING DRAINAGE SYSTEM MAINTAINED BY THE CITY OF ROCKWALL, TEXAS.
6. THE SOILS ON THE SITE ARE GENERALLY EXPANSIVE CLAYS.
7. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN EROSION PROTECTION AROUND THE WORK AREA PERIMETER AND AT ALL INLET MOUTHS PRIOR TO COMMENCING WORK AND UNTIL THE WORK AREA HAS BEEN STABILIZED.
8. THE CONTRACTOR WILL REMOVE ALL EXCESS SOIL FROM CONSTRUCTION VEHICLES PRIOR TO EXITING THE SITE.
9. ALL DISTURBED AREAS WHICH WILL NOT BE RE-DISTURBED FOR 14 DAYS MUST BEGIN BEING STABILIZED IMMEDIATELY BY THE CONTRACTOR TO CONTROL EROSION. THE CONTRACTOR HAS 14 DAYS TO HAVE ALL STABILIZATION AND EROSION CONTROL DEVICES IN PLACE.
10. THE CONTRACTOR SHALL UNDERTAKE PROPER METHODS TO REDUCE DUST GENERATION FROM THE SITE.
11. THE CONTRACTOR MUST COMPLY WITH FEDERAL, STATE AND LOCAL REGULATIONS REGARDING SEDIMENT AND EROSION CONTROL.
12. A COPY OF THIS PLAN, AS PART OF THE SWPPP, MUST BE KEPT AT THE CONSTRUCTION FACILITY DURING THE ENTIRE CONSTRUCTION PERIOD.
13. CONSTRUCTION SEQUENCING MUST PROVIDE FOR THE EXCAVATION OF AN ON-SITE SEDIMENTATION BASIN FOR THE COLLECTION OF SEDIMENT PRIOR TO THE DISTURBANCE OF GREATER THAN 10 ACRES OF LAND.
14. ALL FINISHED GRADES ARE TO BE HYDROMULCHED, SPOT SODDED OR SEEDED AND WATERED UNTIL GROWTH IS ESTABLISHED ON AND OFF-SITE.
15. A PIT OR WASH OUT BASIN SHALL BE CONSTRUCTED ON-SITE BY THE CONTRACTOR FOR THE "WASH OUT" OF CONCRETE TRUCKS. BASIN SHALL CONFORM TO LOCAL, STATE, AND FEDERAL REGULATIONS.
16. A BERM OR OTHER SPILL PROTECTION MEASURE THAT CONFORMS TO LOCAL, STATE, AND FEDERAL REGULATIONS SHALL BE USED FOR ANY TEMPORARY FUEL STORAGE TANK ON-SITE.
17. IF "SUMP" PUMPS ARE USED TO REMOVE WATER FROM EXCAVATED AREAS, FILTER THE DISCHARGE TO REMOVE SEDIMENT AND OTHER POLLUTANTS BEFORE THE WATER LEAVES THE SITE.
18. TO PREVENT DAMAGE TO VEGETATION IN DOWNSTREAM WATER COURSES, LIMIT ANY PROPOSED LIME STABILIZATION OPERATIONS TO THAT WHICH CAN BE MIXED AND COMPACTED BY THE END OF EACH WORK DAY. GEOTEXTILE FABRIC IS NOT EFFECTIVE IN FILTERING LIME SINCE THE GRAIN SIZE IS SMALLER THAN THE OPENING IN THE FABRIC.
19. VEHICLE PARKING AREAS, STAGING AREAS, STOCKPILES, SPOILS, ETC. SHALL BE LOCATED SUCH THAT THEY WILL NOT ADVERSELY AFFECT STORM WATER QUALITY. OTHERWISE, COVERING OR ENCLING THE AREAS WITH PROTECTIVE MEASURES SHALL BE NECESSARY.
20. STORE ALL TRASH AND BUILDING MATERIALS WASTE IN AN ENCLOSURE UNTIL IT CAN BE PROPERLY DISPOSED OF AT THE APPROPRIATE OFF-SITE FACILITIES.
21. TRACKING OF SEDIMENT OFF-SITE BY TRUCK TRAFFIC SHALL BE HANDLED THROUGH REGULAR CLEANING.
22. INSPECTIONS SHALL BE CONDUCTED BY THE PERMITEE ONCE EVERY TWO WEEKS AND WITHIN 24 HOURS AFTER STORM EVENT OF 0.5 INCHES OR MORE OR ONCE PER WEEK ON A SPECIFIC PRE-DEFINED DAY. THE INSPECTIONS WILL INCLUDE:
 - 22.A. DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN STABILIZED.
 - 22.B. AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.
 - 22.C. STRUCTURAL CONTROL MEASURES.
 - 22.D. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.
 - 22.E. IDENTIFICATIONS OF MEASURES THAT NEED TO BE MAINTAINED, MODIFIED, OR ADDED TO CORRECT PROBLEMS.
23. CONTRACTOR SHALL MINIMIZE THE EXPOSURE OF BUILDING MATERIALS, BUILDING PRODUCTS, CONSTRUCTION WASTES, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS PRESENT ON THE SITE TO PRECIPITATION AND STORMWATER RUNOFF.
24. PERMANENTLY STABILIZE EXPOSED SOIL, WITHIN AND ADJACENT TO THE SITE, THAT IS DISTURBED BY VEHICLES, GRADING AND OTHER CONSTRUCTION ACTIVITIES.
25. CONTAIN ALL RUNOFF FROM MATERIAL USED IN SUBGRADE STABILIZATION.
26. MATERIAL STOCKPILES SHALL BE COVERED BY PLASTIC OR SURROUNDED BY EROSION CONTROL STRUCTURES TO CONTROL SEDIMENT RELEASES.
27. CONTRACTOR SHALL PROTECT SLOPES IN EXCESS OF 15% IN ORDER TO MINIMIZE EROSION OF SOILS AND THE DISTURBANCE OF SLOPES.
28. VEGETATION TO BE PRESERVED WHERE EVER POSSIBLE TO HELP REDUCE EROSION. WHERE VEGETATION MUST BE REMOVED, PRESERVE NATIVE TPOIR IN ALL AREAS POSSIBLE.
29. MINIMIZE SOIL COMPACTION IN AREAS INTENDED FOR POST CONSTRUCTION PERVIOUS SURFACE.

NOTE: NO CITY ACCEPTANCE OR CD PRIOR TO 75% TO 80% COVERAGE OF ALL DISTURBED AREAS WITH A MINIMUM OF 1" STAND OF GRASS (WINTER RYE NOT ACCEPTED.)

**STATE HIGHWAY NO. 205
(S. GOLIAD STREET)
(VARIABLE WIDTH R.O.W.)**



4, BLOCK A L CENTERS OF ICA ADDITION (CAB. G, SLIDE 137)

LOT 8
ROCKWALL BUSINESS
PARK EAST SUBDIVISION
(CAB. G, SLIDE 231)

ONE-STORY
STONE & STUCCO
BUILDING

LOT 6
ROCKWALL BUSINESS
PARK EAST SUBDIVISION
(CAB. G, SLIDE 231)

RECORD DRAWING

THE SIGNED AND SEALED CONSTRUCTION DOCUMENT HAS BEEN REVISED TO REFLECT CONSTRUCTION RECORDS MAINTAINED AND PROVIDED BY THE CONTRACTOR FOR THIS PROJECT. THE INFORMATION SHOWN ON THIS RECORD DRAWING, WHICH WAS PROVIDED BY THE CONTRACTOR, OR OTHERS NOT ASSOCIATED WITH THE DESIGN ENGINEER, CANNOT BE VERIFIED FOR ACCURACY OR COMPLETENESS. PACHECO KOCH SHALL ASSUME NO LIABILITY FOR ANY CHANGES MADE DURING CONSTRUCTION THAT WERE NOT SPECIFICALLY APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION. THE SEALED CONSTRUCTION DRAWINGS ARE ON FILE AT THE OFFICES OF PACHECO KOCH.

ATTESTED BY:
SIGNATURE: _____
ENGINEER OF RECORD: A. GREGORY GERBIG
CONTRACTOR: FRANCIS COMMERCIAL
DATE REVISED: 04/28/2017

BENCH MARK LIST

- R005-1 CONCRETE MONUMENT WITH BRASS CAP FOUND IN THE MEDIAN OF SUMMIT RIDGE DRIVE, ±50' WEST OF THE CENTERLINE OF F.M. 740 (RIDGE ROAD) (CITY OF ROCKWALL CONTROL MONUMENT).
ELEV=578.63
- BM# 2 * [X] CUT SET ON A CONCRETE SIDEWALK ON THE SOUTHWEST SIDE OF S.H. 205 (S. GOLIAD STREET), ±420' SOUTHEAST OF THE INTERSECTION OF S.H. 205 AND S.H. 276.
ELEV=544.02
- BM# 4 * [X] CUT SET ON A CONCRETE SIDEWALK ON THE SOUTHWEST SIDE OF S.H. 205 (S. GOLIAD STREET), ±180' NORTHWEST OF THE INTERSECTION OF S.H. 205 AND E. RALPH HALL PARKWAY.
ELEV=533.22

NO.	DATE	REVISION
04/28/2017	RECORD DRAWINGS	

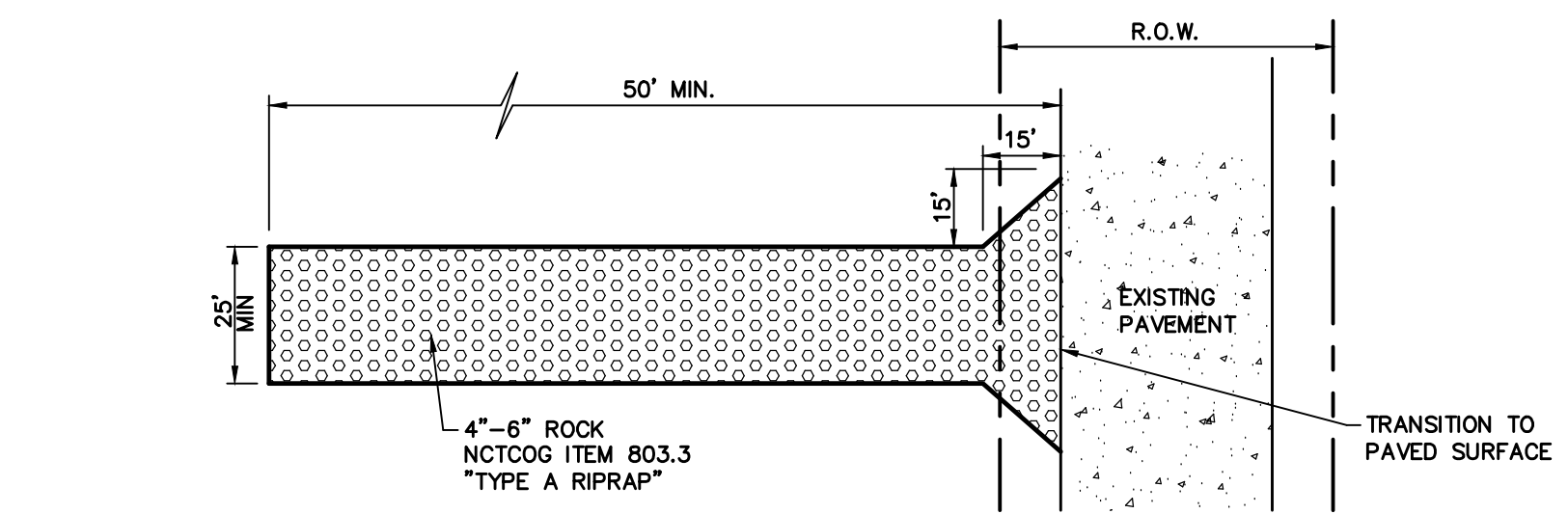
Pacheco Koch
7557 RAMBLER ROAD, SUITE 1400
DALLAS, TX 75231 972.235.3031
TX REG. ENGINEERING FIRM F-14439
TX REG. SURVEYING FIRM LS-10193805

EROSION CONTROL PLAN
SPEEDY BEE CAR WASH
2360 S. GOLIAD STREET
LOT 7, ROCKWALL BUSINESS PARK EAST
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

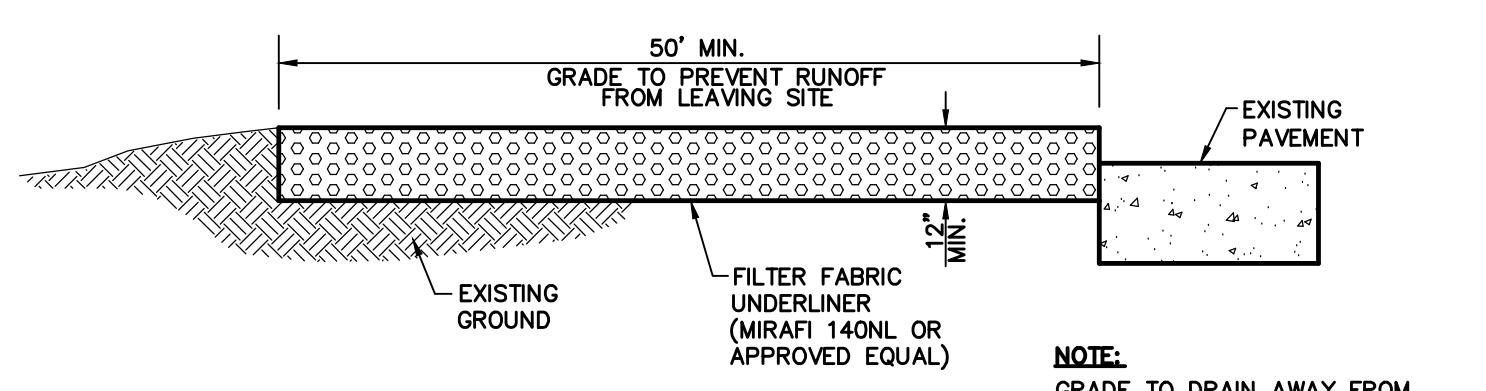
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
AGG	ADR	MAR 2016	1"=20'			C8.1

AREWOLDS 4/27/2017 5:57 PM M:\C\25\2583-15.366\DWG\CIVIL C.3D 2015\2583-15.366\FKOS.DWG

SPEEDY BEE CAR WASH, ROCKWALL BUSINESS PARK EAST



PLAN VIEW



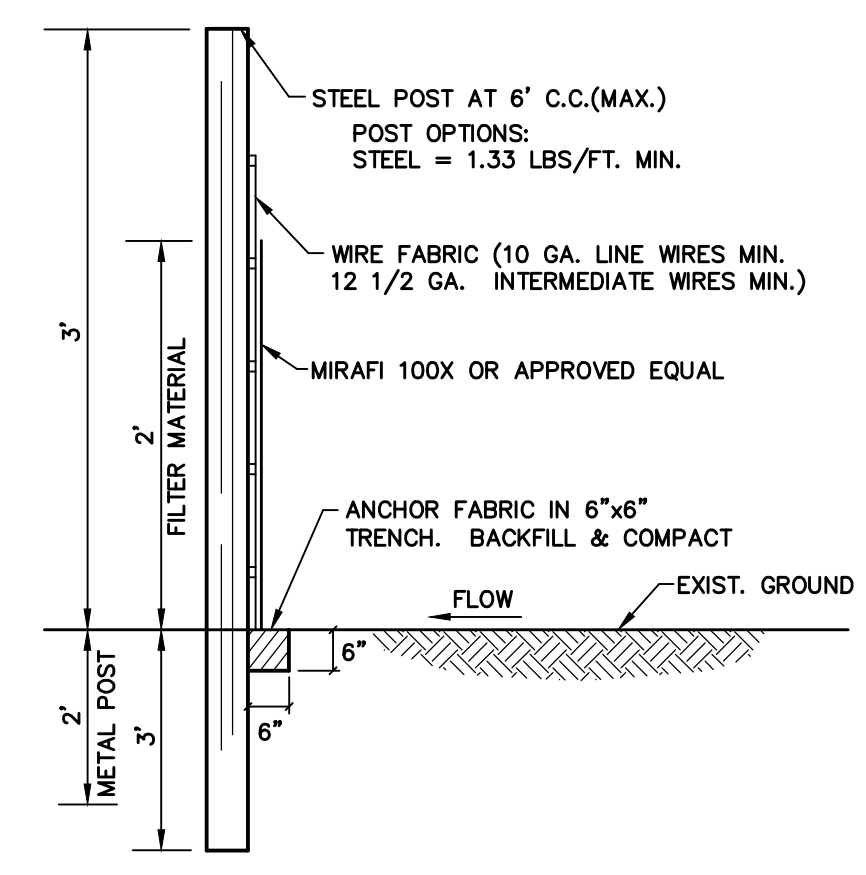
PROFILE

STABILIZED CONSTRUCTION ENTRANCE

1

NOT TO SCALE

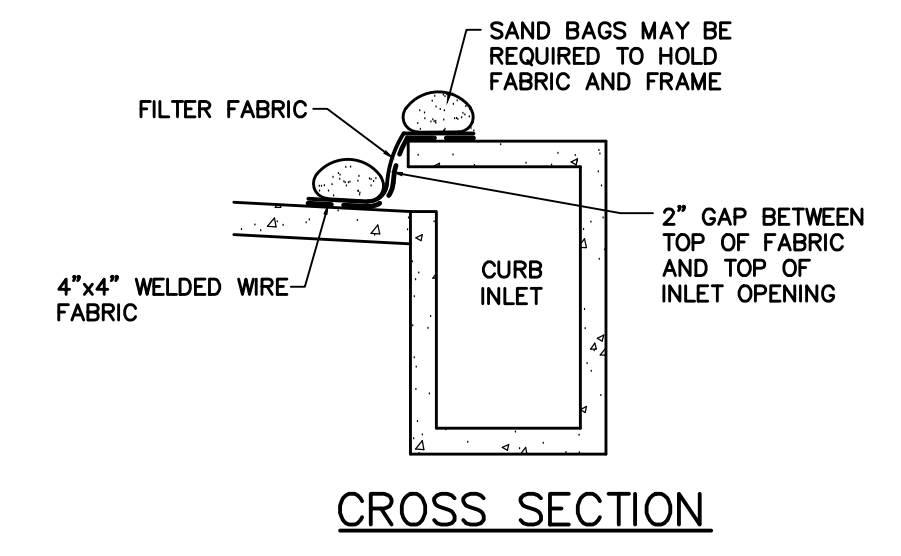
NOTE:
GRADE TO DRAIN AWAY FROM STABILIZATION AND STREET PAVED SURFACE. DRAINAGE MUST FLOW AWAY FROM ENTRANCE.



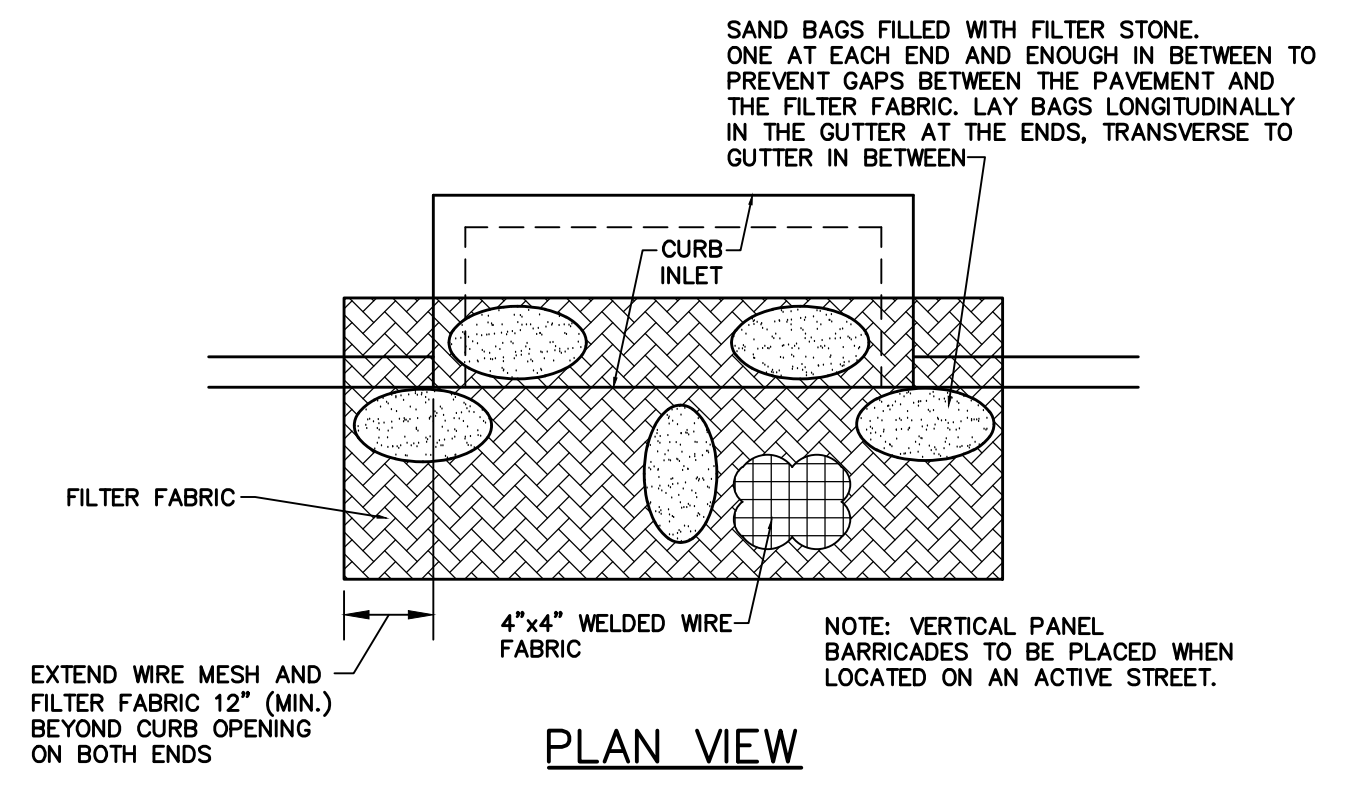
SILT FENCE

2

NOT TO SCALE



CROSS SECTION



PLAN VIEW

CURB INLET PROTECTION

3

NOT TO SCALE

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.

RECORD DRAWING

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ATTESTED BY: *[Signature]*
ENGINEER OF RECORD: A. GREGORY GERBIG
CONTRACTOR: FRANCIS COMMERCIAL
DATE REVISED: 04/28/2017

NO.	DATE	REVISION
△	04/28/2017	RECORD DRAWINGS

Pacheco Koch 7557 RAMBLER ROAD, SUITE 1400
DALLAS, TX 75231 972.235.3031
TX REG. ENGINEERING FIRM F-14439
TX REG. SURVEYING FIRM LS-10193805

EROSION CONTROL DETAILS

SPEEDY BEE CAR WASH

2360 S. GOLIAD STREET

LOT 7, ROCKWALL BUSINESS PARK EAST

CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
AGG	ADR	MAR 2016				C8.2

ARENOLD 4/27/2017 5:57 PM
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SPEEDY BEE CAR WASH, ROCKWALL BUSINESS PARK EAST