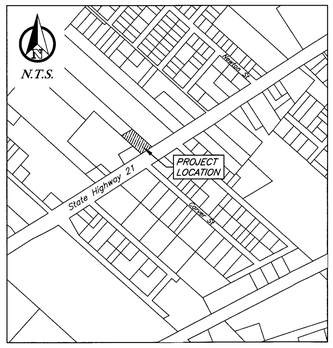
Miguel's Shop

Lot 6A, Park Heights Subdivision

2110 State Highway 21 West

Bryan, Brazos County, Texas



VICINITY PLAN

N.T.S.

Sheet List Table	
Sheet Number	*Sheet Title*
C1	Notes
C2	Site Plan
C3	Pavement Plan
C4	Erosion and Sediment Control Plan
C5	Grading Plan

OWNER/DEVELOPER:

Miguel Tavarez Nieto

2203 State Highway 21 West

Bryan, TX 77802

ENGINEER:

J4 Engineering

Firm # 9951

PO Box 5192

Bryan, Texas 77805

979-739-0567

811 Know what's **below.** **Call** before you dig.

Preliminary Plans Only
Not for Construction

This document is released for the purpose of interim review under the authority of Glenn Jones, P.E. 97600 on Mar 31, 2015. It is not to be used for construction, bidding, or permitting purposes.

Released for Review

March 2015

J4E PROJECT No. 14-057

General Notes:

1. The contractor shall promptly notify the engineer of any discrepancies between these plans and other drawings of differing disciplines & specifications.
2. The contractor is specifically cautioned that the location and/or elevation of the 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 upon as being exact or complete. It is the contractor's responsibility to avoid all existing utilities and repair any damaged lines, at his own expense, whether the utility is shown on these plans or not. The contractor shall notify the appropriate utility company 48 hours prior to any excavation. The contractor shall also notify the engineer if design changes need to be made in the field.
3. Contractor to verify all underground utilities in the field prior to construction.
4. It is the responsibility of the contractor to comply with all state and federal regulations regarding construction activities near energized over head power lines.
5. The contractor shall be responsible for the protection of all existing utilities or service lines that are crossed or exposed during construction operations. Where existing utilities or service lines are cut, broken, or damaged, the contractor shall repair or replace the utilities or service line with the same type of material and construction or better. This material and work shall be at the contractor's own expense.
6. During the execution of the work, the contractor shall maintain the project site in an orderly and acceptable manner as far as practical. The contractor shall clean and remove from the project area all surplus and discarded materials, temporary structures, and debris of any kind and shall leave the project site in a neat and orderly condition. All clean up will be done to the satisfaction of the engineer.
7. Contractor is responsible for OSHA established trench safety as described in the federal register 29 CFR Part 1926. a trench safety plan should be prepared and a "competent person" appointed prior to any and all excavating operations exceeding 5' depth. The plan is to be prepared and sealed by a registered texas professional engineer and shall be submitted to the city of Bryan and consulting engineer prior to any excavation on the project.
8. A copy of the approved construction plans shall be kept on site at all times throughout the entire construction of the project. Contractor shall maintain a a set of redline drawings, recording as-built conditions during construction. These redline marked up drawings will be submitted to the design consultant who will make the changes on the original tracings, labeling each sheet in the set as "record drawings".
9. The contractor shall be responsible for safeguarding and protections all material and equipment stored on the jobsite. The contractor shall be responsible for the storage of materials in a safe and workmanlike manner to prevent injuries, during and after working hours, until project completion.
10. Contractor to store materials at location(s) approved by & coordinated with the owner. Equipment is to be stored overnight at locations so as not to block streets or drives. Materials are to be protected from damage by the elements.
11. Contractor shall saw cut remove and replace concrete pavement, and curb & gutter as required to construct proposed improvements.
12. It shall be the responsibility of the contractor to pay for and obtain all required permits and inspection approvals for all work shown.
13. Any adjacent property and right-of-way disturbed during construction will be returned to their existing condition or better. The contractor agrees to repair any damage to the public right-of-way in accordance with the standards of the applicable regulatory agency.
14. All exposed dirt surfaces shall be seeded, hydro-mulched, or sodded.
15. The contractor shall not create a dirt nuisance or safety hazard in any street or driveway. the pavement be cleaned daily.
16. Adequate drainage shall be maintained at all times during construction and any drainage ditch or structure disturbed during construction shall be restored to existing conditions or better.
17. The contractor shall coordinate all fence removal and replacement with the Owner.
18. The contractor shall protect all monuments, iron pins, and property corners during construction.
19. The contractor must provide construction staking from the information provided on the plans.

General Utility Note (Private & Public):

1. All excavation for underground utilities shall be made true to grade. Excavation shall be made a minimum of six inches below the required grade and provide a sand bed for the piping. Backfill over piping shall be made with earth or fill sand , free of debris, and shall be tamped by hand or mechanical means to the density of the adjacent undisturbed earth or to 95% standard proctor density (ASTM D698), which ever is greater. All trenching and excavation shall be done in strict accordance with current OSHA requirements and all other applicable safety codes and standards.
2. Minimum bury or cover specified is to be measured from finish grades. Where utility line extend under pavement, the bury or cover shall be measured from the bottom of the structure.
3. Utility installations in non-structural areas shall be bedded and initial backfill consistent with non-structural requirements. In structural areas (i.e. under foundations, pavement, walks, etc.) the utility shall be bedded and initial backfill with cement stabilized sand. Final backfill in these areas shall be compacted by mechanical tamping to structural compaction requirements.
4. Regardless of elevations shown for manhole rims, clean-out covers, or grates, these items shall be placed flush with the pavement elevations and slopes. Manholes and clean-outs not in pavement areas shall be set 3 inches above the finish grade.
5. Contractor shall uncover existing utilities at all "points of interest" to determine if conflicts exist before commencing and construction. Notify the engineer at once of any conflict.
6. The contractor shall coordinate all utility installation so that grade critical elements (i.e. storm drain, sanitary sewer, etc.) do not conflict with non-grade critical elements (i.e. electrical conduit, water services, etc.).
7. The contractor shall furnish all materials, equipment, and labor for excavation, boring, installation, and backfilling of utility lines and relates appurtenances, as shone on the plans.
8. The loading and unloading of all pipe and other accessories shall be in accordance with the manufacturer's recommended practices and shall, at all times, be performed with care to avoid any damage to the material. The contractor shall locate and provide the necessary storage areas for materials and equipment.
9. Contractor shall be responsible for coordinating all connections to public systems and installations with regulatory inspector.
10. This project shall be built by means of open cut except as noted on the drawings. Contractor to determine the locations of bore pits in the field subject to the inspector's approval.
11. Structural backfill will be required for all excavation within 5 feet of public roadway pavements or walks.

Private Utility Notes:

1. The contractor shall install the proposed private utility lines in accordance with local codes, latest national plumbing code, and all applicable state and local laws. Other private or public utilities shall be installed in accordance with the utility company's specifications. Should these drawings or specifications differ with other utility company's specifications, the stricter of the two shall apply.
2. It shall be the responsibility of the contractor to pay for and obtain all required permits and inspection approvals for all work shown.
3. The contractor shall coordinate all installations of service lines, conduits, meters, etc., with the appropriate utility company.

Water Line Notes (Public & Private):

1. All domestic water line pipe shall be constructed out of PVC (Sch 40). Public or fire water line pipe shall be constructed out of C900 and public services shall be copper.

Storm Sewer Notes (Private):

1. All 15 inch to 42 inch storm sewer pipe, shall be constructed out of reinforced concrete pipe (RCP), C443 ASTM C76, Class III except as noted.
2. All 6 inch to 12 inch storm sewer pipe, except as noted, shall be HDPE. SDR-35, ASTM D-3034, PVC pipe may be used in place of HDPE pipe.
3. Contractor shall provide a minimum of 12 inch clearance at storm sewer and water line crossings and a minimum of 6 inch clearance at storm sewer and sanitary sewer crossings.
4. Unless otherwise specified, the contractor shall install all storm sewer pipe in accordance with the trench detail contained in these construction drawings.

Demolition & Construction Notes:

1. Demolition of existing structures and improvements shall include all work contained on these plans, but shall not be limited to the items specially identified. Any materials to be demolished or cleared shall be completely removed and disposed of. This work will not only consist of above ground items, but underground elements as well, including but not limited to: tree roots, foundation systems, old pipes, etc. The contractor shall notify the engineer of any additional items that require demolition, not identified on these plans, prior to removal.
2. It shall be the responsibility of the contractor to stage and sequence all demolition work with utility companies to provide minimal interruption and inconvenience of utility services.
3. Demolished surplus material shall be legally disposed of off-site.
4. All pavement edges, bounding the construction area & matching with new construction, shall be neatly sw cut, unless gravel. Flexible pavement shall be saw cut a minimum of 24" beyond any proposed structures.
5. The contractor shall clear all right-of-ways and easements contained in these construction drawings.
6. The contractor shall field verify and locate all existing utilities on site prior to demolition.
7. The contractor shall perform demolition activities as noted and shown on these plans and as directed by the owner/ developer.
8. It shall be the responsibility of the contractor to obtain any permits and pay any fees required for demolition and disposal from the appropriate authorities.
9. The contractor shall install all erosion and sediment control devices prior to commencing demolition work.
10. The contractor is responsible for the protection of all utilities that are to remain in place.
11. The contractor shall take all precautions to avoid damage to any existing road surface.
12. All existing items that are to remain in place which are damaged during construction shall be restored to original condition, or better, at the sole expense of the contractor.
13. Should any existing utilities not shown or shown incorrectly on this plan be found on site, the contractor shall contact the engineer immediately to discuss any possible conflicts before proceeding with any work in that area.
14. An asbestos survey must be performed prior to the demolishing of any structures. The contractor shall adhere to the requirements set forth in the asbestos survey and report.

Dimensional Control Notes:

1. The contractor may obtain an electronic copy of these plans for construction purposes. The electronic file and information generated, by J4 Engineering (J4E), for this project is considered by j4e to be confidential. When issued, it's use is intended solely for the individual or entity to which it is addressed. The material is intended for use by the recipient named, only, and permission is not granted to the recipient for distribution of these documents in any form or fashion. The recipient understands that this data is authorized "as is" without any warranty as to it performance, accuracy, freedom from error, or as to any results generated throughout its use. The recipient also understands and agrees that J4E, upon release of such data, is no longer responsible for their use or modification. The user and recipient of the electronic data accepts full responsibility and liability for any consequences arising out of their use.
2. All dimensions shown are to be used in conjunction with these plans for locating all improvements and shall be field verified by the contractor for workability prior to construction of improvements.
3. Unless otherwise shown, all dimensioning is to the back of curb or edge of pavement, which ever is applicable.

Grading Notes:

1. All unpaved areas shall be adequately graded to drain at a minimum of 1.00% slope, unless otherwise noted, so that no ponding occurs.
2. Unless otherwise specified, unpaved areas shall drain away from buildings so that the perimeter curb is a minimum 6" lower than the finished floor.
3. Finish grade adjacent to curbing or sidewalk shall be ½" below the top of concrete and 2" below in landscaping areas.
4. When top of curb elevations are shown, the curb height is 6" unless otherwise specified.
5. The contractor shall follow the general intent of the grading plans. Minor adjustments to the actual elevations shown on the grading plan may be required to match existing ground elevations and structures.
6. Adequate drainage shall be maintained at all times during construction and any drainage ditch or structure disturbed during construction shall be restored to existing conditions or better.
7. The approval of these plans is not an authorization to grade adjacent properties. When field conditions warrant off-site grading, permission must be obtained from the affected property owner(s). Any adjacent property and right-of-way disturbed during construction will be returned to there existing conditions or better.

Erosion Control Notes:

1. Erosion control measures shown in these plans shall be considered the very minimum required. It shall be the responsibility of the contractor to implement all other erosion control measures (diversion berms, drainage structures, swales, additional fencing, etc..) necessary to keep the existing improvements and developments from damage of any kind, during all phases of demolition and construction.
2. The site operator, or his representative established by a letter of delegation, shall make a visual inspection of all siltation controls and newly stabilized areas on a daily basis; especially after a rainfall to insure that all controls are maintained and properly functioning. Any damaged controls shall be repaired or replaced prior to the end of the work day, including re-seeding and mulching or re-sodding, if necessary.
3. All sediment trapping devices shall be installed as soon as practical after the area has been disturbed. All sediment trapping devices shall be cleaned when sediment level reaches 25% capacity. Sediment shall be disposed of by spreading on site or hauling away if not suitable for fill.
4. During construction, contractor shall maintain best management practice (bmp). Sediment fence. hay bale barriers, or other devices shall control all storm water leaving the site.
5. The contractor shall be responsible for establishing temporary erosion control measures as required for different phases of construction. Erosion control measures shown may need to be adjusted to handle increased or concentrated flows created by various stages of construction.
6. Phase II erosion control measure measures shall be implemented immediately after construction of their associated improvements. Inlet protection barriers shall be constructed with hay bales or silt fencing. Inlets located in pavements areas shall be protected with sand bags, replacing the hay bales or silt fencing once the pavement is in place. Erosion control measures shall be kept in place until upstream drainage areas are fully stabilized.
7. The contractor is responsible for removing sediment control devices after the site has been seeded and/ or sodded, and ground cover has taken root.
8. The contractor shall take all necessary measures to ensure that all disturbed areas are stabilized. Designated areas shall be block sodded and all other areas disturbed due to construction shall be hydro-mulched seeded. These stabilized areas shall be sodded or seeded, fertilized, and watered to establish a solid ground cover within 30 days of completion or if activities cease for 14 days.
9. When hydro-mulching is required, contractor shall keep mulch moist after installation and until area shows growth.
10. Erosion control measures shall be implemented prior to any excavation or demolition work.

Sidewalk Construction

1. Sidewalks shall be doweled into and tie to any concrete structure adjacent to sidewalk (driveway, inlet box, curb) #4 x 12" bars @ 18" O.C.
2. ADA ramps shall be constructed per the ambulatory ramp details on the pavement plan shown in these plans. All ramps shall have a detectable warning surface for the full length of the ramp.

Paving Notes:

1. The pavement system shown was designed without the aid of a geotechnical investigation. Due to the plastic soils within this area, some differential movement may still occur due to seasonal soil moisture variations.
2. Sub-grade
   a. Existing trees, stumps, and large tree systems, shall be grubbed and removed. Vegetation shall be removed and the top 6 inches of top soil and sub-grade stripped from the areas to be covered by the proposed improvements.
   b. Paving areas shall be proof-rolled with a 20 ton roller and, if required at the time of construction, the contractor shall stabilize weak areas by over excavation and backfilling.
   c. Materials excavated on site, excluding the top 6 inches, may be used as fill material, under pavement areas only, if the material is free from trash, lumps, clods, organic substance, & other foreign matter.
   d. Fill material shall be placed in eight inch maximum loose lifts, with each lift wetted or dried to a moisture content range of 0% to +3% of the optimum moisture content and compacted to a uniform density of 95% of the maximum dry density as determined by ASTM D698.
   e. Compaction test, for fill, shall be verified by in-place density test for each lift. One in-place density test shall be performed for every 4,000 SF with a minimum of 3 tests being performed, per lift.
4. Portland Cement Concrete
   a. All concrete, unless otherwise specified, shall have a minimum compressive strength of 3,500 psi at 28 days for pavement and 3,000 psi at 28days for non-pavement applications (ie. sidewalks, drainage flumes, and containment structures).
   b. All concrete shall be vibrated when placed and not raked a distance greater than 10 feet.
   c. Unless otherwise noted, joint spacing shall not exceed 15 feet in any direction to another joint or edge of pavement. Control joints shall be cut between 4 and 18 hours after placement of concrete and may be substituted with construction joints. If provided, the contractor shall follow the general intent of the joint plans shown.
   d. Expansion joints shall not exceed a maximum spacing of 45 feet and should not be placed through the middle of area inlets or junction boxes located in the pavement. All area inlets or junction boxes, located in pavement area, shall be installed with isolation joints between the structure and the pavement.
   e. All joints shall be sealed with Sonoborn Sonolastic SL-1, or an approved equal.
   f. Concrete shall not be placed if the air temperature is 50° F and falling or 95° F or higher. Concrete may be placed if the air temperature is 40° F and rising or less than 95° F.
5. Steel
   a. All reinforcing steel shall be deformed billed steel bar having a minimum yield strength of not less than 60 KSI conforming to ASTM A6115, Grade 60.
   b. All reinforcing steel shall be free from rust or other bond reducing agents.
   c. All splices in pavement and curbing steel shall be staggered and lapped 30 inches times the bar diameter or 12 inches, whichever is greater.
   d. Concrete coverage for the reinforcing steel shall comply with the ACI code, latest edition. The steel shall have a minimum 1 ½ inch clearance.

Traffic Control Notes:

1. Contractor shall provide and install traffic control devices in conformance with part VI of the Texas Manual on Uniform Traffic Control Devices (Texas MUTCD, most recent edition with revisions) during construction.
2. Lane closure will not be allowed unless approved by the TxDOT or City of Bryan representative, as applicable.
3. The work shall be completed such that the roadway will be fully opened to traffic overnight. Overnight lane closures will not be permitted, unless otherwise approved by the applicable engineer.
4. Plastic drums shall be used for overnight delineation of off roadway work areas.

Legend

Line Types

- W-8 — Existing Water Line, Size Noted
- W-8 — Proposed Water Line, Size Noted
- W — W — Existing Water Service
- W — W — Proposed Water Service
- S-8 — Existing Sanitary Sewer Line, Size Noted
- S-8 — Proposed Sanitary Sewer Line, Size Noted
- S — S — Existing Sanitary Sewer Service
- S — S — Proposed Sanitary Sewer Service
- Existing Storm Sewer Piping
- Proposed Storm Sewer Piping
- GAS — GAS — Existing Natural Gas Line
- GAS — GAS — Proposed Natural Gas Line
- UE — UE — Existing Underground Electrical Line
- UE — UE — Proposed Underground Electrical Line
- AE — AE — Existing Aerial Electrical Line
- AE — AE — Proposed Aerial Electrical Line
- T — T — Existing Underground Telephone
- T — T — Proposed Underground Telephone
- 315 — Existing Contour, Elevation Noted
- 315 — Proposed Contour, Elevation Noted
- Existing Easement
- SILT — SILT — Silt Fence
- Existing Chain Link Fence
- Proposed Chain Link Fence
- XXX — XXX — Existing Wire Fence
- Existing Board Fence
- Proposed Board Fence

Symbols

- Hydrant
- Storm Grate Inlet
- Water Valve
- S.E.T.
- Water Manhole
- Sewer Manhole
- WM Water Meter
- S Sewer Clean-Out
- Phone Pedestal
- MB Mail Box
- Sign
- Power Pole

Abbreviations

TP	Top of Pavement	W/	With
TC	Top of Curb	W/OUT	With Out
TG	Top of Ground	S.E.T.	Sloped End Treatment
TW	Top of Walk	BM	Bench Mark
TI	Top of Inlet	TBM	Temporary Bench Mark
TR	Top of Wall	SY	Square Yard
FL	Flow Line	LF	Linear Foot
MH	Man Hole	CO	Clean Out
Min	Minimum	O.C.	On Center
Max	Maximum	O.C.E.W.	On Center Each Way
N.T.S.	Not to Scale	PSI	Pounds per Square Inch
PI	Point of Inflection	PVC	Polyvinyl Chloride
PT	Point of Tangency	RCP	Reinforced Concrete Pipe
PC	Point of Curvature	PVMT	Pavement
Sch	Schedule	H	Horizontal
R.O.W.	Right of Way	V	Vertical

Gas Company Notes:

1. At all underground gas utility crossings, the contractor shall give the appropriate utility company a minimum of 72 hours notice so that their field representative may be present.
2. Eighteen (18) inch clearance shall be maintained between the proposed utility and the existing underground gas line. this clearance shall be measured form outside of pipe to outside of pipe, or sleeving, whichever is more conservative.
3. For excavation near the underground gas line(s), the contractor shall cover, or remove, the bucket teeth of the excavator. The final thirty-six (36) inches surrounding the gas line shall be excavated by hand digging.

Notes

General Notes:

1. It is the intent of these plans to comply with all City of Bryan guidelines, specifications & details.

Preliminary Plans Only Not for Construction

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Released for Review

No.	Revision/Issue	Date

Firm Name and Address:

J4 Engineering

PO Box 5192 - Bryan, Texas - 77805
979-739-0567 www.J4Engineering.com
Firm# 9951

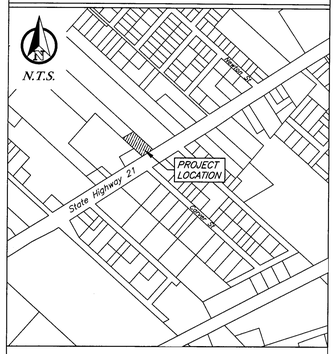
Project Name and Address:

Miguel's Shop

2110 State Highway 21 West
Lot 6A, Park Heights
Subdivision ~ 0.52 AC
Bryan, Brazos County, Texas

Date:	Sheet:
Mar 2015	*C1*
Scale: *As Noted*	

Vicinity Map



Site Specific Notes:

1. The owner & developer of the property is Miguel Tavarez Nieto. The subject property is Lot 6 of the Park Heights Subdivision. The property is zoned C-3, Commercial.
2. Proposed building is a single-story Type IIb without sprinklers. The building is a total of 5,000 sf and a FF=327.00 without a brick/tin ledge.
3. This lot is not within the 100-yr floodplain according to the DFIRM for Brazos County, Texas and Incorporated Areas, Map No. 48041C0195E, effective July 7, 2014.
4. The stormwater runoff from this development does not require detention and shall follow existing drainage patterns and be discharged at the northwest corner of the property.
5. Drainage information and details will be provided on the Grading Plan.
6. The developed area for this project is 0.52 acres (18,992 sf).
7. The irrigation system must be approved and installed prior to C.O.
8. Traffic impact analysis is not required.
9. Solid waste pickup will be providing by the collection truck entering the parking lot and collecting waste from an 8 CY container within the enclosed dumpster area.

Landscape Analysis:

Construction Activities:

Parking & Pavement	=	12,365	SF
Building	=	5,000	SF
Total	=	17,365	SF

Requirements:

Building, Parking, & Pavement 17,365 SF @ 15%	=	2,605	SF

Provided:

Canopy Trees 6 @ 200 SF	=	1,200	SF
Non-Canopy Trees 7 @ 150 SF	=	1,050	SF
Shrubs 8 @ 10 SF	=	80	SF
Grasses & Ground Cover 10 SF per 100 @ 22,660 (Limited to 15% of Required)	=	394	SF
Total	=	2,724	SF

Symbol	Qty.	Common Name	Botanical Name	Size
	6	Live Oak	Quercus virginiana	2" cal.
	7	Crepe Myrtle	Lagerstroemia indica	1½" cal.
	8	Waxleaf Ligustrum	Ligustrum japonicum	Min. 5 Gallon
	--	Bermuda Grass	Cynodon dactylon	--

Construction Notes:

(A) 12'x12' dumpster pad w/ 10' apron, 8" reinforced concrete w/ #5 rebar @ 12" O.C.E.W. and w/ 6' tall brick enclosure. Dimensions shall be measured from face of bollards.

1. All site work is to be done in conformance with the Bryan/College Station 2012 Standard Specifications for Water & Sewer and the City of Bryan Standard Specifications for Streets & Drainage.
2. All radii and distances are measured to the back of curb, unless otherwise noted, as shown on the Pavement Plan
3. All fill subgrade and base material shall be compacted to 98% STD in areas to be paved and 95% STD in all other areas.
4. All concrete to be constructed 3500 psi (Min.) - 28-day strength portland cement concrete.
5. All items to be removed during clearing and grubbing. Remove not only the above ground elements, but all underground elements as well. All excavated material shall become the property of the contractor, unless otherwise directed by the Owner. All debris must be disposed of off-site.
6. Prior to grading operations, the contractor is to strip the first 6" of soil. Contractor shall proof-roll the entire site and remove any unstable materials according to TxDOT specifications. Select fill is to be used in replacing objectionable material.
7. Each utility contractor is responsible for positioning and trenching of service lines. Mark all lines with utility tape. Utility contractors are responsible for coordinating with paving contractor in placement and installation of any necessary utility conduit prior to subgrade preparation. Lines requiring slope control are to be installed first. All other lines not requiring slope control or elevation shall be installed deepest first. Each contractor is responsible for knowing final determination of installation order.
8. Contractor is responsible for field verifying existing and proposed grades, flowlines, elevations, etc. prior to any construction and reporting any inconsistencies to the Engineer. Utility crossings and other points of possible conflict shall be verified prior to construction.
9. Electrical conduit for parking lot lighting will be shown on the electrical site plan.
10. The parking lot is 6" depth concrete pavement to meet or exceed minimum City of Bryan Requirements.
11. The bearing system shown hereon is based on grid north as established from GPS observation.
12. Irrigation System - Potable water supply must be protect by either an atmospheric or pressure vacuum breaker, or testable double check valve assembly, and installed as per City Ordinance. The irrigation system must be approved and installed prior to issuance of C.O.
13. Potable Water Protection - All devices, appurtenances, appliances, and apparatus intended to serve some special function and that connect to the water supply system, shall be provided against backflow and contamination of the water supply system.
14. Materials and methods for pavement markings shall conform to TxDOT Standard Specifications for Construction of Highways, Streets, and Bridges (current edition) with the following exceptions: 1) Type II marking materials need not be purchased from the department, and 2) Glass beads may be omitted, but marking material shall by Type II paint-type material.
15. Wet sanding in preparing vehicles for paint shall not be utilized.
16. No floor drains shall be utilized in storage/service areas.

Parking Analysis:

Proposed Improvements:

1,000	SF	Office Space
2,000	SF	Shop Space
2,000	SF	Storage Space
5,000	SF	Total Area

New Required Parking:

4... 1 Space per 300 SF General Office Space
10... 1 Space per 200 SF Shop Space
4... 1 Space per 600 SF Storage Space

18... Total Required

New Provided Parking:

7... Straight in Parking
6... Parallel Parking
2... ADA Parking w/Van Accessible
4....Bay Parking

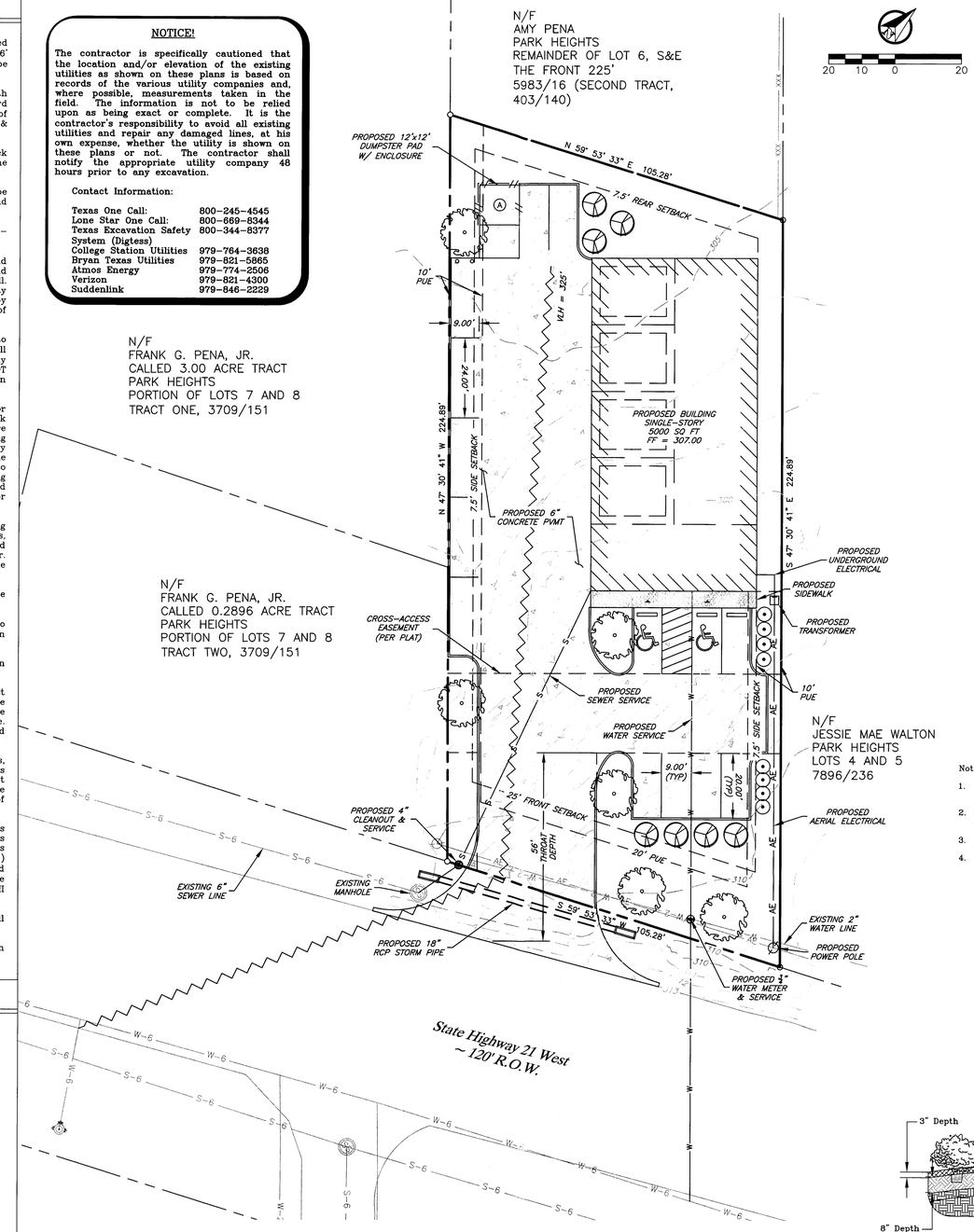
19.... Total Provided

NOTICE!

The contractor is specifically cautioned that the location and/or elevation of the 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 upon as being exact or complete. It is the contractor's responsibility to avoid all existing utilities and repair any damaged lines, at his own expense, whether the utility is shown on these plans or not. The contractor shall notify the appropriate utility company 48 hours prior to any excavation.

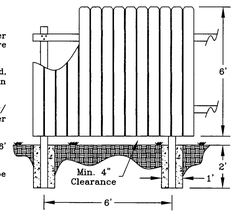
Contact Information:

Texas One Call:	800-245-4545
Lone Star One Call:	800-669-8344
Texas Excavation Safety System (Digtess)	800-344-8377
College Station Utilities	979-764-3638
Bryan Texas Utilities	979-821-5865
Atmos Energy	979-774-2506
Verizon	979-821-4300
Suddenlink	979-846-2229

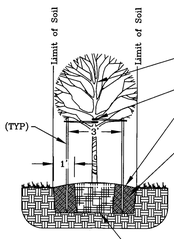


Notes:

1. All lumber shall be weather resistant cedar or pressure treated.
2. Pickets are to be 1x6, dog-eared, fastened w/ 1 ½" galv. screws, min 2 per connection.
3. Rails are to be 2x4 fastened w/ 3" galv. screws, min. 3 per connection.
4. Posts are to be 4x4, placed 6' O.C., & set in 3,000 PSI concrete.
5. Screening fence & posts are to be placed outside dumpster pad.



Dumpster Screen Fence
N.T.S

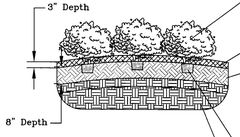


1. Fully remove native soil to the size of container.
2. Fully remove all construction debris, trash, rocks and any other material greater than 2" in diameter.
3. Install premixed soil containing 40% sandyloam topsoil, 40% black humus and 20% sharp sand.
4. Dig planting hole width 12" larger than rootball on all sides.
5. Scarify root ball.
6. Root flare shall be exposed.

Notes:

1. Trees to be balled and burlapped or container grown.
2. If container grown, remove container from tree before planting.
3. Top of root ball to be 3" higher than final grade.
4. Top of root ball to be exposed.

Tree Staking & Planting
N.T.S



Notes:

1. Container grown plants only.
2. Remove containers from plants before installing.
3. Place plants in prepared bed as shown.
4. Edge spacing for plants varies with species and location.

Groundcover plant material, (TYP) evenly distribute the specified quantity of plants within each designated area. Maintain edge and separation separation distances between plant types.

3" mulch layer. No geo- textile weed barrier fabric planting beds.

Prepared bedding soil backfill (TYP)

1. Fully remove native soil to the size of container.
2. Fully remove all construction debris, trash, rocks and any other material greater than 2" in diameter.
3. Install premixed soil containing 50% native soil, 25% humus and 25% sand.
4. Dig planting hole width 1.5x larger than root ball on all sides.
5. Scarify root ball.

Make sure that plant root ball is fully planted to the depth of the container in prepared planting mix.

Do not plant groundcover in mulch layer only.

Native soil

Shrub Planting
N.T.S

Site Plan

General Notes:

1. The topography shown is from field survey data.
2. Refer to Final Plat for all lot dimensions and bearings.
3. All utilities shown are taken from the best available information based on construction utility documents obtained by J4 Engineering from City and independent agencies and/or above ground field evidence. Shown positions may not represent as-built conditions.
4. The contractor shall be responsible for verifying the exact location of all existing underground utilities, whether shown on these plans or not. Notification of the utility companies 48 hours in advance of construction is required.
5. Contractor is responsible for field verifying existing and proposed grades prior to any construction and reporting any inconsistencies to the Owner.
6. All construction shall be in accordance with the current BCS Standard Specifications, Details, and Design Guidelines for Water, Sewer, Streets, and Drainage, unless otherwise noted.
7. The contractor shall be responsible for the containment and proper disposal of all liquid and solid waste associated with the project and shall use all means necessary to prevent the occurrence of wind blown litter.
8. It is the intent of these plans to comply with all City of Bryan guidelines, specifications & details.
9. See Sheet C1 - General Notes

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Firm Name and Address:

J4 Engineering

PO Box 5192 - Bryan, Texas - 77805
979-739-0567 www.J4Engineering.com
Firm# 9951

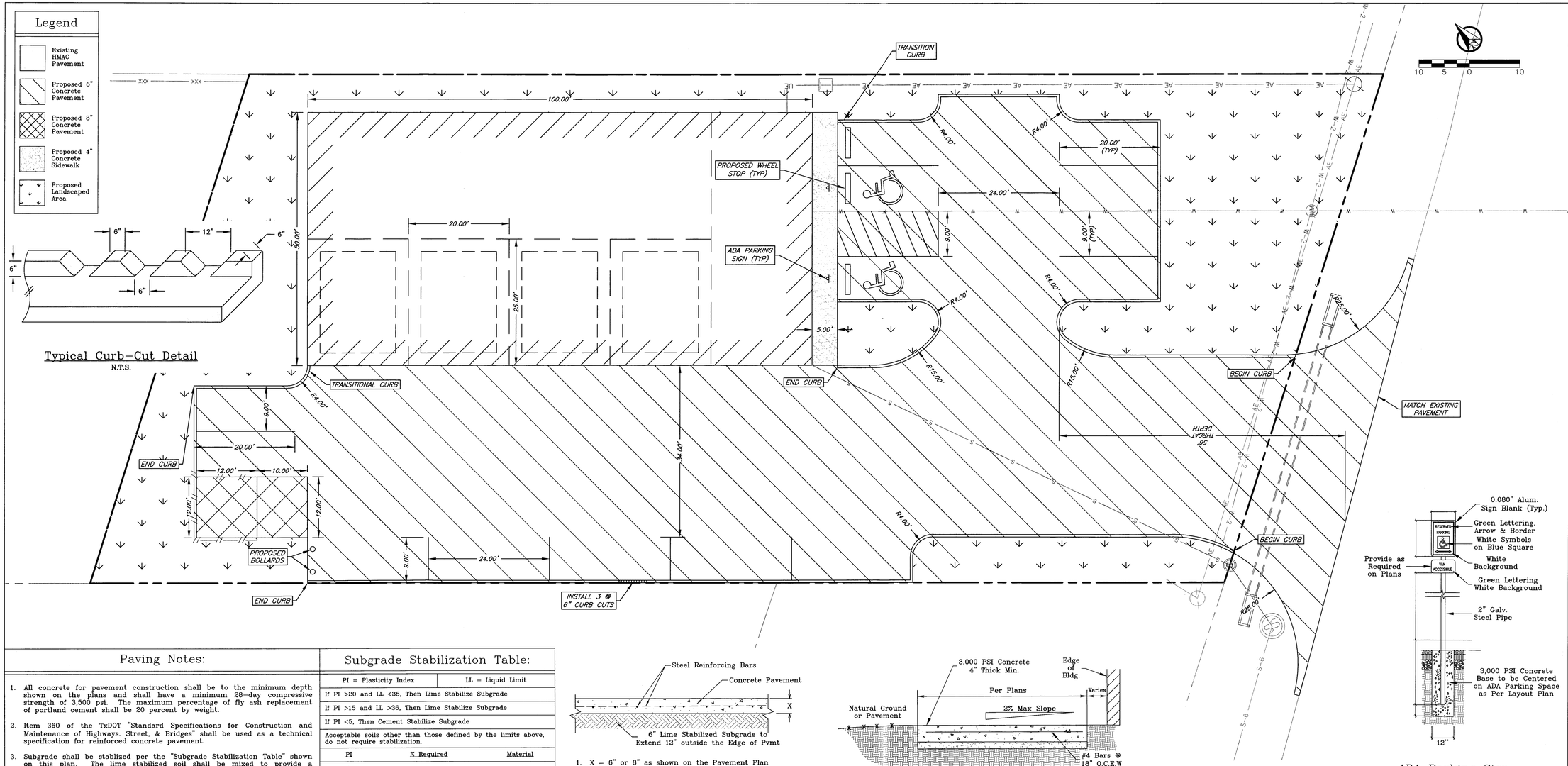
Project Name and Address:

Miguel's Shop

2110 State Highway 21 West
Lot 6A, Park Heights
Subdivision ~ 0.52 AC
Bryan, Brazos County, Texas

Date:	Sheet:
Mar 2015	C2
Scale: As Noted	

J4E Project # 14-057 | A&L Tire Shop Site Plan.dwg | 03/31/2015 | J4 Engineering



Typical Curb–Cut Detail
N.T.S.

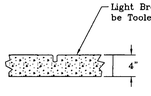
Paving Notes:

1. All concrete for pavement construction shall be to the minimum depth shown on the plans and shall have a minimum 28–day compressive strength of 3,500 psi. The maximum percentage of fly ash replacement of portland cement shall be 20 percent by weight.
2. Item 360 of the TxDOT "Standard Specifications for Construction and Maintenance of Highways, Street, & Bridges" shall be used as a technical specification for reinforced concrete pavement.
3. Subgrade shall be stabilized per the "Subgrade Stabilization Table" shown on this plan. The lime stabilized soil shall be mixed to provide a homogeneous mixture with a minimum pH of 12.4, and which meets the gradation requirements specified in the TxDOT, Standard Specifications for Construction of Highways, Streets, and Bridges, Item 260. The lime stabilized soil shall be compacted to a density of at least 98% of the maximum dry density as determined by ASTM D698 at a moisture content from optimum moisture to 4% above optimum moisture content. The lime used to stabilize the soil shall meet the requirements of TxDOT Item 264, "Lime and Lime Slurry". The lime stabilized subgrade should extend a minimum of 12" outside the pavement.
4. The subgrade beneath the concrete sidewalks shall be compacted and "proof–rolled". any weak or soft areas identified by the "proof–rolling" shall be removed and replaced.
5. A sand leveling course under concrete pavement is NOT permitted.
6. Joint sealant material to be Sonneborn SL–1 or approved equal.
7. Curing compound shall be applied uniformly to the concrete after the surface finishing is complete at the rate recommended by the manufacturer. The curing compound shall meet the requirements of TxDOT Item 526.
8. Contractor shall provide engineer with a proposed pavement expansion and contraction joint plan prior to pavement construction.
9. See Sheet C1 – General Notes.

Subgrade Stabilization Table:

PI = Plasticity Index	LL = Liquid Limit
If PI >20 and LL <35, Then Lime Stabilize Subgrade	
If PI >15 and LL >36, Then Lime Stabilize Subgrade	
If PI <5, Then Cement Stabilize Subgrade	
Acceptable soils other than those defined by the limits above, do not require stabilization.	

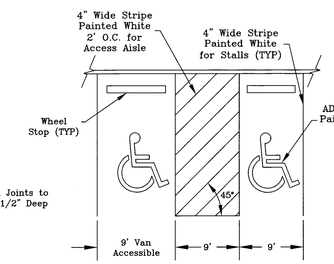
PI	% Required	Material
<5	5%	Cement
<25	5%	Lime
26–33	6%	Lime
34–40	7%	Lime
>40	Determined by ASTM C977	Lime



Sidewalk Note:

1. Sidewalk joint sealant to be Sonoborn SL–1 or approved equal.
2. Sidewalk expansion joints shall be spaced at 60' maximum intervals.
3. Sidewalk contraction joints shall be spaced at a maximum interval equal to the sidewalks width.

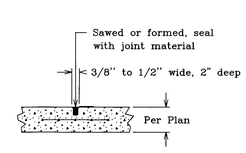
Sidewalk Contraction Joint Detail
N.T.S.



ADA Pavement Markings
N.T.S.

1. X = 6" or 8" as shown on the Pavement Plan
2. 6" Pavement – use #4 rebar @ 18" O.C.E.W.
3. 8" Pavement – use #5 rebar @ 12" O.C.E.W.

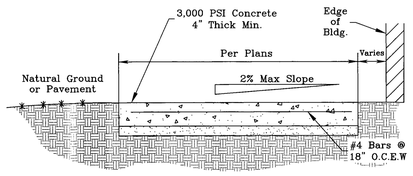
Typical Concrete Paving Section
N.T.S.



Note:

1. Contraction joint sealant to be Sonoborn SL–1 or approved equal.
2. Contraction joints shall be spaced at 15' maximum intervals
3. Sawcut control joints within 6–12 hours of concrete placement..

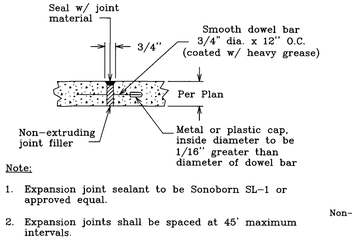
PVMT Contraction Joint Detail
N.T.S.



Note:

1. Install expansion joints at 40' (max) longitudinal spacing and install control joints at 5' (max) longitudinal spacing

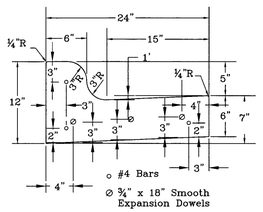
Typical Sidewalk
N.T.S.



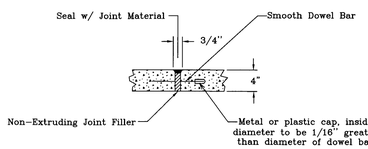
Note:

1. Expansion joint sealant to be Sonoborn SL–1 or approved equal.
2. Expansion joints shall be spaced at 45' maximum intervals.

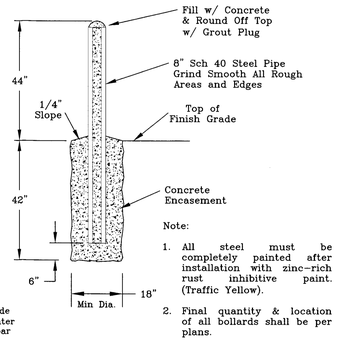
PVMT Expansion Joint Detail
N.T.S.



Raised Curb Detail
N.T.S.



Sidewalk Expansion Joint Detail
N.T.S.



Note:

1. All steel must be completely painted after installation with zinc–rich rust inhibitive paint. (Traffic Yellow).
2. Final quantity & location of all bollards shall be per plans.

Typical Bollard Detail
N.T.S

ADA Parking Sign
N.T.S

Pavement Plan

General Notes:

1. Refer to Final Plat for all lot dimensions and bearings.
2. All dimensions are to back of curb or edge of pavement, unless otherwise noted.
3. Maximum cross slope for all ADA acessible routes is 2% for sidewalks and pavement. The minimum cross slope for sidewalks is 1%.
4. Materials and methods for pavement markings shall conform to TxDOT Standard Specifications for Construction of Highways, Streets, and Bridges (Current Edition), with the following exceptions: 1) Type II marking materials need not be purchased from the Department, and 2) Glass beads may be omitted, but marking material shall be Type II paint–type material.
5. It is the intent of these plans to comply with all City of Bryan guidelines, specifications & details.
6. See Sheet C1 – General Notes

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PO Box 5192 - Bryan, Texas - 77805
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Firm# 9951

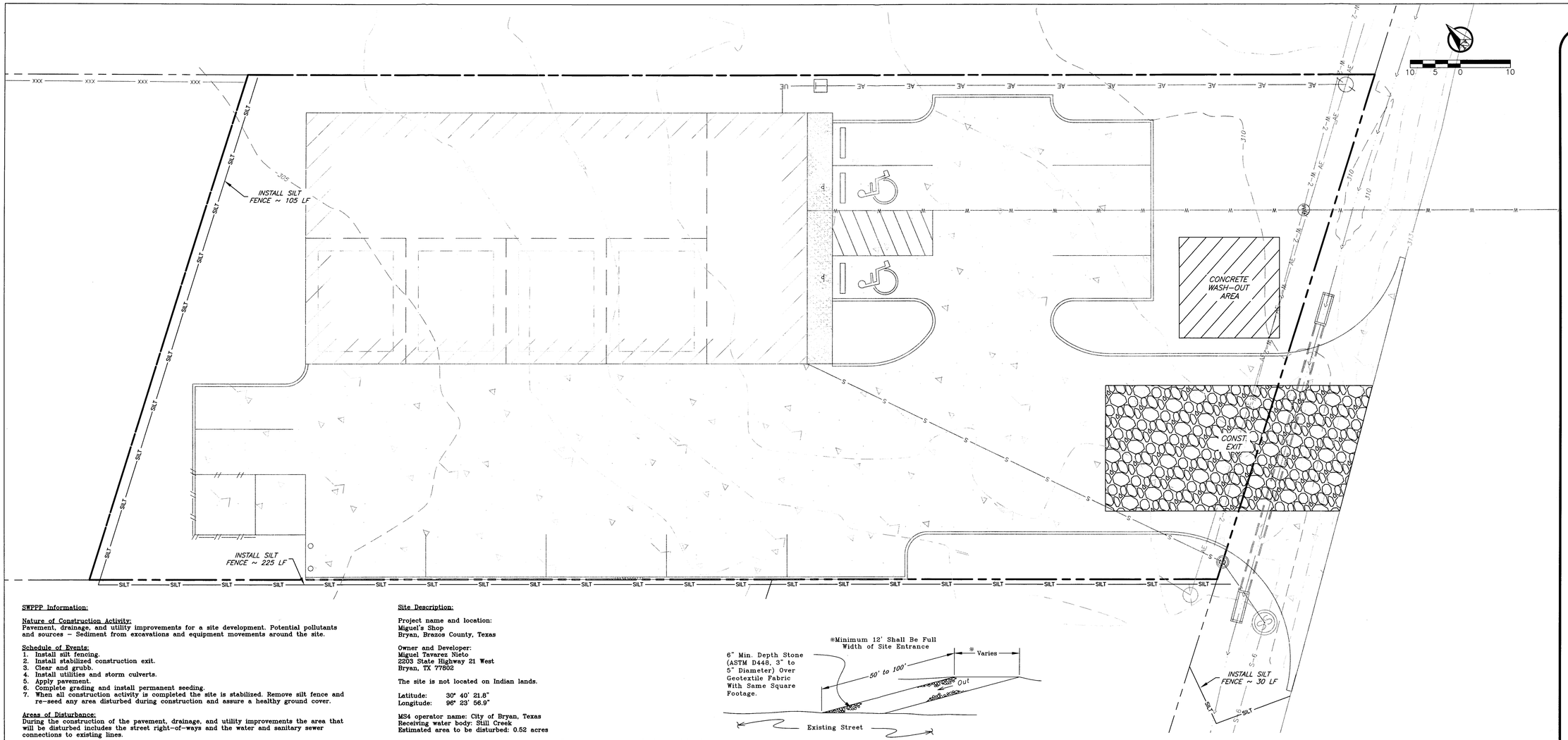
Project Name and Address:

Miguel's Shop

2110 State Highway 21 West
Lot 6A, Park Heights
Subdivision – 0.52 AC
Bryan, Brazos County, Texas

Date:	Sheet:
Mar 2015	*C3*
Scale: *As Noted*	

J4 Engineering 03/31/2015 A&L Tire Shop Site Plan.dwg J4E Project # 14–057



SWPPP Information:

Nature of Construction Activity:
Pavement, drainage, and utility improvements for a site development. Potential pollutants and sources – Sediment from excavations and equipment movements around the site.

Schedule of Events:
1. Install silt fencing.
2. Install stabilized construction exit.
3. Clear and grubb.
4. Install utilities and storm culverts.
5. Apply pavement.
6. Complete grading and install permanent seeding.
7. When all construction activity is completed the site is stabilized. Remove silt fence and re-seed any area disturbed during construction and assure a healthy ground cover.

Areas of Disturbance:
During the construction of the pavement, drainage, and utility improvements the area that will be disturbed includes the street right-of-ways and the water and sanitary sewer connections to existing lines.

Structural Controls:
Temporary stabilization ~ areas where construction activity temporarily ceases for at least 21 days will be stabilized with temporary seed no later than 14 days from the last construction activity in that area all proposed fill material will be seeded.

Silt fence and/or hay bales will be installed at all outfalls, areas where water runs off the site; inlets under construction will have silt fencing or hay bales placed around the perimeter of the inlet all constructed inlets will have sandbags placed in front of the throat to collect sediment but allow flow of water into the inlet.

There is one livestock pond present at this site that will be incorporated into the regional detention pond.

Storm Water Management:
Storm water drainage will be controlled by drainage ditches and a detention pond for the developed area. All areas affected by construction will be fine graded and have permanent seeding. The remainder of the area will remain in its natural state.

Offsite vehicle tracking:
A stabilized construction entrance will be provided to help reduce vehicle tracking of sediments. The paved street adjacent to the site entrance will be swept to remove any excess mud, dirt, or rock tracked from the site. Dump trucks hauling material from the construction site will be covered with a tarpaulin.

Certification of Compliance with State and Local Regulations:
This storm water pollution prevention plan reflects the city's requirements for storm water management, erosion, and sediment control. To ensure compliance, this plan was prepared in accordance with the cities drainage policy. There are no other applicable state or federal requirements for sediment and erosion site plans (or permits) or storm water management site plans (or permits).

Maintenance/Inspection Procedures:
These are the inspection and maintenance practices that will be used to maintain erosion and sediment controls:
- All control measures will be inspected at least once every 14 days and following any storm event of 0.5 inches or greater.
- All measures will be maintained in good working order; if a repair is necessary if will be initiated within 24 hours of the report.
- Built up sediment will be removed from silt fence when it has reached one-half the height of the fence.
- Silt fence will be inspected for depth of sediment, tears, to see if the fabric is securely attached to the fence posts, and to see that the fence posts are firmly in the ground.
- Temporary and permanent seeding and planting will be inspected for bare spots, washouts, and healthy growth.
- A maintenance inspection report will be made after each inspection. The inspection report form will be prepared by the site superintendent and filed for record.
- A site superintendent will be responsible for inspections, maintenance and repair activities, and filling out the inspection and maintenance report.

Non-Storm Water Discharges:
It is expected that the following non-storm water discharges will occur from the site during the construction period:

- Water from water line flushing

Site Description:

Project name and location:
Miguel's Shop
Bryan, Brazos County, Texas

Owner and Developer:
Miguel Tavarez Nieto
2203 State Highway 21 West
Bryan, TX 77802

The site is not located on Indian lands.

Latitude: 30° 40' 21.8"
Longitude: 96° 23' 56.9"

MS4 operator name: City of Bryan, Texas
Receiving water body: Still Creek
Estimated area to be disturbed: 0.52 acres

The storm water pollution prevention plan shall be in compliance with state and local sediment and erosion plans.

Operator Requirements:
The operator shall submit a NOI to TCEQ and a copy to the operator and post a copy at the construction site in a location where it is readily available for viewing prior to commencing construction activities, and maintain the notice in that location until completion of the construction activity.

The operator shall provide a copy of the NOI to the operator of the municipal separate storm sewer system receiving the discharge, at least two (2) days prior to commencing construction activities.

The operator shall submit a NOT to TCEQ and a copy to the operator of the municipal storm sewer system once the final stabilization has been achieved and the temporary erosion controls have been removed.

Controls must be developed to limit, to the extent practicable, offsite transport of litter, construction debris and construction materials.

Operator Inspection Requirements:
The following records must be maintained and either attached to or referenced in the storm water plan:

- The dates when major grading activities occur.
- The dates when construction activities temporarily or permanently cease on a portion of the site.
- The dates when stabilization measures are initiated.

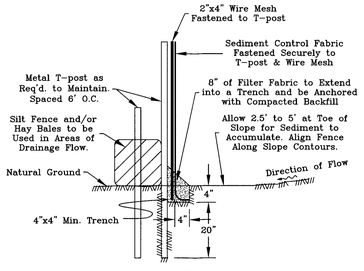
A report summarizing the scope of the inspection, names and qualifications of personnel making the inspection, the dates of the inspection, and major observations must be made and retained with the storm water plan. Major observations should include:

- The locations of discharges of sediment or other pollutants form the site;
- Locations of BMP's that failed to operate as designed or proved inadequate for a particular location; and
- Locations where additional BMP's are needed.

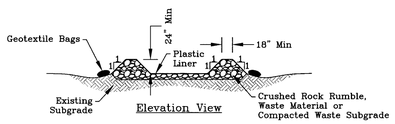
Operator's Record Keeping:
The permittee must retain the following records for a minimum of 3 years from the date that a NOT is submitted:

- A copy of the storm water plan and
- All reports and actions required by this permit, including a copy of the construction site notice all data used to complete the NOI.

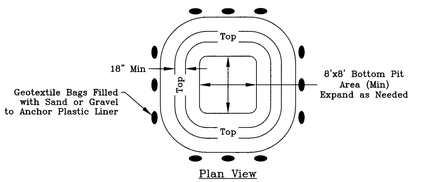
Construction Exit Detail
N.T.S



Silt Fence
N.T.S



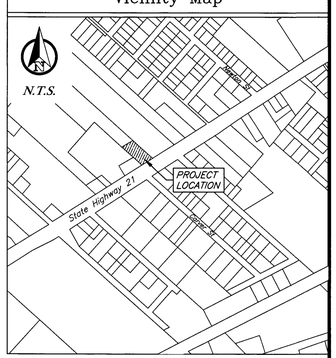
Elevation View



Plan View

Concrete Washout
N.T.S

Vicinity Map



Erosion and Sediment Control Plan

General Notes:

1. The topography shown is from field survey data.
2. Assure positive drainage across project site.
3. It is the intent of these plans to comply with all City of Bryan guidelines, specifications & details.
4. See Sheet C1 – General Notes.

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Bryan, Brazos County, Texas

Date:	Sheet:
Mar 2015	C4
Scale: As Noted	

J4 Engineering 03/31/2015 A&L Tire Shop Site Plan.dwg J4E Project # 14-057

Grading Plan

General Notes:

1. All proposed elevations shown are finished grade.
2. The contractor shall field verify and locate all existing utilities on site prior to excavation.
3. Maximum cross slope for all ADA accessible routes is 2% for sidewalks and pavement. The minimum cross slope for sidewalks is 1%.
4. Should any existing utilities not shown or shown incorrectly on this plan be found on site, the contractor shall contact the design engineer immediately to discuss any possible conflicts before proceeding with any work in that area.
5. It is the intent of these plans to comply with all City of Bryan guidelines, specifications & details.
6. See Sheet C1 – General Notes.

FL – Flow Line
NG – Top of Ground
TC – Top of Curb
TP – Top of Pavement
TW – Top of Sidewalk

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