

NEW BUILDING DAIRY QUEEN 1801 SOUTH GOLIAD STREET ROCKWALL, TX 75087

FOR PERMIT

GENERAL:

- C0.0 COVER SHEET
- C0.1 FINAL PLAT
- C0.2 FINAL PLAT
- C1.0 EAS CONTROL PLAN
- C1.1 EAS CONTROL DETAILS
- C2.0 SITE PLAN
- C3.0 UTILITY PLAN
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- C4.1 DRAINAGE PLAN
- C5.0 STORM SEWER PLAN AND PROFILE
- C6.0 GENERAL DETAILS
- C6.1 GENERAL DETAILS
- ~~C7.0 EXISTING SHEETS - OMITTED FOR THIS SUBMITTAL~~
- ~~C7.1 EXISTING SHEETS - OMITTED FOR THIS SUBMITTAL~~
- L1.0 LANDSCAPE PLAN
- L1.1 LANDSCAPE DETAILS

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TPE FIRM 13035

STATE OF TEXAS
REGISTERED PROFESSIONAL ENGINEER
CHARLES A. THOMSON
88659

DAIRY QUEEN Restaurant
AMERICAN DAIRY QUEEN MINNEAPOLIS, MN U.S.A.
*REGISTERED U.S. PATENT OFFICE.
AMERICAN DAIRY QUEEN CORPORATION. THIS DRAWING, ITS DESIGN DETAIL AND INVENTION ARE THE PROPERTY OF AMERICAN DAIRY QUEEN INC. (ADQ) AND SHALL NOT BE COPIED IN ANY MANNER NOR DISCLOSED TO ANY OUTSIDE PARTY WITHOUT ADQ CONSENT.

BUILDING TYPE:
DAIRY QUEEN
TEXAS

NEW BUILDING
DAIRY QUEEN
1801 SOUTH GOLIAD STREET
ROCKWALL, TEXAS 75087

REVISIONS	
NO.	DATE
1	10-15-2014
2	01-07-2015
3	01-23-2015
4	04-17-2015

DATE:
08/27/2014

PROJECT NO.
LAY 14 002

SHEET NO.
C0.0

ISSUED FOR PERMIT
COVER SHEET

SCOPE OF WORK:

INVOLVES THE SCARIFYING OF EXISTING ORGANIC MOTHER EARTH AND SOILS, EXCAVATION AND TRENCHING FOR A NEW STORM WATER DETENTION FACILITY, SEWER LINE, WATERLINE, AND GAS LINE UTILITIES, AND UNDERGROUND ELECTRICAL SERVICE. PROVIDE NEW SANITARY SEWER, ELECTRICAL, WATER, AND GAS AS PER CONTRACT DOCUMENTS. PROVIDE NEW GRADING, CONTOURS, PAVING, CURB AND GUTTER, MANHOLES, INLETS, SIDEWALK, ADA RAMPS, STRIPING, IRRIGATION, AND LANDSCAPING.

GENERAL DRAWING SYSTEMS

	ROOM NAME/NUMBER		DOOR NUMBER
	ELEVATION NUMBER/SHEET NUMBER		WINDOW LETTER
	CEILING HEIGHT		KEY NOTE
	BLDG. SECTION NUMBER BLDG. SECTION SHEET		EQUIPMENT NUMBER
	WALL SECTION NUMBER WALL SECTION SHEET		INTERIOR PARTITION
	DETAIL NUMBER DETAIL SHEET		ROOM FINISH NUMBER
	LEADER TO DETAIL BUBBLE		COLUMN NUMBER/LETTER
	REVISION NUMBER		SPOT ELEVATION
	BLDG. HEIGHT REFERENCE POINT		SIDEWALK SLOPE

REFER TO STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SHEETS FOR SPECIFIC SYMBOLS

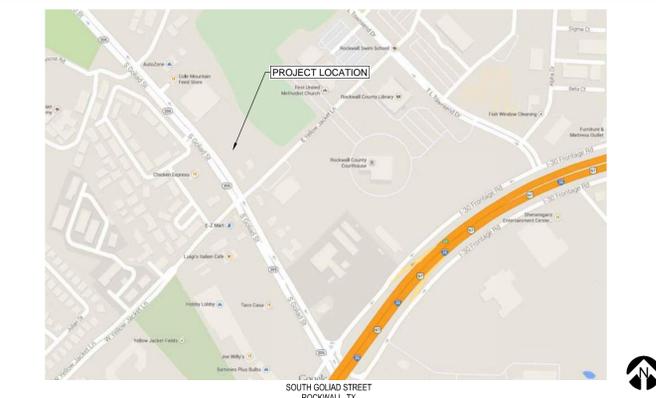
PROJECT SUMMARY

REGULATORY
LEGAL JURISDICTION: CITY OF ROCKWALL, TEXAS

BUILDING INFORMATION
BUILDING AREA: NA
OCCUPANCY: NA
TYPE CONSTRUCTION: NA

DESIGN CRITERIA
WIND SPEED: NA
EARTHQUAKE ZONE: NA
ROOF LIVE LOAD: NA

VICINITY MAP

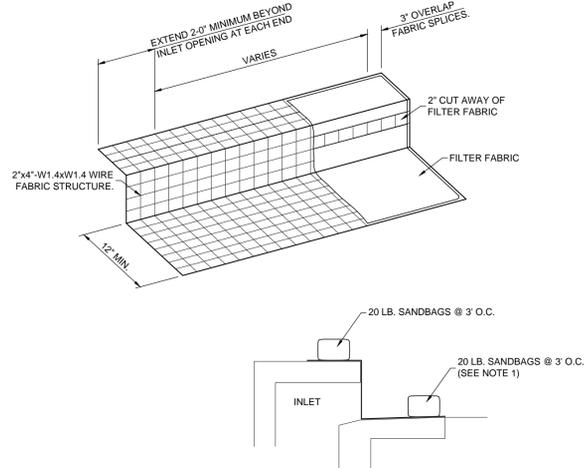


PROJECT DIRECTORY

OWNER/CONSTRUCTION MGR. SCOTT LAY CONSTRUCTION MANAGER LAY DESIGN / BUILD PO BOX 5300 TYLER, TX 75712 903-877-4128 OFFICE 903-877-4449 FAX	ARCHITECT/ENGINEER TOTAL ENGINEERING SERVICES, LLC 103 COMMUNITY BOULEVARD LONGVIEW, TX 75605 903-212-2856 OFFICE 903-212-3775 FAX
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GENERAL EROSION CONTROL NOTES

- THE STORM WATER POLLUTION PREVENTION PLAN IS COMPRISED OF THIS DRAWING (NOTES & DETAILS), THE SITE MAP, THE PLAN NARRATIVE, ATTACHMENTS INCLUDED IN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP), PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
- ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE SWPPP PRIOR TO THE START OF CONSTRUCTION. DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (TPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
- CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
- BEST MANAGEMENT PRACTICES (BMPs) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER. SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS, AND MUST BE MAINTAINED ON SITE AT ALL TIMES.
- CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
- GENERAL CONTRACTOR SHALL DEDICATE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
- ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE RETAINED AND PROPERLY TREATED OR DISPOSED.
- SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEANUP FUEL OR CHEMICAL SPILLS OR LEAKS.
- DUCT ON THE SITE SHALL BE CONTROLLED BY SPRAYING WATER ON DRY AREAS OF THE SITE. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
- RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
- ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS PLAN, AND IN THE SWPPP, SHALL BE INITIATED AS SOON AS PRACTICABLE.
- DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS STOPPED FOR AT LEAST 21 DAYS SHALL BE TEMPORARILY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
- DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN.
- IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
- ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADSWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
- CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
- ON-SITE AND OFF-SITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
- SCOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
- DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, STRAW BARRIERS, ETC.) TO PREVENT EROSION.
- ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY. THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.



- NOTES:**
- WHERE MINIMUM CLEARANCES CAUSE TRAFFIC TO DRIVE IN THE GUTTER, THE CONTRACTOR MAY SUBSTITUTE A 1"x4" BOARD SECURED WITH CONCRETE NAILS 3" O.C. NAILED INTO THE GUTTER IN LIEU OF SANDBAGS TO HOLD THE FILTER DIKE IN PLACE. UPON REMOVAL, CLEAN ANY DIRT/DEBRIS FROM NAILING LOCATIONS, APPLY CHEMICAL SANDING AGENT AND APPLY NON-SHRINK GROUT FLUSH WITH SURFACE OF GUTTER.
 - A SECTION OF FILTER FABRIC SHALL BE REMOVED AS SHOWN ON THIS DETAIL OR AS DIRECTED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE. FABRIC MUST BE SECURED TO WIRE WITH CLIPS OR HOG RINGS AT THIS LOCATION.
 - DAILY INSPECTION SHALL BE MADE BY THE CONTRACTOR AND SILT ACCUMULATION MUST BE REMOVED WHEN DEPTH REACHES 2".
 - CONTRACTOR SHALL MONITOR THE PERFORMANCE OF INLET PROTECTION DURING RAINFALL EVENT AND IMMEDIATELY REMOVE THE INLET PROTECTIONS IF THE STORM WATER BEGINS TO OVERTOP THE CURB. INLET PROTECTION SHALL BE REMOVED AS SOON AS THE SOURCE OF SEDIMENT IS STABILIZED.

STORM WATER POLLUTION PREVENTION SYSTEM INSPECTIONS AND MAINTENANCE

BETWEEN THE TIME THIS SWPPP IS IMPLEMENTED AND FINAL SITE STABILIZATION IS ACHIEVED, ALL DISTURBED AREAS AND POLLUTANT CONTROLS MUST BE INSPECTED AT LEAST ONCE EVERY FOURTEEN CALENDAR DAYS AND WITHIN 24 HOURS FOLLOWING A RAINFALL OF 0.5 INCHES OR GREATER. THE PURPOSE OF SITE INSPECTIONS IS TO ASSESS PERFORMANCE OF POLLUTANT CONTROLS. THE INSPECTIONS WILL BE CONDUCTED BY THE GENERAL CONTRACTOR OR DESIGNATED REPRESENTATIVE. BASED ON THESE INSPECTIONS, THE GENERAL CONTRACTOR WILL DECIDE WHETHER IT IS NECESSARY TO MODIFY THIS SWPPP, ADD OR RELOCATE SEDIMENT BARRIERS OR WHATEVER ELSE MAY BE NEEDED IN ORDER TO PREVENT POLLUTANTS FROM LEAVING THE SITE VIA STORM WATER RUNOFF. THE GENERAL CONTRACTOR HAS THE DUTY TO CAUSE POLLUTANT CONTROL MEASURES TO BE REPAIRED, MODIFIED, MAINTAINED, SUPPLEMENTED, OR WHATEVER ELSE IS NECESSARY IN ORDER TO ACHIEVE EFFECTIVE POLLUTANT CONTROL.

EXAMPLES OF PARTICULAR ITEMS TO EVALUATE DURING SITE INSPECTIONS ARE LISTED BELOW. THIS LIST IS NOT INTENDED TO BE COMPREHENSIVE. DURING EACH INSPECTION THE INSPECTOR MUST EVALUATE OVERALL POLLUTANT CONTROL SYSTEM PERFORMANCE AS WELL AS PARTICULAR DETAILS OF INDIVIDUAL SYSTEM COMPONENTS. ADDITIONAL FACTORS SHOULD BE CONSIDERED AS APPROPRIATE TO THE CIRCUMSTANCES.

LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE MUST BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING. A STABILIZED CONSTRUCTION ENTRANCE WILL BE CONSTRUCTED WHERE VEHICLE ENTER AND EXIT. THIS ENTRANCE WILL BE MAINTAINED OR SUPPLEMENTED AS NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE SITE ON VEHICLES.

SEDIMENT BARRIERS MUST BE INSPECTED AND, IF NECESSARY, THEY MUST BE ENLARGED OR CLEANED IN ORDER TO PROVIDE ADDITIONAL CAPACITY. ALL MATERIAL EXCAVATED FROM BEHIND SEDIMENT BARRIERS WILL BE STOCKPILED ON THE UP-SLOPE SIDE. ADDITIONAL SEDIMENT BARRIERS MUST BE CONSTRUCTED AS NEEDED.

INSPECTIONS WILL EVALUATE DISTURBED AREAS AND AREAS USED FOR STORING MATERIALS THAT ARE EXPOSED TO RAINFALL FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. IF NECESSARY, THE MATERIALS MUST BE COVERED OR ORIGINAL COVER MUST BE REPAIRED OR SUPPLEMENTED. ALSO, PROTECTIVE BERMS MUST BE CONSTRUCTED, IF NEEDED, IN ORDER TO CONTAIN RUNOFF FROM MATERIAL STORAGE AREAS.

GRASSED AREAS WILL BE INSPECTED TO CONFIRM THAT A HEALTHY STAND OF GRASS IS MAINTAINED. THE SITE IS CONSIDERED TO BE STABILIZED ONCE ALL AREAS ARE COVERED WITH BUILDING FOUNDATION OR PAVEMENT, OR HAVE A STAND OF GRASS WITH AT LEAST 70% DENSITY. THE DENSITY OF 70% OR GREATER MUST BE MAINTAINED TO BE CONSIDERED AS STABILIZED. AREAS MUST BE FERTILIZED, WATERED, AND RESEED AS NEEDED TO ACHIEVE THIS GOAL. ALL DISCHARGE POINTS MUST BE INSPECTED TO DETERMINE WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS.

EXAMPLE FOR MAINTENANCE ITEMS ARE LISTED BELOW. THIS LIST IS NOT INTENDED TO BE COMPREHENSIVE. ADDITIONAL PROCEDURES SHOULD BE CONSIDERED AS APPROPRIATE TO EACH INDIVIDUAL CIRCUMSTANCE.

- EROSION AND SEDIMENT CONTROL MEASURES THAT HAVE BEEN IMPROPERLY INSTALLED OR HAVE BEEN DISABLED, NON-CHESE REINFORCED DEFECTIVE REPAIRS MUST BE REPLACED OR CORRECTED IMMEDIATELY. MAINTENANCE AND REPAIRS WILL BE CONDUCTED WITHIN 24 HOURS OF INSPECTION REPORT.
- SEDIMENT WILL BE REMOVED FROM BEHIND THE FILTER FABRIC FENCE WHEN IT REACHES ABOUT 1/2" THE HEIGHT OF THE FENCE. SEDIMENT WILL BE REMOVED FROM AROUND THE INLET BARRIERS AND DIKES WHEN THE STORAGE CAPACITY HAS BEEN APPROXIMATELY 50% FILLED.
- BASED ON INSPECTION RESULTS, ANY MODIFICATION NECESSARY TO INCREASE THE EFFECTIVENESS OF THIS SWPPP TO AN ACCEPTABLE LEVEL MUST BE MADE WITHIN SEVEN CALENDAR DAYS OF THE INSPECTION. THE INSPECTION REPORTS MUST BE COMPLETED ENTIRELY AND ADDITIONAL REMARKS SHOULD BE INCLUDED IF NEEDED TO FULLY DESCRIBE A SITUATION. AN IMPORTANT ASPECT OF THE INSPECTION REPORT OR THE DESCRIPTION OF ADDITIONAL MEASURES THAT NEED TO BE TAKEN TO ENHANCE PLAN EFFECTIVENESS, THE INSPECTION REPORT MUST IDENTIFY WHETHER THE SITE WAS IN COMPLIANCE WITH THE SWPPP AT THE TIME OF INSPECTION AND SPECIFICALLY IDENTIFY ALL INCIDENTS OF NON-COMPLIANCE.
- INSPECTION REPORTS MUST BE KEPT ON FILE BY THE GENERAL CONTRACTOR AS AN INTEGRAL PART OF THIS SWPPP FOR AT LEAST THREE YEARS FROM THE DATE OF COMPLETION OF THE PROJECT.

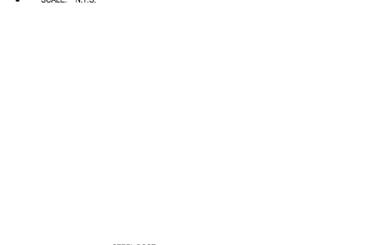
ULTIMATELY, IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ASSURE THE ADEQUACY OF SITE POLLUTANT DISCHARGE CONTROLS. ACTUAL PHYSICAL SITE CONDITIONS OR CONTRACTOR PRACTICES COULD MAKE IT NECESSARY TO INSTALL MORE STRUCTURAL CONTROLS THAN ARE SHOWN ON THE PLANS. FOR EXAMPLE, LOCALIZED CONCENTRATIONS OF RUNOFF COULD MAKE IT NECESSARY TO INSTALL ADDITIONAL SEDIMENT BARRIERS. ASSESSING THE NEED FOR ADDITIONAL CONTROLS AND IMPLEMENTING THEM OR ADJUSTING EXISTING CONTROLS WILL BE A CONTINUING ASPECT OF THIS SWPPP UNTIL THE SITE ACHIEVES FINAL STABILIZATION.

EROSION CONTROL MAINTENANCE

ALL MEASURES STATED ON THIS EROSION AND SEDIMENT CONTROL PLAN, AND IN THE SWPPP, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON AT LEAST ONCE EVERY FOURTEEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A 0.5" RAINFALL EVENT, AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

- INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.
- ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE RESEED, WATERED, AND RESEED AS NEEDED.
- SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-THIRD THE HEIGHT OF THE SILT FENCE.
- THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.
- THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AND STORAGE AREA.
- OUTLET STRUCTURES IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REACHED BY 50% OR AS REQUIRED BY THE CITY ENGINEER.

1 DOWELED CONSTRUCTION JOINT (DCJ)



2 INLET PROTECTION DETAIL



3 CONSTRUCTION ENTRANCE SIGN



SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE
(NOTE: GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR SPECIFIC PROJECT SCHEDULE)

CONSTRUCTION SEQUENCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
INSTALL STABILIZED CONSTRUCTION ENTRANCE (SCE) WITH APPROPRIATE SIGNAGE. THIS WILL BE THE FIRST CONSTRUCTION WORK ON THE PROJECT.												
INSTALL SILT FENCES AND INLET PROTECTION. CONTRACTOR SHALL INSURE THERE ARE SEDIMENT BARRIERS LOCATED DOWN-SLOPE FROM CONSTRUCTION ACTIVITIES THAT DISTURB SITE SOIL.												
CLEAR AND GRUB SITE ONLY AS NEEDED FOR CONSTRUCTION. CONTRACTOR SHALL NOT CLEAR AND GRUB AREAS WHERE CONSTRUCTION OPERATIONS DO NOT OCCUR.												
PRIOR TO CONSTRUCTION OF DIVERSION CHANNELS, CONSTRUCT STORM SEWER OUTFALLS PER PLANS.												
INSTALL INLET PROTECTION.												
CONSTRUCT SEDIMENTATION BASIN AND ROCK OUTLET DETAIL, PER PLANS.												
GRADE SITE ACCORDING TO GRADING PLAN.												
PREPARE SITE FOR BUILDING PAD AND CONSTRUCTION OF BUILDING.												
PREPARE SITE FOR PAVING.												
INSTALL UTILITIES.												
PAVE SITE.												
INSTALL PERMANENT SEEDING AND PLANTING.												
REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES ONLY IF SITE IS STABILIZED.												

CONTRACTOR/PROJECT MANAGER

LAV CONSTRUCTION
P.O. BOX 5300
TYLER, TEXAS 75712
(937) 471-1120

DISTURBED AREA

TOTAL DISTURBED AREA = 1.187 ac
PRE DEVELOPED SITE RUNOFF COEFFICIENT "C" = 0.35
POST DEVELOPED SITE RUNOFF COEFFICIENT "C" = 0.60
CONTRACTOR TO PROVIDE SWPPP AND N05 IN ACCORDANCE WITH TCEQ

ADDING/RELOCATING BMP'S

CONTRACTOR SHALL RELOCATE OR ADD TO THE EXISTING BMP'S AS NECESSARY TO ENSURE NO SEDIMENT LADEN RUNOFF EXITS THE SITE.

LOCATION OF OFF-SITE MATERIAL, WASTE, BORROW, FILL, OR EQUIPMENT STORAGE AREAS

CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE LOCATIONS OF OFF-SITE MATERIAL, WASTE, BORROW, FILL, OR EQUIPMENT STORAGE AREAS ON THIS SITE MAP AND ENSURING THAT EACH LOCATION HAS THE NECESSARY PERMITS IF NOT COVERED BY THESE PERMITS. GENERAL PERMIT FOR THIS PROJECT. THE SITE MAP SHALL BE REVISED AND DATED IF THESE LOCATIONS CHANGE.

SEEDING AND MULCHING NOTE

CONTRACTOR SHALL SEED AND MULCH ALL DISTURBED AREAS WITHIN THE SUBJECT BOUNDARY NOT PAVED OR OTHERWISE COVERED, PER THE SPECIFICATIONS. ALL AREAS DISTURBED OUTSIDE THE PROPERTY BOUNDARY SHALL ALSO BE SEEDED AND MULCHED AND COVER SHALL BE ESTABLISHED TO PREVENT EROSION. CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY WATERING UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED.

WEATHER NOTE

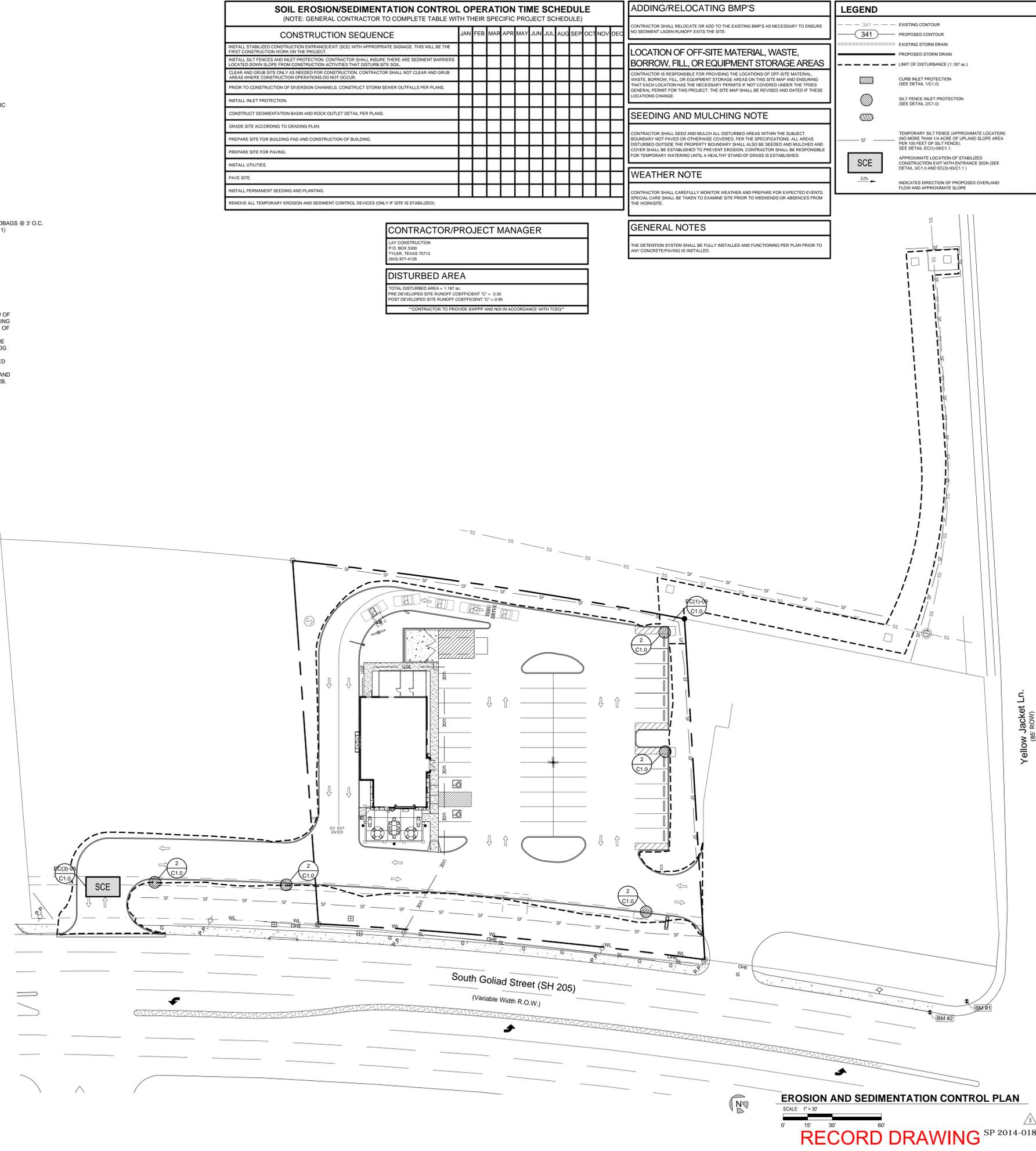
CONTRACTOR SHALL CAREFULLY MONITOR WEATHER AND PREPARE FOR EXPECTED EVENTS. SPECIAL CARE SHALL BE TAKEN TO EXAMINE SITE PRIOR TO WEEKENDS OR ABSENCES FROM THE WORKSITE.

GENERAL NOTES

THE DETENTION SYSTEM SHALL BE FULLY INSTALLED AND FUNCTIONING PER PLAN PRIOR TO ANY CONCRETE PAVING IS INSTALLED.

LEGEND

- 341 --- EXISTING CONTOUR
- 341 --- PROPOSED CONTOUR
- --- EXISTING STORM DRAIN
- --- PROPOSED STORM DRAIN
- --- LIMIT OF DISTURBANCE (1.187 ac.)
- --- CURB INLET PROTECTION (SEE DETAIL 2C1.0)
- --- SILT FENCE INLET PROTECTION (SEE DETAIL 2C1.0)
- SF --- TEMPORARY SILT FENCE (APPROXIMATE LOCATION) AND MORE THAN 14 ACRES OF UPLAND SLOPE AREA PER 100 FEET OF SILT FENCE (SEE DETAIL 2C1.0)
- SCE --- APPROXIMATE LOCATION OF STABILIZED CONSTRUCTION EXIT WITH ENTRANCE SIGN (SEE DETAIL 3C1.0 AND ECI09/3C1.1)
- 50% --- INDICATES DIRECTION OF PROPOSED OVERLAND FLOW AND APPROXIMATE SLOPE



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DESIGN/BUILD

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TBE FIRM 15355

STATE OF TEXAS
REGISTERED PROFESSIONAL ENGINEER
CHARLES A. THOMSON
88655

ADQ

Restaurant

AMERICAN DAIRY QUEEN
MINNEAPOLIS, MN U.S.A.
REGISTERED U.S. PATENT OFFICE.
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BUILDING TYPE: DAIRY QUEEN TEXAS

NEW BUILDING

DAIRY QUEEN

1801 SOUTH GOLIAD STREET
ROCKWALL, TEXAS 75087

Yellow Jacket Ln. (66' R.O.W.)

REVISIONS

NO.	DATE
1	10-15-2014
2	01-07-2015
3	01-23-2015
4	04-17-2015

DATE: 08/27/2014

PROJECT NO. **LAY 11 002**

SHEET NO. C1.0

ISSUED FOR PERMIT
E&S CONCRCL PLAN

EROSION AND SEDIMENTATION CONTROL PLAN
SCALE: 1" = 30'
0' 15' 30' 60'

RECORD DRAWING SP 2014-018

DISCLAIMER: This standard is governed by the Texas Engineering Practice Act. No warranty of any kind is made by the Engineer for the use of this standard for any purpose other than that intended. The use of this standard for any other purpose is at the user's risk.

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SECTION A-A

Filter fabric 3' min. width
 Backfill & hand ramp
 Embed posts 18" min. or anchor if in rock

GENERAL NOTES

- The guidelines shown hereon are suggestions only and may be modified by the Engineer.

PLAN SHEET LEGEND

Sediment Control Fence — SCF

SEDIMENT CONTROL FENCE USAGE GUIDELINES

A sediment control fence may be constructed near the downstream perimeter of a disturbed area along a contour to intercept sediment from overland runoff. A 2 year storm frequency may be used to calculate the flow rate to be filtered.

Sediment control fence should be sized to filter a max. flow through rate of 100 GPM/FT. Sediment control fence is not recommended to control erosion from a drainage area larger than 2 acres.

Hinge Joint Knot Woven Mesh (Option)

Galv. Hinge joint knot woven mesh (12.5 Ga. Min.) requires a minimum of five horizontal wires spaced at a max. 12 inches apart and all vertical wires spaced at a max. 12 inches apart.

Connect the ends of successive reinforcement sheets or rolls a min. of 6 times with hog rings.
 Attach the wire mesh & fabric on end posts using 4 evenly spaced staples for wooden posts (or 4 T-clips or sewn vertical pockets for steel posts).
 Galv. Welded wire mesh (W.W.M.) with a max. opening size of 2" x 4" or Woven Mesh (W.M.) (See Detail)
 Woven filter fabric
 Place 4" to 6" of fabric against the trench side and approx. 2" across trench bottom in upstream direction. Minimum trench size shall be 6" square. Backfill and hand ramp.

TEMPORARY SEDIMENT CONTROL FENCE

SCF

SECTION B-B

Wire, nylon or polypropylene binding
 Flow
 4" min. to 1/2 height of bale

PLAN VIEW

Overlap tops of Hay Bales
 Angle stakes toward lower adjacent bale
 Ditch Flowline

PROFILE VIEW

Angle stakes toward adjacent bale
 4" min. to 1/2 height of bale
 Fill voids between bales with hay or 3/4" Dia. rebar or 2" x 2" wood stakes

BALED HAY FOR EROSION CONTROL

BH

GENERAL NOTES

- Hay bales shall be a minimum of 30" in length and weigh a minimum of 50 Lbs.
- Hay bales shall be bound by either wire or nylon or polypropylene string. The bales shall be composed entirely of vegetative matter.
- Hay bales shall be embedded in the soil a minimum of 4" and where possible 1/2 the height of the bale.
- Hay bales shall be placed in a row with ends tightly abutting the adjacent bales. The bales shall be placed with bindings parallel to the ground.
- Hay bales shall be securely anchored in place with 3/4" Dia. rebar or 2" x 2" wood stakes, or even through the bales. The first stake shall be angled towards the previously laid bale to force the bales together.
- The guidelines shown hereon are suggestions only and may be modified by the Engineer.

BALED HAY USAGE GUIDELINES

A Baled Hay installation may be constructed near the downstream perimeter of a disturbed area along a contour to intercept sediment from overland runoff. A two year storm frequency may be used to calculate the flow rate to be filtered. Installation should be sized to filter a maximum flow thru rate of 5 GPM/FT of cross sectional area. Baled hay may be used at the following locations:

- Where the runoff approaching the baled hay flows over disturbed soil for less than 100'. If the slope of the disturbed soil exceeds 10%, the length of slope upstream the baled hay should be less than 50'.
- Where the installation will be required for less than 3 months.
- Where the contributing drainage area is less than 1/2 acre.

For Baled Hay installations in small ditches, the additional following considerations apply:

- The ditch sideslopes should be graded as flat as possible to maximize the drainage flowrate thru the hay.
- The ditch should be graded large enough to contain the overtopping drainage when sediment has filled to the top of the baled hay.

Bales should be replaced usually every 2 months or more often during wet weather when loss of structural integrity is accelerated.

PLANS SHEET LEGEND

Baled Hay — BH

Texas Department of Transportation
 Design Division Standard

TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES FENCE & BALED HAY

EC (1) - 09

FILE	DATE	BY	CHK	APP	DATE	BY	CHK	APP
171007	JUNE 1993	DAVE	DAVE	JOB				
REVISIONS								
		ISS	OWNER					SHEET NO.

CONSTRUCTION EXIT (TYPE 1)

Drain to sediment trapping device
 50' Min.
 14' Min.
 Coarse Aggregate
 PLAN

4' Min.
 50' Min.
 4' Min.
 Approach transition
 Approach transition
 Foundation course
 6' min.
 8" Min.
 PROFILE

CONSTRUCTION EXIT (TYPE 2)

Drain to sediment trapping device
 50' Min.
 10' Min.
 2" x 6"
 Treated timber plank
 PLAN

2" x 10"
 Railroad ties
 Typical dimensions 8' X 10' X 8"
 PLAN

4' Min.
 50' Min.
 4' Min.
 Approach transition
 Approach transition
 Foundation course
 6' min.
 PROFILE

GENERAL NOTES

- The length of the type 1 construction exit shall be as indicated on the plans, but not less than 50'.
- The coarse aggregate should be open graded with a size of 4" to 8".
- The approach transitions should be no steeper than 6:1 and constructed as directed by the Engineer.
- The construction exit foundation course shall be flexible base, bituminous concrete, portland cement concrete or other material as approved by the Engineer.
- The construction exit shall be graded to allow drainage to a sediment trapping device.
- The guidelines shown hereon are suggestions only and may be modified by the Engineer.

GENERAL NOTES

- The length of the type 2 construction exit shall be as indicated on the plans, but not less than 50'.
- The treated timber planks shall be attached to the railroad ties with 1/2" x 6" min. lag bolts. Other fasteners may be used as approved by the Engineer.
- The treated timber planks shall be #2 grade min., and should be free from large and loose knots.
- The approach transitions shall be no steeper than 6:1 and constructed as directed by the Engineer.
- The construction exit foundation course shall be flexible base, bituminous concrete, portland cement concrete or other material as approved by the Engineer.
- The construction exit should be graded to allow drainage to a sediment trapping device.
- The guidelines shown hereon are suggestions only and may be modified by the Engineer.

CONSTRUCTION EXIT (TYPE 3)

Stabilized Driveway
 R.O.W.
 20' Min.
 2" x 8" treated timbers nailed onto abutted ends of wood sheets
 PLAN

Disturbed Soil Area
 1/2" Min. thick plywood or pressed wafer board sheets
 Paved Roadway
 PLAN

2" x 8" Timbers Nailed onto ends of wood sheets
 Disturbed soil
 16 Penny Nails @ 1' on centers.
 1/2" Min. thick treated plywood or pressed wafer board sheets
 SECTION A-A

GENERAL NOTES

- The length of the type 3 construction exit shall be as shown on the plans, or as directed by the Engineer.
- The type 3 construction exit may be constructed from open graded crushed stone with a size of two to four inches spread a min. of 4" thick to the limits shown on the plans.
- The treated timber planks shall be #2 grade min., and should be free from large and loose knots.
- The guidelines shown hereon are suggestions only and may be modified by the Engineer.

CONSTRUCTION EXITS EC (3) - 93

FILE	DATE	BY	CHK	APP	DATE	BY	CHK	APP
171007	JUNE 1993	DAVE	DAVE	JOB				
REVISIONS								
		ISS	OWNER					SHEET NO.

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LAY
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 LONGVIEW, TX 75605
 903.212.2856
 te-services.com
 TBE FIRM 13535

STATE OF TEXAS
 CHARLES A. THOMSON
 88659
 REGISTERED PROFESSIONAL ENGINEER

ADQ
 Restaurant

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BUILDING TYPE:
 DAIRY QUEEN
 TEXAS

NEW BUILDING
DAIRY QUEEN
 1801 SOUTH GOLIAD STREET
 ROCKWALL, TEXAS 75087

NO.	DATE
1	10-15-2014
2	01-07-2015
3	01-23-2015
4	04-17-2015

DATE:
 08/27/2014

PROJECT NO.
 LAY 14 002

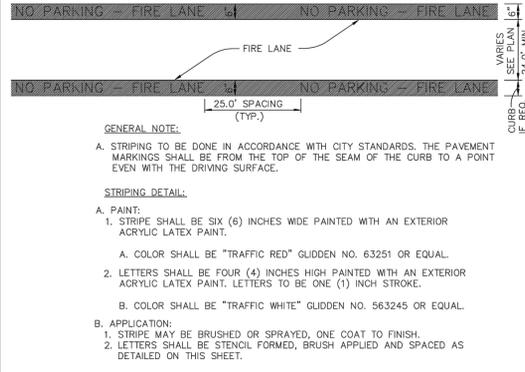
SHEET NO.
C1.1

ISSUED FOR PERMIT
 E&S CONCRCL DETAILS

BENCH MARK					
BM #	PT #	ELEVATION	NORTHING	EASTING	DESCRIPTION
BM #1	11	579.03	7021194.79	2596795.46	X IN CONC
BM #2	12	579.14	7021206.98	2596775.46	X IN CONC

C1 Curve Information	
Radius	2,942.92'
Chord Bearing	N 36°44'44" W
Chord Distance	236.63'
Arc Distance	236.70'

C2 Curve Information	
Radius	2,942.91'
Chord Bearing	S 33°35'41" E
Chord Distance	241.48'
Arc Distance	241.55'



ACCESSIBILITY NOTE

- PROPOSED CONSTRUCTION ON THIS SITE SHALL COMPLY WITH THE LATEST REVISION OF THE ADA REGULATIONS AND THE TEXAS ACCESSIBILITY STANDARDS (TAS).
- ACCESSIBILITY ROUTES SHALL NOT HAVE A CROSS SLOPE GREATER THAN 2.0% (1:50).
- ACCESSIBILITY ROUTE SURFACE SHALL BE SLIP RESISTANT AND CONSTRUCTED IN A MANNER THAT WILL NOT RETAIN WATER AND BE MINIMUM OF 3 FEET WIDE.
- ACCESSIBILITY ROUTES WITH RUNNING SLOPE GREATER THAN 5% (1:20) RAMP AND SHALL BE CONSTRUCTED WITH HANDRAILS AND 5x5 LANDINGS. RAMP SLOPE SHALL NOT EXCEED 8.3% (1:12).
- SURFACE OF CURB RAMP SHALL BE CONSTRUCTED WITH ADA COMPLIANT SURFACE TEXTURE AND CONTRASTING COLOR. RAMP SLOPE SHALL NOT EXCEED 8.3% (1:12). CURB RAMP SHALL NOT EXCEED 6" IN LENGTH.
- ACCESSIBLE PARKING SPACE SLOPE SHALL NOT EXCEED 2.0% (1:50) IN ALL DIRECTIONS. ADA COMPLIANT SIGNAGE SHALL BE PROVIDED FOR EACH ACCESSIBLE SPACE.

ONE CALL SYSTEM

AS REQUIRED BY LAW ONE CALL SYSTEM MUST BE CONTACTED AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION OPERATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE LOCAL ONE CALL SYSTEM CALL 811 FOR LOCAL OR VISIT WWW.CALL811.ORG FOR A LIST OF ALL OTHER 8000 NUMBERS.

CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS PUT ON NOTICE THAT THERE MAY BE NUMEROUS UNDERGROUND UTILITIES IN THE LINE OF WORK, SUCH AS WATER, SEWER, GAS, PIPELINE, TELEPHONE AND ELECTRICAL. SOME MAY BE ABANDONED WHILE MANY ARE ACTIVE. EXISTING UTILITIES SHOWN ON THE PLANS REPRESENT A DILIGENT EFFORT TO SHOW THEIR APPROXIMATE LOCATION.

THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN CONDUCTING EXCAVATION OPERATIONS. DAMAGES SHALL BE REPAIRED IMMEDIATELY AT CONTRACTOR'S EXPENSE.

THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST FIELD LOCATION OF UTILITIES.

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENT SHOWN ON THE PLANS.

PERMITS NOTE

CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED BY FEDERAL, STATE, OR LOCAL CODES AND/OR UTILITY SERVICE COMPANIES PRIOR TO START OF CONSTRUCTION.

INSPECTIONS/CERTIFICATIONS NOTE

ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY LOCAL CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO SUBSTANTIAL PROJECT COMPLETION.

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LAY DESIGN/BUILD

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TPE FIRM 15355

STATE OF TEXAS
REGISTERED PROFESSIONAL ENGINEER
CHARLES A. THOMSON
88659

ADQ Restaurant

AMERICAN DAIRY QUEEN
MINNEAPOLIS, MN U.S.A.
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BUILDING TYPE:
DAIRY QUEEN
TEXAS

NEW BUILDING
DAIRY QUEEN
1801 SOUTH GOLIAD STREET
ROCKWALL, TEXAS 75087

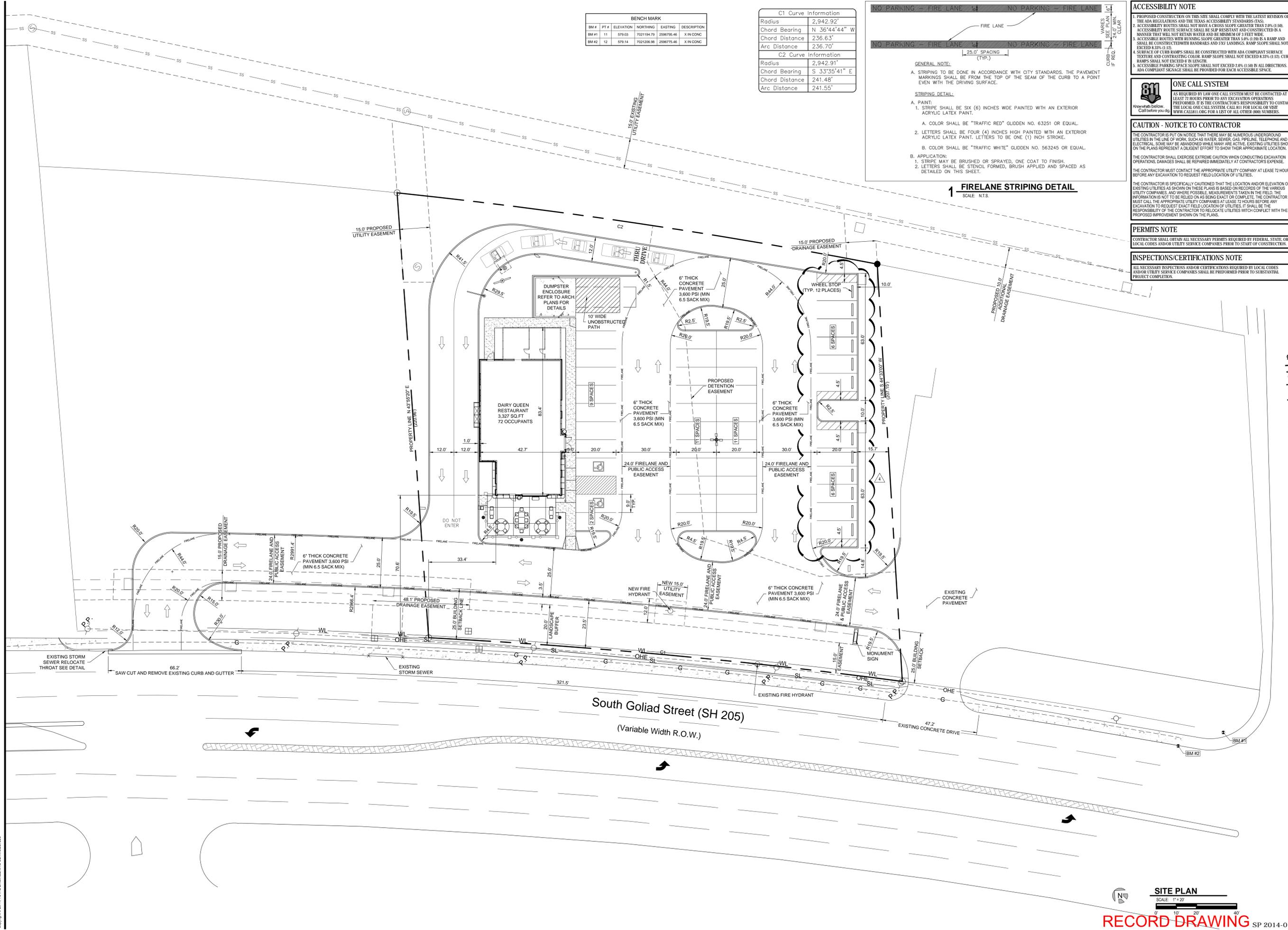
NO.	DATE
1	10-15-2014
2	01-07-2015
3	01-23-2015
4	02-10-2015
5	02-26-2015

DATE:
08/27/2014

PROJECT NO.
LAY 14 002

SHEET NO.
C2.0

ISSUED FOR CITY REVIEW
SITE PLAN



Filename: P:\LAY 14 002 - Lay Construction - DO Rockwall TX\CD\July 14 002 - SITE PLAN.dwg
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RECORD DRAWING SP 2014-018

LEGEND	
---	GAS
---	OHE
---	SS
---	W
---	UGE
---	GAS LINE
---	OVERHEAD ELECTRIC LINE
---	UNDER GROUND ELECTRIC LINE
---	SANITARY SEWER LINE
---	STORM SEWER LINE
---	WATER LINE
---	LIGHTING CIRCUIT CONDUIT
---	POWER POLE
---	EXISTING MANHOLE
---	EXISTING FIRE HYDRANT
---	WATER METER
---	WATER VALVE
---	LIGHT POLE

ONE CALL SYSTEM
 AS REQUIRED BY LAW ONE CALL SYSTEM MUST BE CONTACTED AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION OPERATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE LOCAL ONE CALL SYSTEM. CALL 811 FOR LOCAL OR VISIT WWW.CALL811.ORG FOR A LIST OF ALL OTHER (800) NUMBERS.

CAUTION - NOTICE TO CONTRACTOR
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PERMITS NOTE
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INSPECTIONS/CERTIFICATIONS NOTE
 ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY LOCAL CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO SUBSTANTIAL PROJECT COMPLETION.

BACKFLOW PREVENTER DEVICES NOTE
 BACKFLOW PREVENTER DEVICES (BUILDING POTABLE FIRE AND IRRIGATION) MUST BE TESTED UPON INSTALLATION BY A CONTRACTOR WHO IS REGISTERED WITH THE CITY OF ROCKWALL FOR THE APPROPRIATE TYPE OF BACKFLOW TESTING AND SUBMIT REPORT TO THE BUILDING INSPECTION DEPT.

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 TYPE FIRM 13355



Restaurant
 AMERICAN DAIRY QUEEN
 MINNEAPOLIS, MN U.S.A.
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BUILDING TYPE:
 DAIRY QUEEN
 TEXAS

NEW BUILDING DAIRY QUEEN
 1801 SOUTH GOLIA STREET
 ROCKWALL, TEXAS 75087

NO.	DATE
1	10-15-2014
2	01-07-2015
3	01-23-2015
4	06-03-2015

DATE:
 08/27/2014

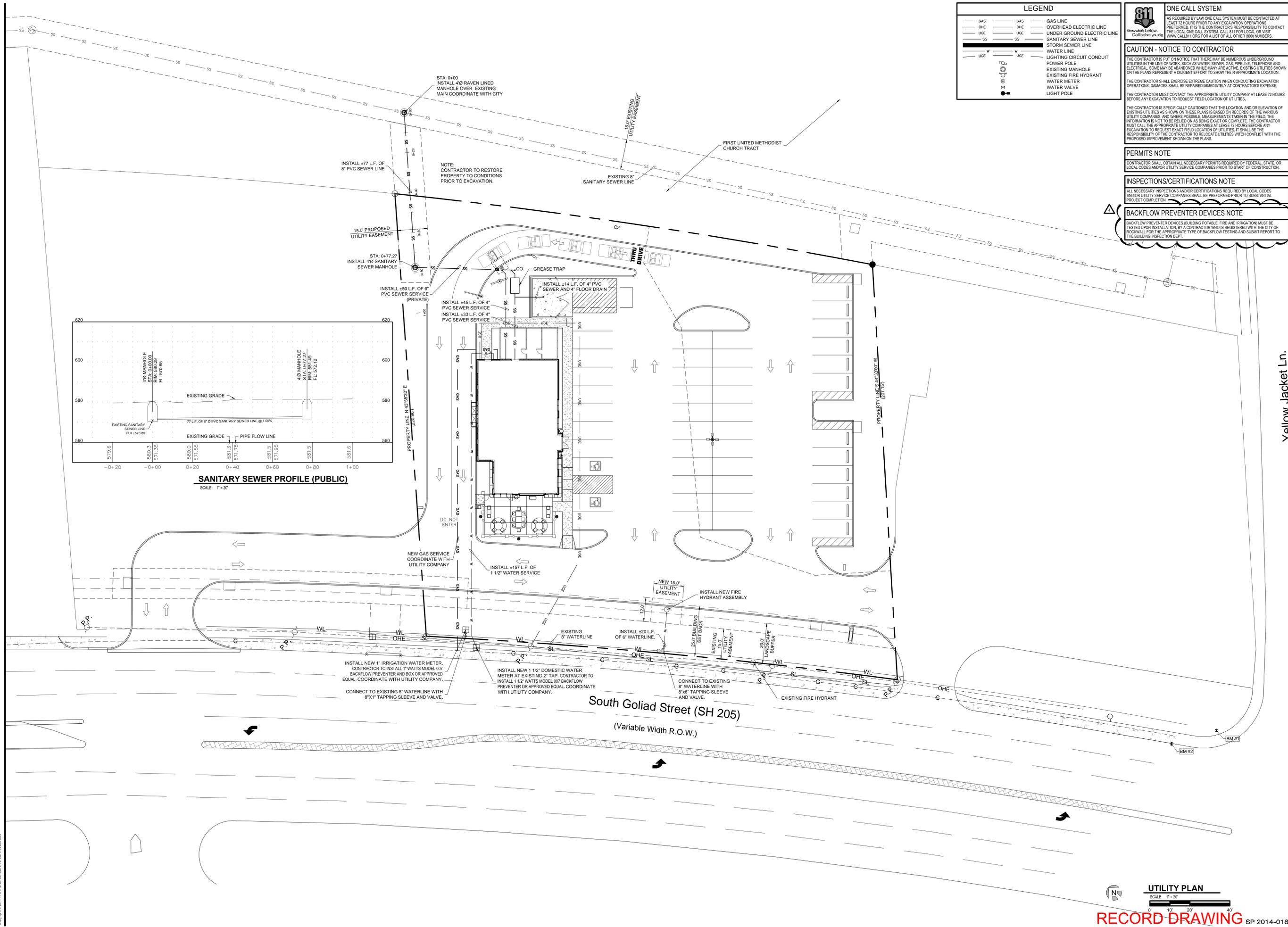
PROJECT NO.
 LAY 14 002

SHEET NO.
C3.0

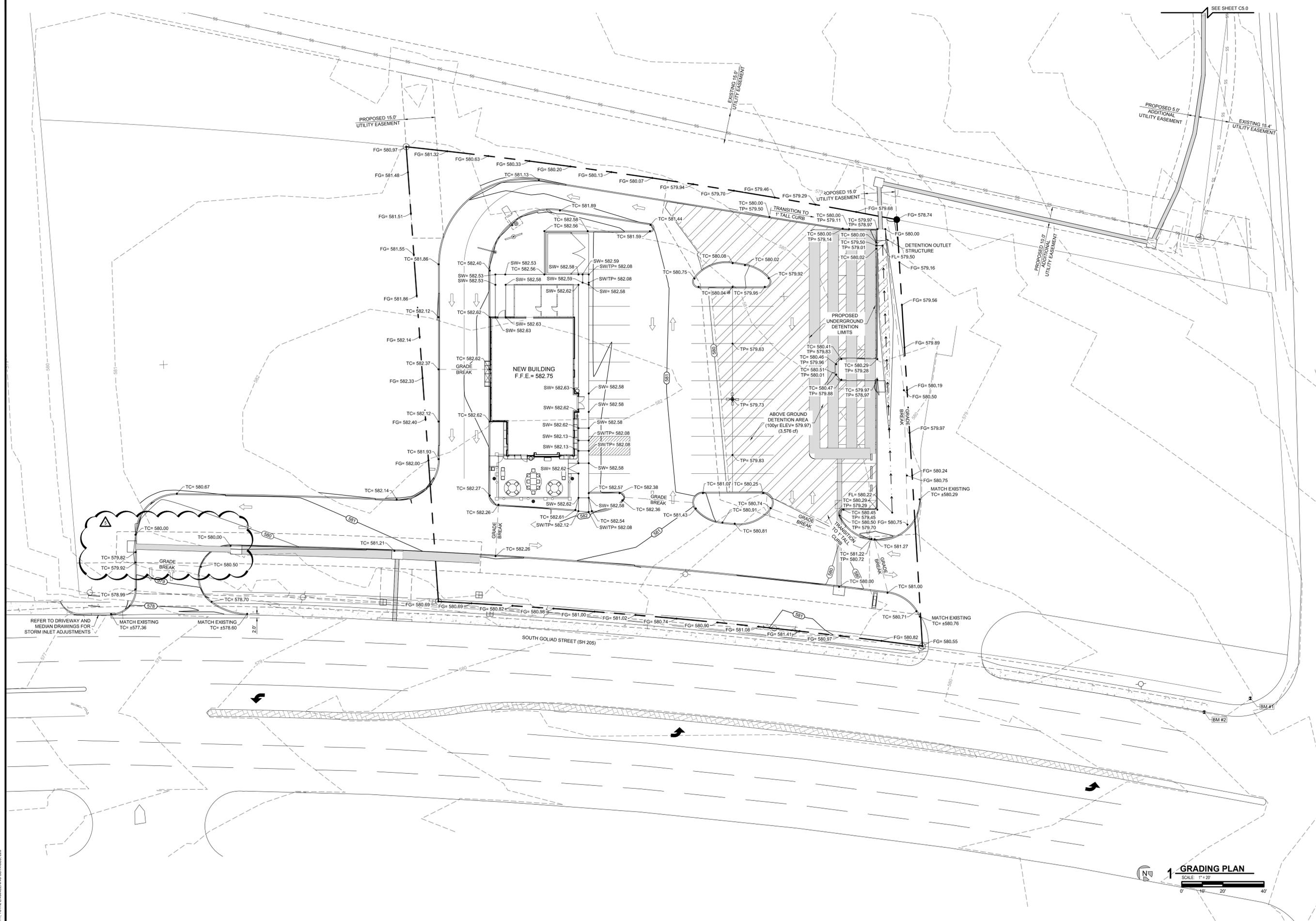
ISSUED FOR PERMIT
 UTILITY PLAN

UTILITY PLAN
 SCALE: 1" = 20'

RECORD DRAWING SP 2014-018



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BUILDING TYPE:
 DAIRY QUEEN
 TEXAS

NEW BUILDING DAIRY QUEEN
 1801 SOUTH GOLIAD STREET
 ROCKWALL, TEXAS 75087

NO.	DATE
1	10-15-2014
2	01-07-2015
3	01-23-2015
4	02-10-2015
5	09-22-2015

DATE:
 08/27/2014

PROJECT NO.
 LAY 14 002

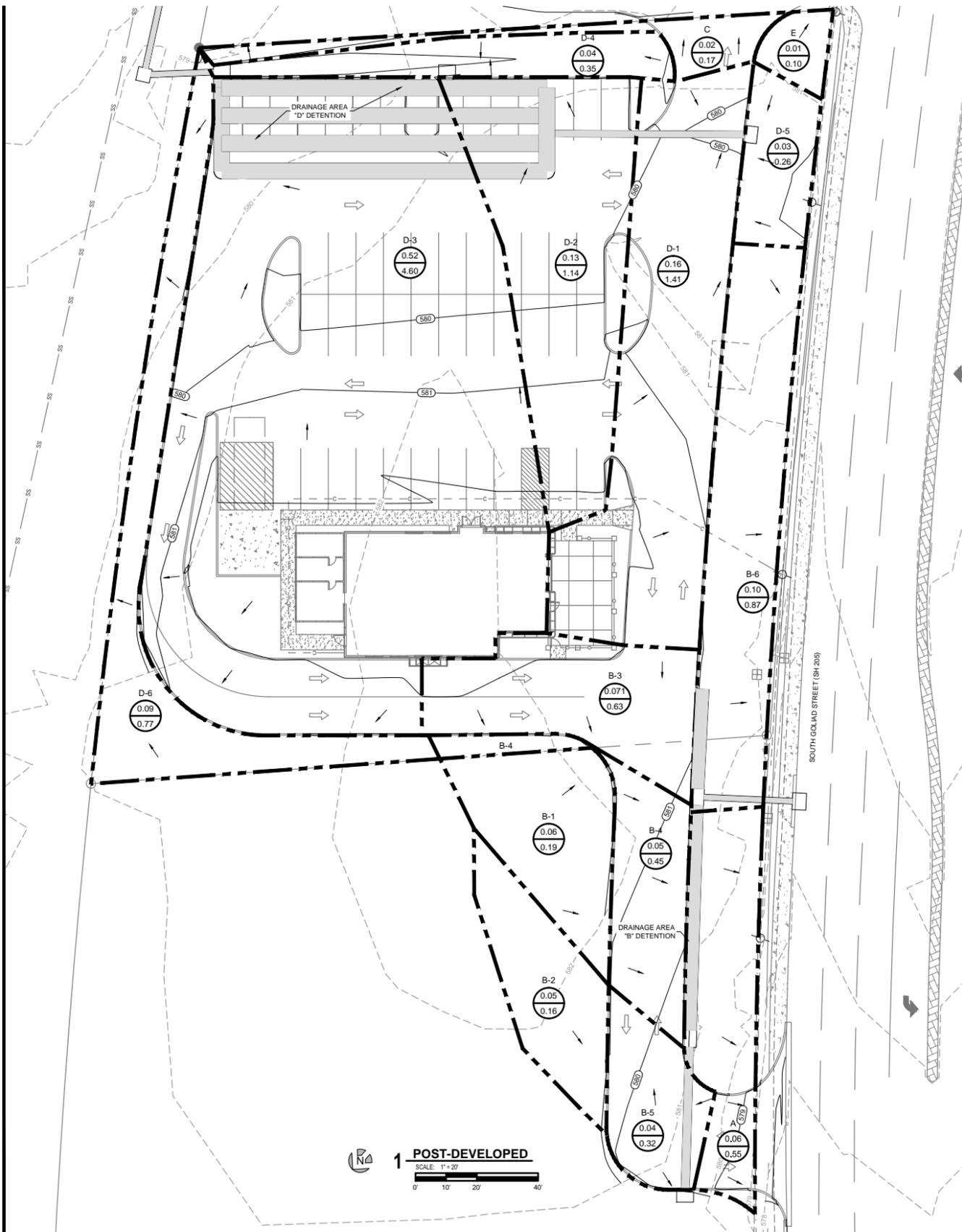
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C4.0

ISSUED FOR CITY REVIEW
 GRADING PLAN

1 GRADING PLAN
 SCALE: 1"=20'

RECORD DRAWING SP 2014-018

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POST-DEVELOPED RUNOFF CALCULATIONS - RATIONAL METHOD

DRAINAGE AREA ID	DRAINAGE AREA ACRES	RUNOFF COEFFICIENT C	TIME OF CONCENTRATION MIN.	INTENSITY				POND OUTLET				TOTAL RUNOFF				POND				
				5-YEAR IN/HR	10-YEAR IN/HR	25-YEAR IN/HR	100-YEAR IN/HR	5-YEAR CFS	10-YEAR CFS	25-YEAR CFS	100-YEAR CFS	5-YEAR CFS	10-YEAR CFS	25-YEAR CFS	100-YEAR CFS					
A	0.062	0.90	10	6.2	7.5	8.3	9.8	0.35	0.42	0.46	0.55									
B-1	0.055	0.35	10	6.2	7.5	8.3	9.8	0.12	0.14	0.16	0.19									
B-2	0.046	0.35	10	6.2	7.5	8.3	9.8	0.10	0.12	0.13	0.16									
B-3	0.071	0.90	10	6.2	7.5	8.3	9.8	0.40	0.48	0.53	0.63	0.33	0.33	0.44	0.59	0.88	1.00	1.18	1.46	B
B-4	0.051	0.90	10	6.2	7.5	8.3	9.8	0.28	0.34	0.38	0.45									
B-5	0.036	0.90	10	6.2	7.5	8.3	9.8	0.20	0.24	0.27	0.32									
B-6	0.099	0.90	10	6.2	7.5	8.3	9.8	0.55	0.67	0.74	0.87									
C	0.020	0.90	10	6.2	7.5	8.3	9.8	0.11	0.13	0.15	0.17									
D-1	0.160	0.90	10	6.2	7.5	8.3	9.8	0.89	1.08	1.20	1.41									
D-2	0.129	0.90	10	6.2	7.5	8.3	9.8	0.72	0.87	0.96	1.14	0.24	0.24	0.32	1.14	0.72	0.82	0.97	1.93	D
D-3	0.521	0.90	10	6.2	7.5	8.3	9.8	2.91	3.52	3.89	4.60									
D-4	0.040	0.90	10	6.2	7.5	8.3	9.8	0.22	0.27	0.30	0.35									
D-5	0.029	0.90	10	6.2	7.5	8.3	9.8	0.16	0.20	0.22	0.26									
D-6	0.087	0.90	10	6.2	7.5	8.3	9.8	0.49	0.59	0.65	0.77									
E	0.011	0.90	10	6.2	7.5	8.3	9.8	0.06	0.07	0.08	0.10									

LEGEND

- 100 --- EXISTING CONTOUR
- 100 --- PROPOSED CONTOUR
- DRAINAGE AREA BOUNDARY
- A --- DRAINAGE AREA DESIGNATION
- XX --- DRAINAGE AREA (Ac.)
- XX --- RUNOFF 100yr (C.F.S.)

PRE-DEVELOPED RUNOFF CALCULATIONS - RATIONAL METHOD

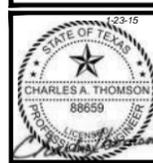
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				5-YEAR IN/HR	10-YEAR IN/HR	25-YEAR IN/HR	100-YEAR IN/HR	5-YEAR CFS	10-YEAR CFS	25-YEAR CFS	100-YEAR CFS
A	0.223	0.35	20	5.0	5.7	6.7	8.3	0.39	0.44	0.52	0.65
B	0.502	0.35	20	5.0	5.7	6.7	8.3	0.88	1.00	1.18	1.46
C	0.312	0.35	20	5.0	5.7	6.7	8.3	0.55	0.62	0.73	0.91
D	0.413	0.35	20	5.0	5.7	6.7	8.3	0.72	0.82	0.97	1.20
E	0.064	0.35	20	5.0	5.7	6.7	8.3	0.11	0.13	0.15	0.19

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BUILDING TYPE: DAIRY QUEEN TEXAS

NEW BUILDING
DAIRY QUEEN
1801 SOUTH GOLIAD STREET
ROCKWALL, TEXAS 75087

REVISIONS

NO.	DATE
1	10-15-2014
2	01-07-2015
3	01-23-2015

DATE: 08/27/2014

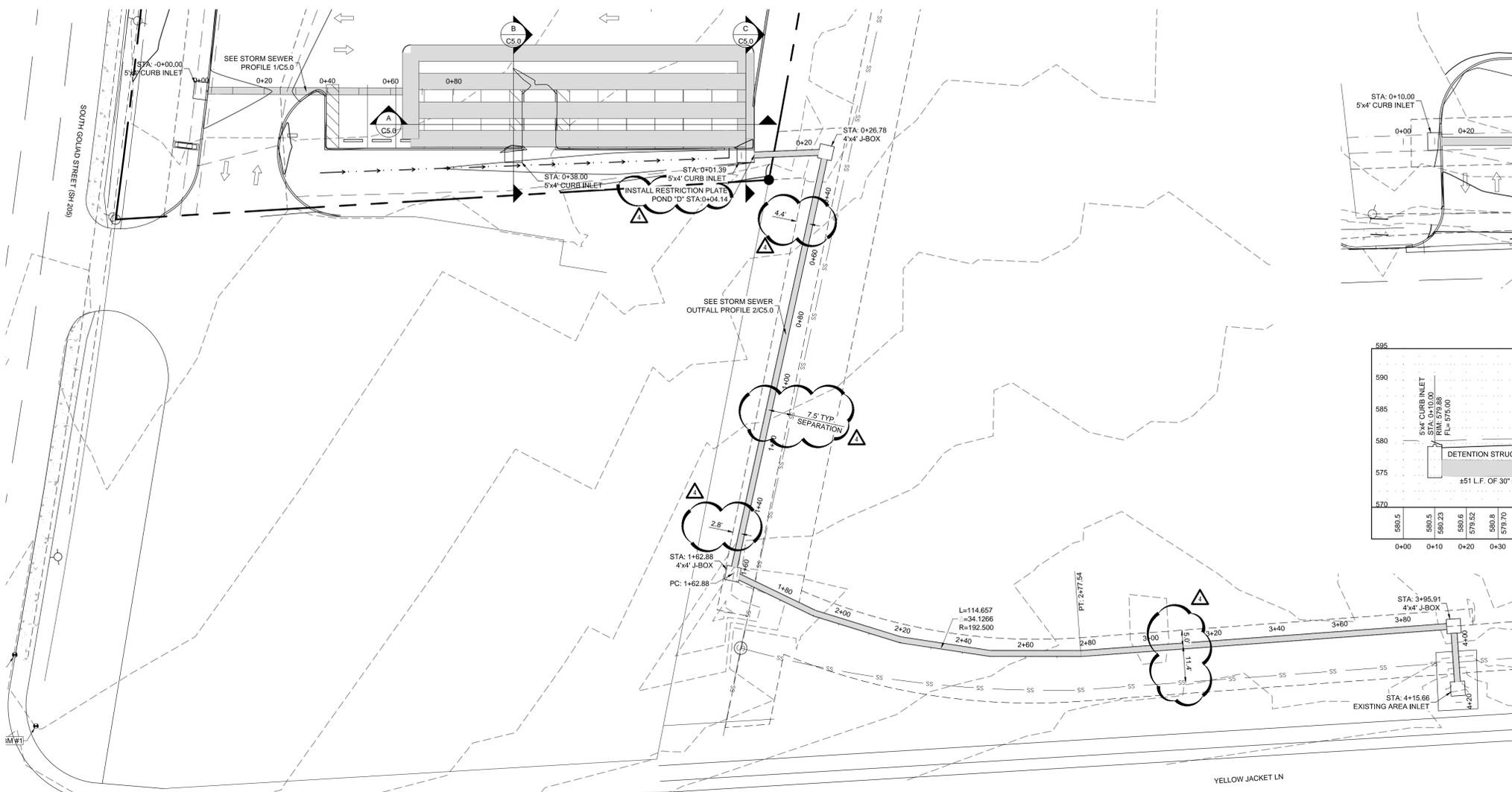
PROJECT NO. LAY 14 002

SHEET NO. C4.1

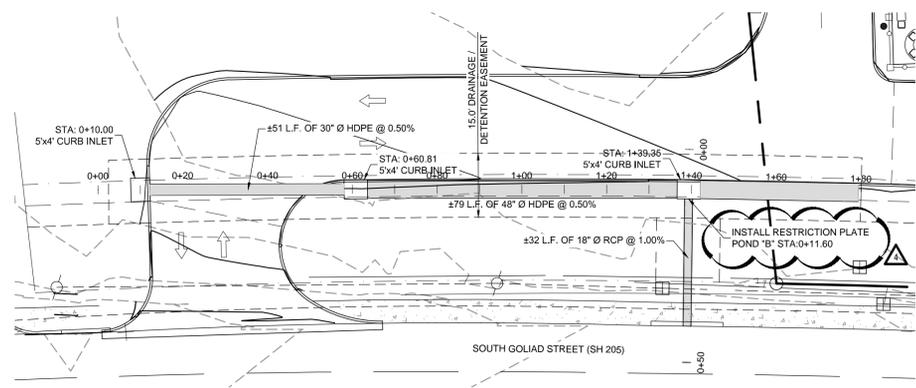
ISSUED FOR PERMIT DRAINAGE PLAN

RECORD DRAWING

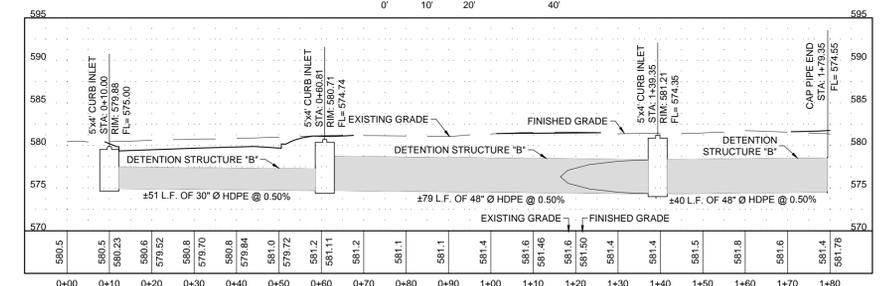
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 Pinned: 1/23/2015 9:02:22 AM
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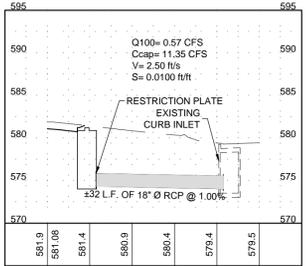
STORM SEWER PLAN
SCALE: 1" = 20'



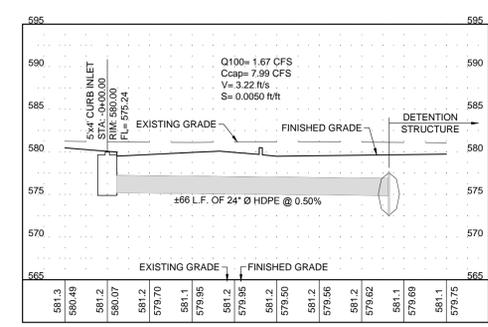
STORM SEWER PLAN
SCALE: 1" = 20'



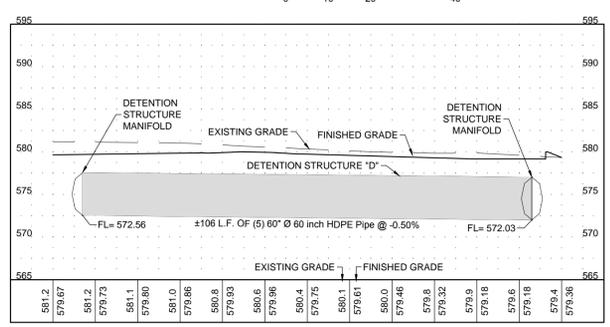
STORM SEWER PROFILE
SCALE: H: 1" = 20' V: 1" = 10'



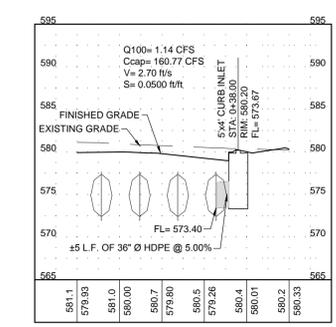
STORM SEWER PROFILE
SCALE: H: 1" = 20' V: 1" = 10'



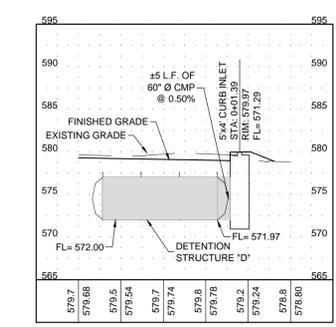
PRIVATE STORM SEWER PROFILE
SCALE: H: 1" = 20' V: 1" = 10'



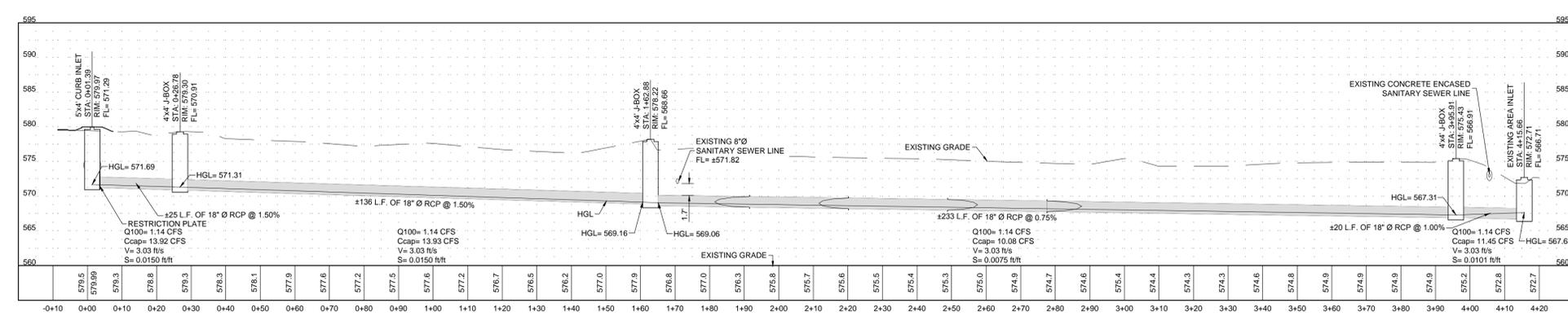
A DETENTION STRUCTURE SECTION
SCALE: H: 1" = 20' V: 1" = 10'



B DETENTION STRUCTURE SECTION
SCALE: H: 1" = 20' V: 1" = 10'

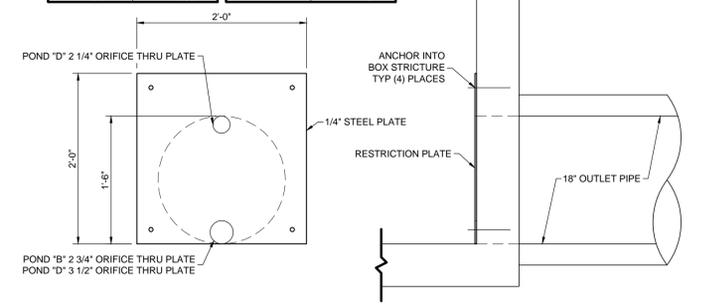


C DETENTION STRUCTURE SECTION
SCALE: H: 1" = 20' V: 1" = 10'



STORM SEWER OUTFALL PROFILE
SCALE: H: 1" = 20' V: 1" = 10'

POND 'B'		POND 'D'	
ALLOWABLE	ACTUAL	ALLOWABLE	ACTUAL
Q5=0.31	Q5=0.30	Q5=0.65	Q5=0.58
Q10=0.36	Q10=0.31	Q10=0.75	Q10=0.62
Q25=0.45	Q25=0.33	Q25=0.92	Q25=0.69
Q100=0.57	Q100=0.38	Q100=1.14	Q100=1.13



RESTRICTION PLATE DETAIL
SCALE: N.T.S.

RECORD DRAWING

P. O. Box 5300
TYLER TX 75712
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F 903.877.4449
www.layconstruct.com

LAY
DESIGN / BUILD

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te-services.com

TPE FIRM 13533

STATE OF TEXAS
REGISTERED PROFESSIONAL ENGINEER
CHARLES A. THOMSON
88659

DQ
Restaurant
AMERICAN DAIRY QUEEN
MINNEAPOLIS, MN U.S.A.
REGISTERED U.S. PATENT OFFICE.
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BUILDING TYPE:
DAIRY QUEEN
TEXAS

NEW BUILDING
DAIRY QUEEN
1801 SOUTH GOLIAD STREET
ROCKWALL, TEXAS 75087

NO.	DATE
1	10-15-2014
2	01-07-2015
3	01-23-2015
4	02-10-2015

DATE:
08/27/2014

PROJECT NO.
LAY 1002

SHEET NO.
C5.0

ISSUED FOR CITY REVIEW
STORM SEWER PLAN
AND PROFILE

File Name: P:\LAY\14002_LAY Construction - 00 Rockwall TCO\2014\1402_GROUNDWORK\DWG
Printed: 2/10/2015 2:28:45 PM
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AMERICAN DAIRY QUEEN MINNEAPOLIS, MN U.S.A.
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ROCKWALL, TEXAS 75087

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NO.	DATE
1	10-15-2014
2	01-07-2015
3	01-23-2015

DATE:
08/27/2014

PROJECT NO.
LAY 14 002

SHEET NO.
C6.0

ISSUED FOR PERMIT
GENERAL DETAILS

GENERAL PAVING JOINT NOTES

CONTROL JOINTS SHALL BE SAW CUT INTO THE CONCRETE WITHIN 12 HOURS AFTER CONCRETE IS POURED.

THE CONTROL JOINT PATTERN SHALL DIVIDE THE PAVEMENT INTO PANELS THAT ARE APPROXIMATELY SQUARE. THE LENGTH OF A PANEL MAY BE 25 PERCENT GREATER THAN THE WIDTH MAX.

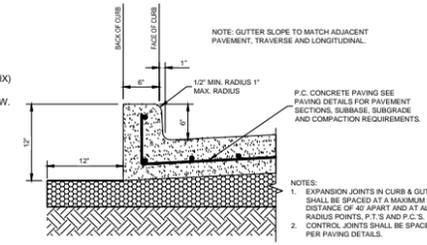
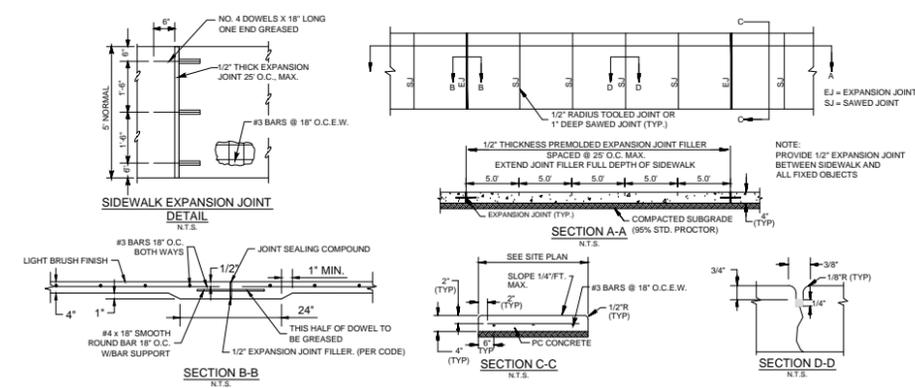
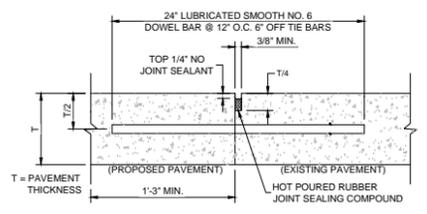
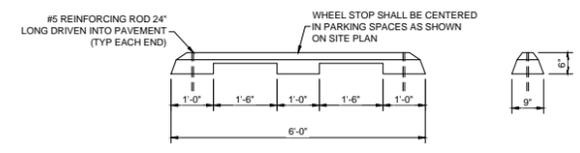
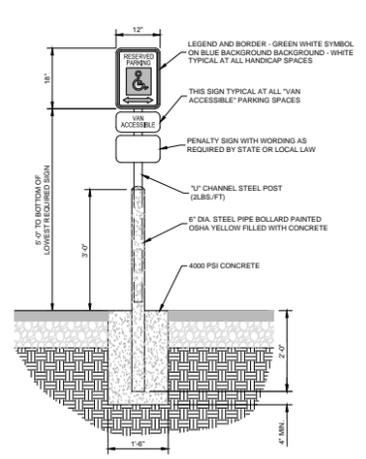
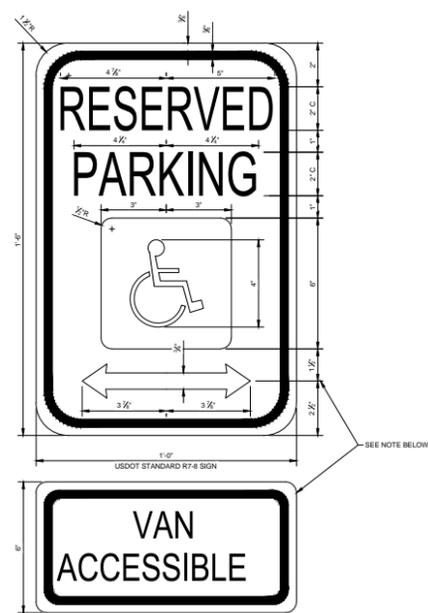
UNLESS OTHERWISE SHOWN ON PLANS, ABSOLUTE MAXIMUM JOINT SPACING SHALL BE PER CHART BELOW.

CONCRETE THICKNESS (INCHES)	MAXIMUM JOINT SPACING (FEET)
3.5	7.0
4.0	8.0
4.5	9.0
5.0	10.0
5.5	11.0
6.0	12.0
6.5	13.0
7.0	14.0
7.5	15.0
OVER 7.5	15.0

WHEN TRANSVERSE CONSTRUCTION JOINTS ARE NEEDED, THEY SHALL BE INSTALLED AT CONTRACTION JOINT LOCATIONS IF POSSIBLE.

THE JOINT FILLER FOR ISOLATION JOINTS SHALL EXTEND THROUGHOUT THE SLAB THICKNESS TO THE SUBGRADE AND SHALL BE RECESSED BELOW THE PAVEMENT SURFACE SO THAT THE JOINT CAN BE SEALED WITH JOINT SEALANT MATERIALS.

RECOMMENDED JOINT FILLER MATERIALS INCLUDE BITUMINOUS MASTIC, BITUMINOUS IMPREGNATED CELLULOSE OR CORK, SPONGE RUBBER, OR RESIN-BOUND CORK, AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS.



Project Summary

Date:	1/21/2015
Project Name:	Dairy Queen
City / County:	Rockwall
State:	Texas
Designed By:	MWA
Company:	TE-Services
Telephone:	903-212-2856

Enter Information in Blue Cells

Corrugated Metal Pipe Calculator

Storage Volume Required (cf):	8,986
Limiting Width (ft):	30.00
Invert Depth Below Asphalt (ft):	5.00
Solid or Perforated Pipe:	Solid
Shape Or Diameter (in):	60
Number Of Headers:	2
Spacing between Barrels (ft):	3.00
Stone Width Around Perimeter of System (ft):	0
Depth A: Porous Stone Above Pipe (in):	0
Depth C: Porous Stone Below Pipe (in):	0
Stone Porosity (0 to 40%):	40

19.63 ft² Pipe Area

System Sizing

Pipe Storage:	8,993 cf
Porous Stone Storage:	0 cf
Total Storage Provided:	8,993 cf
Number of Barrels:	4 barrels
Length per Barrel:	100.0 ft
Length Per Header:	29.0 ft
Rectangular Footprint (W x L):	29. ft x 110. ft

100.1% Of Required Storage

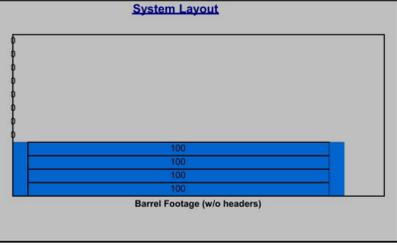
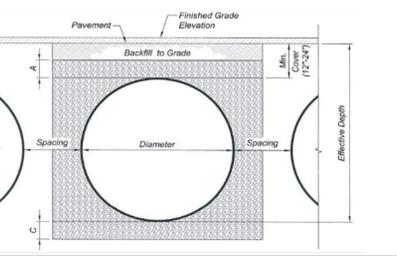
CONTECH Materials

Total CMP Footage:	458 ft
Approximate Total Pieces:	24 pcs
Approximate Coupling Bands:	26 bands
Approximate Truckloads:	6 trucks

Construction Quantities**

Total Excavation:	591 cy
Porous Stone Backfill For Storage:	0 cy stone
Backfill to Grade Excluding Stone:	258 cy fill

**Construction quantities are approximate and should be verified upon final design.



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1 DETENTION POND "D"
SCALE: N.T.S.

Retention D 100yr

Present Conditions

D+C	
A=	0.725 acres
C=	0.35 Undeveloped
T _c =	20 minutes
I ₁₀₀ =	8.30 in/hr
Q ₁₀₀ =	2.11 cfs

Future Conditions

D1-D6 + C	
A=	0.986 acres
C=	0.9 Developed
T _c =	10 minutes
I ₁₀₀ =	9.80 in/hr
Q ₁₀₀ =	8.70 cfs

By-Pass Acreage = 0.11 acre
New Acreage = 0.88 acre

By-Pass Q = 0.97 cfs
Allowable Release = 1.14 cfs

Storm Durations:

Time (min.)	I (in/hr)	C	Q (cfs)
10	9.80	0.9	7.73
15	9.00	0.9	7.10
20	8.30	0.9	6.54
30	6.90	0.9	5.44
40	5.80	0.9	4.57
50	5.00	0.9	3.94
60	4.50	0.9	3.55
70	4.00	0.9	3.15
80	3.70	0.9	2.92
90	3.50	0.9	2.76
100	3.40	0.9	2.68
110	3.20	0.9	2.52
120	2.70	0.9	2.13

Retention B 100yr

Present Conditions

B	
A=	0.5 acres
C=	0.35 Undeveloped
T _c =	20 minutes
I ₁₀₀ =	8.3 in/hr
Q ₁₀₀ =	1.45 cfs

Allowable Release = 0.57 cfs

Future Conditions

B3-B6	
A=	0.257 acres
C=	0.9 Developed
T _c =	10 minutes
I ₁₀₀ =	9.8 in/hr
Q ₁₀₀ =	2.27 cfs

By-Pass Acreage = 0.10 acre
New Acreage = 0.16 acre

By-Pass Q = 0.88 cfs

B1, B2	
A=	0.101 acres
C=	0.35 Undeveloped
T _c =	10 minutes
I ₁₀₀ =	9.8 in/hr
Q ₁₀₀ =	0.35 cfs

Storm Durations (Developed)

Time min.	I, in/hr	C	Q, cfs
10	9.80	0.9	1.38
15	9.00	0.9	1.27
20	8.30	0.9	1.17
30	6.90	0.9	0.97
40	5.80	0.9	0.82
50	5.00	0.9	0.71
60	4.50	0.9	0.64
70	4.00	0.9	0.57
80	3.70	0.9	0.52
90	3.50	0.9	0.49
100	3.40	0.9	0.48
110	3.20	0.9	0.45
120	2.70	0.9	0.38

Storm Durations (Undeveloped)

Time min.	I, in/hr	C	Q, cfs
10	9.80	0.35	0.35
15	9.00	0.35	0.32
20	8.30	0.35	0.29
30	6.90	0.35	0.24
40	5.80	0.35	0.21
50	5.00	0.35	0.18
60	4.50	0.35	0.16
70	4.00	0.35	0.14
80	3.70	0.35	0.13
90	3.50	0.35	0.12
100	3.40	0.35	0.12
110	3.20	0.35	0.11
120	2.70	0.35	0.10

Retention D 100yr

Maximum Storage Volume Volume=Tc*Q*60sec/min

10 min	Inflow= 4635.79 cf	Storage= 3954.24 cf	Outflow= 681.56 cf
15 min	Inflow= 6386.04 cf	Storage= 5534.10 cf	Outflow= 851.94 cf
20 min	Inflow= 7852.46 cf	Storage= 6830.13 cf	Outflow= 1022.33 cf
30 min	Inflow= 9791.93 cf	Storage= 8428.82 cf	Outflow= 1363.11 cf
40 min	Inflow= 10974.53 cf	Storage= 9270.64 cf	Outflow= 1703.89 cf
50 min	Inflow= 11826.00 cf	Storage= 9781.34 cf	Outflow= 2044.67 cf
60 min	Inflow= 12772.08 cf	Storage= 10386.64 cf	Outflow= 2385.44 cf
70 min	Inflow= 13245.12 cf	Storage= 10518.90 cf	Outflow= 2726.22 cf
80 min	Inflow= 14001.98 cf	Storage= 10934.99 cf	Outflow= 3067.00 cf
90 min	Inflow= 14900.76 cf	Storage= 11492.99 cf	Outflow= 3407.78 cf
100 min	Inflow= 16083.36 cf	Storage= 12334.81 cf	Outflow= 3748.55 cf
110 min	Inflow= 16651.01 cf	Storage= 12561.68 cf	Outflow= 4089.33 cf
120 min	Inflow= 15326.50 cf	Storage= 10896.39 cf	Outflow= 4430.11 cf

MAX STORAGE REQUIRED= 12,561.68 cf
UNDERGROUND STORAGE= 8,993 cf
ABOVEGROUND STORAGE= 3,578 cf
TOTAL STORAGE PROVIDED= 12,569 cf

Retention B 100yr

Maximum Storage Volume Volume=Tc*Q*60sec/min

10 min	Inflow= 1038.70 cf	Storage= 696.40 cf	Outflow= 342.30 cf
15 min	Inflow= 1430.87 cf	Storage= 1002.99 cf	Outflow= 427.88 cf
20 min	Inflow= 1759.43 cf	Storage= 1245.98 cf	Outflow= 513.45 cf
30 min	Inflow= 2193.99 cf	Storage= 1509.39 cf	Outflow= 684.60 cf
40 min	Inflow= 2458.97 cf	Storage= 1603.22 cf	Outflow= 855.75 cf
50 min	Inflow= 2649.75 cf	Storage= 1622.85 cf	Outflow= 1026.90 cf
60 min	Inflow= 2861.73 cf	Storage= 1663.68 cf	Outflow= 1198.05 cf
70 min	Inflow= 2967.72 cf	Storage= 1598.52 cf	Outflow= 1369.20 cf
80 min	Inflow= 3137.30 cf	Storage= 1596.95 cf	Outflow= 1540.35 cf
90 min	Inflow= 3338.69 cf	Storage= 1627.19 cf	Outflow= 1711.50 cf
100 min	Inflow= 3603.66 cf	Storage= 1721.01 cf	Outflow= 1882.65 cf
110 min	Inflow= 3730.85 cf	Storage= 1677.05 cf	Outflow= 2053.80 cf
120 min	Inflow= 3434.08 cf	Storage= 1209.13 cf	Outflow= 2224.95 cf

MAX STORAGE REQUIRED= 1,721.01 cf
UNDERGROUND STORAGE= 250 cf
UNDERGROUND STORAGE= 1465 cf
TOTAL STORAGE PROVIDED= 1,745 cf

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STATE OF TEXAS
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ADQ
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BUILDING TYPE:
DAIRY QUEEN
TEXAS

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ROCKWALL, TEXAS 75087

REVISIONS

NO.	DATE
1	10-15-2014
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DATE:
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ISSUED FOR PERMIT
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