

**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
WATER DISTRIBUTION SYSTEM
GENERAL CONSTRUCTION NOTES**

- This water distribution system must be constructed in accordance with the current Texas Commission on Environmental Quality (TCEQ) Rules and Regulations for Public Water Systems 30 Texas Administrative Code (TAC) Chapter 290 Subchapter D.
- Prior to commencement of construction, the owner of the system or his representative must notify the appropriate TCEQ regional office in writing of the date on which construction will begin.
- All newly installed pipes and related products must conform to American National Standards Institute/National Sanitation Foundation (ANSI/NSF) Standard 61 and must be certified by an organization accredited by ANSI.
- Plastic pipe for use in public water systems must bear the National Sanitation Foundation Seal of Approval (NSF-pw) and have an ASTM design pressure rating of at least 150 psi or a standard dimension ratio of 26 or less.
- No pipe which has been used for any purpose other than the conveyance of drinking water shall be accepted or relocated for use in any public drinking water supply.
- Water transmission and distribution lines must be installed in accordance with the manufacturer's instructions. However, the top of the water line must be located below the frost line and in no case shall the top of the water line be less than 24 inches below ground surface.
- The hydrostatic leakage rate shall not exceed the amount allowed or recommended by the most current AWWA formulas for PVC pipe, cast iron and ductile iron pipe.
- The contractor shall install appropriate air release devices in the distribution system at all points where topography or other factors may create air locks in the lines. All vent openings to the atmosphere shall be covered with 16-mesh or finer, corrosion resistant screening material or an acceptable equivalent.
- The contractor shall maintain a minimum separation distance in all directions of nine feet between the proposed waterline and wastewater collection facilities including manholes and septic tank drainfields. If this distance cannot be maintained, the contractor must immediately notify the project engineer for further direction. Separation distances, installation methods, and materials utilized must meet 290.44(e) of the current rules.
- The contractor shall disinfect the new water mains in accordance with AWWA Standard C651 and then flush and sample the lines before being placed into service. Samples shall be collected for microbiological analysis to check the effectiveness of the disinfection procedure which shall be repeated if contamination persists. A minimum of one sample for each 1,000 feet of completed water line will be required or at the next available sampling point beyond 1,000 feet as designated by the design engineer.
- The contractor shall not place the pipe in water or where it can be flooded with water or sewage during its storage or installation.

**Construction Notes for Subdivisions & Site Plans
City of Cedar Park
Revised June 2, 2017**

General Notes:

- General Contractor shall call for all utility locates prior to any construction. Water & wastewater owned by the City of Cedar Park can be located by calling Texas 811 at 1-800-344-8377. Allow three business days for utility locates by the City of Cedar Park.
- All construction shall be in accordance with the latest City of Austin Standard Specifications. City of Austin standards shall be used unless otherwise noted.
- Design procedures shall be in general compliance with the City of Austin Drainage Criteria Manual. All variances to the manual are listed below: **NONE**
- Benchmarks shall be tied to the City of Cedar Park benchmarks and be correctly "geo-referenced" to state plane coordinates. A list of the City's benchmarks can be found at: <http://www.cedarparktx.gov/index.aspx?page=793>.
- Prior to issuance of a certificate of occupancy for a site development permit, the right of way between the property line and edge of pavement / back of curb shall be revegetated according to COA specification 602S and 606S. Prior to City acceptance of subdivision improvements all graded and disturbed areas are to be revegetated in accordance with the City of Austin Specification Item #604.
- The Contractor shall provide the City of Cedar Park copies of all test results prior to acceptance of subdivision improvements.
- City, owner, engineer, contractor, representatives of all utility companies, and a representative from the testing lab shall attend pre-construction conference prior to start of construction. The contractor shall schedule the meeting with the City of Cedar Park Engineering Department a minimum of 48 hours prior to this pre-construction meeting (512-401-5000). Final construction plans shall be delivered to Engineering a minimum of seven business days prior to requesting a pre-construction meeting.
- Excess soil shall be removed at the contractor's expense. Notify the City of Cedar Park if the disposal site is inside the City's jurisdictional boundaries.
- Burning is prohibited.
- Any changes or revisions to these plans must first be submitted to the City by the design engineer for review and written approval prior to construction of the revision.
- Minimum setback requirements for existing and newly planted trees from the edge of pavement to conform to the requirements as shown in Table 6-1 of the City of Austin's Transportation Criteria Manual.
- The Contractor will reimburse the City for all cost incurred as a result of any damage to any City utility or any infrastructure within the Right-of-Way by the Contractor, regardless of these plans.
- An engineer's concurrence letter and electronic 22"x34" record drawings shall be submitted to the Engineering Department prior to the issuance of certificate of occupancy or subdivision acceptance. The Engineer and Contractor shall verify that all final revisions and changes have been made to record drawings prior to City submittal. Record construction drawings, including roadway and all utilities, shall be provided to the City in AutoCad ".dwg" files and ".PDF" format on a CD or DVD. Line weights, line types and text size shall be such that if half-size prints (11"x17") were produced, the plans would still be legible. All required digital files shall contain a minimum of two (2) control points referenced to the State Plane Grid Coordinate System - Texas Central Zone (4203), in US feet and shall include rotation information and scale factors required to reduce the drawings to grid coordinates in US feet.
- The City of Cedar Park has not reviewed these plans for compliance with the Americans With Disabilities Act. It is the responsibility of the owner to provide compliance with all legislation related to accessibility within the limits of construction shown in these plans.
- ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE CITY OF CEDAR PARK MUST RELY ON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.
- No blasting is allowed on this project.
- A traffic control plan, in accordance with the Texas Manual on Uniform Traffic Control Devices, shall be submitted to the City for review and approval prior to any partial or complete roadway closures. Traffic control plans shall be site specific and seal by a registered professional engineer.
- The contractor shall keep the site clean and maintained at all times, to the satisfaction of the City. The subdivision will not be accepted (or Certificate of Occupancy issued) until the site has been cleaned to the satisfaction of the City.
- Signs are not permitted in Public Utility Easements, Set Backs or Drainage Easements.
- It shall be the responsibility of the Contractor to inspect temporary erosion controls on a daily basis. Adjust the controls and/or remove any sediment buildup as necessary. A stop work order and/or fine may be imposed if the erosion controls are not maintained.
- A final certificate of occupancy will not be issued on commercial sites until all disturbed areas have been re-vegetated. Substantial grass cover, as determined by Engineering Department, must be achieved prior to the issuance of a final certificate of occupancy. All erosion controls must remain in place and maintained until all disturbed areas have been re-vegetated to the acceptance of the City of Cedar Park Engineering Department. Prior to issuance of a certificate of occupancy for a site development permit, the right of way between the property line and edge of pavement / back of curb shall be revegetated according to COA specification 602S and 606S.
- Contractor will be responsible for keeping roads and drives adjacent to and near the site free from soil, sediment and debris. Contractor will not remove soil, sediment or debris from any area or vehicle by means of water, only shoveling and sweeping; will be allowed. Contractor will be responsible for dust control from the site. Failure to comply with this requirement may result in a stop work order or a fine.
- All wet utilities shall be installed and all densities must have passed inspection(s) prior to the installation of dry utilities.
- A minimum of seven days of cure time is required for HMA/C prior to the introduction of vehicular traffic to any streets.
- Prior to plan approval, the Engineer shall submit to the Engineering Department documentation of subdivision/site registration with the Texas Department of Licensing and Regulations (TDLR) and provide documentation of review and compliance of the subdivision/site construction plans with Texas Architectural Barriers Act (TABA).
- Prior to subdivision/site acceptance, the engineer/developer-owner shall submit to the Engineering Department documentation that the subdivision/site was inspected by TDLR or a registered accessibility specialist (RAS) and the subdivision/site is in compliance with the requirements of the TABA.
- All construction and construction related activities shall be performed Monday thru Friday from 7:00 A.M. to 6:00 P.M. However, construction activities within one hundred feet (100') of a dwelling or dwelling unit shall be performed between the hours of 8:00 a.m. and 6:00 p.m.
- Approval for construction activities performed on Owner's Holidays and/or Saturdays shall be obtained in writing 48 hours in advance, and inspection fees at 1.5 times the hourly inspection rate shall be billed directly to the contractor. There shall be no construction or construction related activities performed on Sunday. The City reserves the right to require the contractor to uncover all work performed without City inspection.
- All poles to be approved by City and PEC, no conduit shall be installed down lot lines / between homes. All conduit shall be located in the public ROW or in an easement adjacent to and parallel to the public ROW.
- Dry utilities shall be installed after subgrade is cut and before first course base. No trenching of compacted base. If necessary dry utilities installed after first course base shall be bored across the full width of the ROW.
- No ponding of water shall be allowed to collect on or near the intersection of private driveway(s) and a public street. Reconstruction of the driveway approach shall be at the Contractor's expense.
- All driveway approaches shall have a uniform two percent slope within the ROW unless approved in writing by the Engineering Department.
- Contractors on site shall have an approved set of plans at all times. Failure to have an approved set may result in a stop work order.
- Contractor to clear five feet beyond all right of way to prevent future vegetative growth into the sidewalk areas.

Street Notes:

- No trenching of compacted base will be allowed. A penalty and/or fine may be imposed to the general contractor if trenching of compacted base occurs without City approval, regardless of who performed the trenching.
- All sidewalks shall comply with the Americans With Disabilities Act. The City of Cedar Park has NOT reviewed these plans for compliance with the Americans With Disabilities Act, or any other accessibility legislation, and does not approve these plans for any accessibility standards.
- Street barricades shall be installed on all dead end streets and as necessary during construction to maintain job safety.
- Any damage caused to existing pavement, curbs, sidewalks, ramps, etc., shall be repaired by the contractor to the satisfaction of the City prior to acceptance of the subdivision.
- At intersections, which have valley drainage, the crown to the intersecting street will be culminated at a distance of 40 ft. from the intersecting curb line unless otherwise noted.
- The subgrade material was tested by ECS SOUTHWEST, LLC ON JULY 12, 2018 the pavement sections were designed accordingly. The pavement sections are to be constructed as follows: **N/A NO PUBLIC ROADS ARE PROPOSED**
- Density testing of compacted subgrade material, first course and second course compacted base, shall be made at 500 foot intervals.
- All density testing is the responsibility of the owner or contractor and shall be witnessed by the City of Cedar Park's project representative. The contractor is to notify the City 48 hours prior to scheduled density testing.
- Slope of natural ground adjacent to the right-of-way shall not exceed 3:1. If a 3:1 slope is not possible, a retaining wall or some other form of slope protection approved by the City shall be placed in a location acceptable to the City.
- The City, engineer, contractor or a representative from the asphalt testing lab shall attend a pre-paving conference prior to the start of HMA paving. The contractor shall give the City a minimum of 48 hours notice prior to this meeting (512-401-5000).
- The Contractor or owner is responsible for conducting tests on asphalt pavement in accordance with the requirements set forth in the City of Austin Standard Specification No. 340. Any re-testing of the asphalt pavement shall be conducted under the supervision of the engineer and the City of Cedar Park. Re-testing of the asphalt pavement shall be limited to one retest per project.
- All pavement markings and signage shall comply with MUTCD standards. Street name letter sizing shall be in accordance with MUTCD Table 2-2. Pavement markings shall be thermoplastic unless otherwise noted.
- All signs shall be high intensity retro grade.
- No fencing or wall is allowed to be constructed so that it obstructs the sight lines of drivers from an intersecting public roadway or from an intersecting private driveway. Sight lines are to be maintained as described in City Code Section 14.05.007. Installing a fence or wall which does not comply with the City's Sight Distance Requirements or Fencing Regulations is a violation of the City's Ordinance and may be punishable pursuant to Section 1.01.009 of City Code.
- Temporary rock crushing operations are not allowed. All sources for flexible base material are required to be approved by the City. Prior to base placement all current trial test reports for the proposed stockpiles are to be submitted to the City's project representative for review and approval.
- Utility service boxes or other utility facilities shall not be installed within areas determined to be required sight lines of two intersecting public streets or within sight lines of a private driveway. Sight lines are to be maintained compliant with Table 1-1 of the Austin Transportation Criteria Manual. Utilities determined by the Director of Engineering to be placed within required sight lines may be required to be relocated at the expense of the contractor prior to the City issuing a Certificate of Occupancy or prior to the City's Acceptance of the Project Improvements.
- All lane closures shall occur only between the hours of 9 AM and 4 PM. Any night time lane closures require approval by the Director of Engineering and shall occur between the hours of 8 PM and 6 AM. Lane closures observed by City during the peak hours of 6 AM to 9 AM, or 4 PM to 8 PM will be subject to fine per Chapter 1 of City Ordinance, and/or subsequent issuance of Work Stoppage.
- Improvements that include reconstruction of an existing Type II driveway shall be done in a manner which retains operations of not less than half of the driveway at all times. Full closure of such driveway can be considered with written authorization retained by the Contractor from the property owner(s) or access easement right holder(s) of the driveway allowing full closure of the driveway.

Wastewater Notes:

- Manhole frames and covers and water valve boxes shall be raised to finished pavement grade at the owner's expense by the contractor with the City approval. All utility adjustments shall be completed prior to final paving construction.
- The location of any existing utility lines shown on these plans may not be accurate. Any damage to existing utility lines, both known and unknown, shall be repaired at the expense of the contractor. The contractor shall locate all utilities prior to bidding the project.
- All iron pipe end fittings shall be wrapped with at least 8 mil. Polyethylene wrap.
- All water mains, wastewater mains and service lines shall meet City of Austin minimum cover specifications. All streets are to be cut to subgrade prior to installation of water main cuts will be issued by the engineer.
- Where 48-inches of cover below subgrade cannot be achieved for wastewater service lines alternate materials may be used. A minimum of 36-inches of cover below subgrade shall be achieved. Any wastewater service line with cover between 36-inch and 48-inches shall be SDR-26 PVC pressure pipe.
- Gasketed PVC sewer main fittings shall be used to connect SDR-35 PVC to SDR-26 PVC pressure pipe or C-900.
- Pipe materials to be used for construction of utility lines:
Wastewater- **PVC SCH40 (NO PUBLIC IMPROVEMENTS)**
Force Main- **N/A**
(Note: if using PVC, SDR-26 is required, SDR-35 WW is not allowed)
- All sanitary sewers, excluding service lines, shall be mandrel tested per TCEQ (Texas Commission on Environmental Quality) criteria. A mandrel test will not be performed until backfill has been in place for a minimum of 30 days.
- All wastewater lines 10" and larger shall be video recorded according to COA S10 at the Contractor's expense. The contractor shall supply two copies to the City's Field Representative. No separate pay unless noted on the bid form.
- All sanitary sewers, including service lines, shall be air tested per City of Austin Standard Specifications.
- Density testing of compacted backfill shall be made at a rate of one test per two foot lifts per 500 feet of installed pipe.
- City shall be given 48 hours notice prior to all testing of water and wastewater lines. City inspection is required for all testing of water and wastewater lines.
- Where a water or wastewater line crosses above (or below) a storm sewer structure and the bottom (or top) of the pipe is within 18 inches of the top (or bottom) of the utility structure, the pipe shall be encased with concrete for a distance of at least 1 ft. on either side of the ditch line of the utility structure or the storm sewer. Concrete encasement will not be required for ductile iron (thickness Class 50), AWWA C-900 (SDR-18) 150 psi rated PVC in sizes to 12 inches or AWWA C-905 (SDR-25) 165 psi rated PVC in sizes larger than 12 inches. Concrete encasement shall conform to C.O.A. standard detail 505-1.
- The allowable (maximum) adjustment for a manhole shall be 12" (inches) or less.
- Where a sewer line crosses a water line, the sewer line shall be one 20 ft. joint of 150 psi rated PVC centered on crossing.
- All manhole and inlet covers shall read "City of Cedar Park".
- Contractor to notify, and obtain approval from, the City of Cedar Park 48 hours prior to connecting to existing City utilities.
- All pipe bedding material shall conform to City of Austin Standard Specifications.
- Unless otherwise specified by the Engineer all concrete is to be Class "A" (5 sack, 3000 psi ~ 28-days), and all reinforcing steel to be ASTM A615 60.
- All water valves shall be operated by City personnel ONLY. The contractor may not operate any water valve. The general contractor may be fined if a water valve is operated, regardless of who operated the valve.
- A double check backflow device in a vault shall be installed at the property line on all private fire lines.
- All potable water system components installed after January 4, 2014, shall be "lead free" according to the United States Safe Drinking Water Act. The only components exempt from this requirement are fire hydrants. Components that are not clearly identified by the manufacturer as meeting this requirement by marking, or on the product packaging, or by pre-approved submittal, will be rejected for use. A NSF certification will be adequate if the certification has not expired as of January 4, 2014 and remains in effect at the time of construction.
- All pressure pipe shall have mechanical restraint and concrete thrust blocking at all valves, bends, tees, plugs, and other fittings.

Water Notes:

- The top of valve stems shall be at least 18", and no more than 36", below finished grade. Valve stem risers shall be welded on each end to the City's satisfaction.
- Fire hydrant ends to be ductile iron, Class 350, and installed per City of Austin standard specifications and detail.
- Prior to installation of fire hydrants, the engineer will provide the Contractor one (1) cut from a hub pin, establishing the elevation of the bury line.
- The engineer shall provide cuts for all water lines at all storm sewer crossings to the City of Cedar Park.
- Pipe materials to be used for construction of utility lines:
Water- **PVC SCH40 (NO PUBLIC IMPROVEMENTS)**
Copper pipe and fittings are not permitted within the Right-of-Way.
- Approved 5 1/2" fire hydrants:
• American Flow Control, B84B
• Mueller Company, Super Centurion 250
• Clow Medallon Hydrant
• American AVK Company, Series 27 (Model 2780)
• All fire hydrants must meet City of Cedar Park thread specifications (National Thread)
• Blue reflector markers shall be located on the centerline of the pavement across from all fire hydrants. Pavement markers at intersections shall be four-sided.
- If Tapping Saddles are required, they should be Smith-Blair 662 Stainless Steel Tapping Sleeves, or approved equal. Requests for alternate providers shall be made to the City of Cedar Park Water Distribution Department.
- All water lines, including service lines, shall be pressure and leak tested per City of Austin Standard Specifications and witnessed by the City of Cedar Park representative. All testing is to be the responsibility of the contractor, and the contractor may be required to re-test lines if the testing is not witnessed by the City. Contractor must notify the City of Cedar Park 48 hours prior to any testing.
- All water lines shall be sterilized and bacteriologically tested in accordance with City of Austin Standards. The contractor is responsible for sterilization and the City of Cedar Park is responsible for submitting bacteriological samples to the State.
- Density testing of compacted backfill shall be made at a rate of one test per two foot lifts per 500 feet of installed pipe.
- Contractor to obtain a water meter from the City of Cedar Park for any water that may be required during construction. (512-401-5000)
- ALL WATERMETER BOXES SHALL BE FORD GULF METER BOX WITH LOCKING LID.
• SINGLE-148-233
• DUAL DG-18-243
• 1" METER 111-444
• 1 1/2" - 2" METER 1730-R (LID) & 1730-12 (BOX)/ACCEPTABLE BOXES FOR THIS SIZE OF METER
- Manhole frames and covers and water valve boxes shall be raised to finished pavement grade at the owner's expense by the contractor with City inspection. All utility adjustments shall be completed prior to final paving construction.
- The location of any existing utility lines shown on these plans is the best available and may not be accurate. Any damage to existing utility lines, both known and unknown, shall be repaired at the expense of the contractor.
- All iron pipe and fittings shall be wrapped with at least 8 mil. Polyethylene wrap.
- All water mains, wastewater mains and service lines shall meet City of Austin Specifications for minimum cover requirements. All streets are to be cut to subgrade prior to installation of water mains or cuts will be issued by the engineer.
- City to be given 48 hours notice prior to all testing of water and wastewater lines. City inspection is required for all testing of water and wastewater lines.
- Where a water or wastewater line crosses above (or below) a storm sewer structure and the bottom (or top) of the pipe is within 18 inches of the top (or bottom) of the utility structure, the pipe shall be encased with concrete for a distance of at least 1 ft. on either side of the ditch line of the utility structure or the storm sewer. Concrete encasement will not be required for ductile iron (thickness Class 50), AWWA C-900 (SDR-18) 150 psi rated PVC in sizes to 12 inches or AWWA C-905 (SDR-25) 165 psi rated PVC in sizes larger than 12 inches. Concrete encasement shall conform to C.O.A. standard detail 505-1.
- Contractor to notify the City of Cedar Park 48 hours prior to connecting to existing utilities.
- All pipe bedding material shall conform to City of Austin Standard Specifications.
- Tracer tape shall be installed on all water and wastewater mains in accordance with City of Austin Standards.
- Unless otherwise specified by the Engineer all concrete is to be Class "A" (5 sack, 3000 psi ~ 28-days), and all reinforcing steel to be ASTM A615 60.
- All water valves will be operated by City personnel ONLY. The contractor may not operate any water valve. The general contractor may be fined if a water valve is operated, regardless of who operated the valve.
- A double check backflow device in a vault shall be installed at the property line on all private fire lines.
- All potable water system components installed after January 4, 2014, shall be "lead free" according to the United States Safe Drinking Water Act. The only components exempt from this requirement are fire hydrants. Components that are not clearly identified by the manufacturer as meeting this requirement by marking, or on the product packaging, or by pre-approved submittal, will be rejected for use. A NSF certification will be adequate if the certification has not expired as of January 4, 2014 and remains in effect at the time of construction.
- All pressure pipe shall have mechanical restraint and concrete thrust blocking at all valves, bends, tees, plugs, and other fittings.

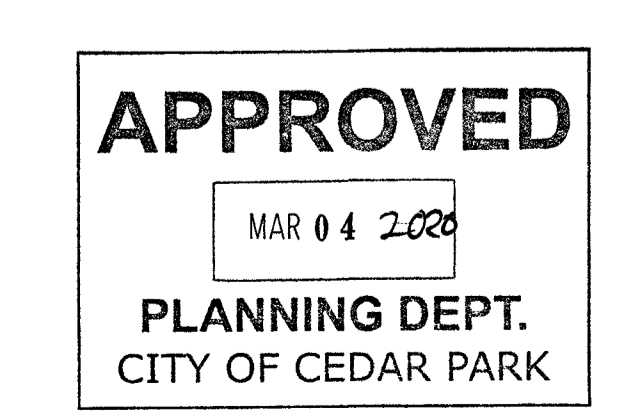
Storm Sewer Notes:

- Manhole frames and covers and water valve boxes shall be raised to finished pavement grade at the owner's expense by the contractor with City inspection. All utility adjustments shall be completed prior to final paving construction. Contractor shall backfill around manholes and junction boxes with Class A concrete.
- All manhole lids shall be 32" or larger, unless expressly approved in writing by the Engineering Department.
- The location of any existing utility lines shown on these plans is the best available and may not be accurate. Any damage to existing utility lines, both known and unknown, shall be repaired at the expense of the contractor.
- Pipe materials to be used for construction of utility lines: Unless otherwise specified by the Engineer, all storm sewer RCP shall be Class III. Corrugated Metal Pipe is not permitted.
- All manhole and inlet covers shall read "City of Cedar Park".
- Contractor to notify the City of Cedar Park 48 hours prior to connecting to existing utilities.
- All pipe bedding material shall conform to City of Austin Standard Specifications.
- Unless otherwise specified by the Engineer all concrete is to be Class "A" (5 sack, 3000 psi ~ 28-days), and all reinforcing steel to be ASTM A615 60.
- Contractor to install and maintain geo-textile fabric barrier (inlet protection) around storm sewer leads and inlets to prevent silt and other material from entering the storm sewer collection system.
- Install concrete safety end treatments to all culverts and ends of drainage pipe.
- All curb inlets shall have an Almetek 4" Disc "No Dumping Drains to Waterway" marker.

REV. NO.	BY	DATE	REVISION DESCRIPTION



[Signature]
Sep 25, 2019



GENERAL NOTES SHEET 1 OF 2	
ACCUSHARP DEVELOPMENT PLAT (PROJECT IN CEDAR PARK ETJ)	
CASE: DP-18-001	SHEET
DATE: Sep 25, 2019	2
DRAWN BY: GEJ	OF 25
DESIGNED BY: GEJ	
REVIEWED BY: GEJ	

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**Texas Commission on Environmental Quality
Contributing Zone Plan
General Construction Notes**

Edwards Aquifer Protection Program Construction Notes - Legal Disclaimer

The following listed "construction notes" are intended to be advisory in nature only and do not constitute an approval or conditional approval by the Executive Director (ED), nor do they constitute a comprehensive listing of rules or conditions to be followed during construction. Further actions may be required to achieve compliance with TCEQ regulations found in Title 30, Texas Administrative Code (TAC), Chapters 213 and 217, as well as local ordinances and regulations providing for the protection of water quality. Additionally, nothing contained in the following listed "construction notes" restricts the powers of the ED, the commission or any other governmental entity to prevent, correct, or curtail activities that result or may result in pollution of the Edwards Aquifer or hydrologically connected surface waters. The holder of any Edwards Aquifer Protection Plan containing "construction notes" is still responsible for compliance with Title 30, TAC, Chapters 213 or any other applicable TCEQ regulation, as well as all conditions of an Edwards Aquifer Protection Plan through all phases of plan implementation. Failure to comply with any condition of the ED's approval, whether or not in contradiction of any "construction notes," is a violation of TCEQ regulations and any violation is subject to administrative rules, orders, and penalties as provided under Title 30, TAC § 213.10 (relating to Enforcement). Such violations may also be subject to civil penalties and injunction. The following listed "construction notes" in no way represent an approved exception by the ED to any part of Title 30 TAC, Chapters 213 and 217, or any other TCEQ applicable regulation.

- A written notice of construction must be submitted to the TCEQ regional office at least 48 hours prior to the start of any ground disturbance or construction activities. This notice must include:
 - the name of the approved project;
 - the activity start date; and
 - the contact information of the prime contractor.
- All contractors conducting regulated activities associated with this project should be provided with complete copies of the approved Contributing Zone Plan (CZP) and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractor(s) should keep copies of the approved plan and approval letter on-site.
- No hazardous substance storage tank shall be installed within 150 feet of a water supply source, distribution system, well, or sensitive feature.
- Prior to beginning any construction activity, all temporary erosion and sedimentation (E&S) control measures must be properly installed and maintained in accordance with the manufacturer's specifications. If inspections indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations. These controls must remain in place until the disturbed areas have been permanently stabilized.
- Any sediment that escapes the construction site must be collected and properly disposed of before the next rain event to ensure it is not washed into surface streams, sensitive features, etc.
- Sediment must be removed from the sediment traps or sedimentation basins when it occupies 50% of the basin's design capacity.
- Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from being discharged offsite.
- All excavated material that will be stored on-site must have proper E&S controls.
- If portions of the site will have a cease in construction activity lasting longer than 14 days, soil

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stabilization in those areas shall be initiated as soon as possible prior to the 14th day of inactivity. If activity will resume prior to the 21st day, stabilization measures are not required. If drought conditions or inclement weather prevent action by the 14th day, stabilization measures shall be initiated as soon as possible.

- The following records should be maintained and made available to the TCEQ upon request:
 - the dates when major grading activities occur;
 - the dates when construction activities temporarily or permanently cease on a portion of the site; and
 - the dates when stabilization measures are initiated.
- The holder of any approved CZP must notify the appropriate regional office in writing and obtain approval from the executive director prior to initiating any of the following:
 - any physical or operational modification of any best management practices (BMPs) or structure(s), including but not limited to temporary or permanent ponds, dams, berms, silt fences, and diversionary structures;
 - any change in the nature or character of the regulated activity from that which was originally approved;
 - any change that would significantly impact the ability to prevent pollution of the Edwards Aquifer; or
 - any development of land previously identified as undeveloped in the approved contributing zone plan.

Austin Regional Office 12100 Park 35 Circle, Building A Austin, Texas 78753-1808 Phone (512) 339-2929 Fax (512) 339-3795	San Antonio Regional Office 14250 Judson Road San Antonio, Texas 78233-4480 Phone (210) 490-3096 Fax (210) 545-4329
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THESE GENERAL CONSTRUCTION NOTES MUST BE INCLUDED ON THE CONSTRUCTION PLANS PROVIDED TO THE CONTRACTOR AND ALL SUBCONTRACTORS.

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EROSION CONTROL NOTES

- THE CONTRACTOR SHALL INSTALL EROSION/SEDIMENTATION CONTROLS AND TREE PROTECTIVE FENCING PRIOR TO ANY WORK (CLEARING, GRUBBING OR EXCAVATION).
- THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL AND THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN.
- THE PLACEMENT OF TREE PROTECTIVE FENCING SHALL BE IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION AND THE APPROVED GRADING/TREE AND NATURAL AREA PLAN.
- A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD ON-SITE WITH THE CONTRACTOR, DESIGN ENGINEER/PERMIT APPLICANT AND WILLIAMSON COUNTY REPRESENTATIVES AFTER INSTALLATION OF THE EROSION/SEDIMENTATION CONTROLS AND TREE PROTECTION MEASURES AND PRIOR TO BEGINNING ANY WORK. THE CONTRACTOR SHALL NOTIFY WILLIAMSON COUNTY ENGINEERS' OFFICE AT LEAST THREE (3) DAYS PRIOR TO THE MEETING DATE.
- THE CONTRACTOR IS REQUIRED TO INSPECT THE CONTROLS AND FENCES AT WEEKLY INTERVALS AND AFTER SIGNIFICANT RAINFALL EVENTS TO INSURE THAT THEY ARE FUNCTIONING PROPERLY. THE PERSON(S) RESPONSIBLE FOR MAINTENANCE OF CONTROLS AND FENCES SHALL IMMEDIATELY MAKE ANY NECESSARY REPAIRS TO DAMAGED AREAS. SILT ACCUMULATION AT CONTROLS MUST BE REMOVED WHEN THE DEPTH REACHES SIX (6) INCHES.
- THE TEMPORARY SPOILS DISPOSAL SITE IS TO BE SHOWN ON THE EROSION CONTROL MAP. THE DEPTH OF SPOIL WILL NOT EXCEED 10 FEET IN ANY AREA.
- NO PERMANENT SPOILS DISPOSAL ON-SITE EXCEPT AS SHOWN ON THE PLANS.
- ALL AREAS DISTURBED OR EXPOSED DURING CONSTRUCTION SHALL BE REVEGETATED IN ACCORDANCE WITH WILLIAMSON COUNTY STANDARDS. HOWEVER, THE TYPE OF VEGETATION MUST EQUAL OR EXCEED THE TYPE OF VEGETATION PRESENT BEFORE CONSTRUCTION UNLESS OTHERWISE REQUESTED BY THE PROPERTY OWNER.
- A STABILIZED CONSTRUCTION ENTRANCE IS REQUIRED AT ALL POINTS WHERE CONSTRUCTION TRAFFIC IS EXITING THE PROJECT ONTO EXISTING PAVEMENT.

REINFORCED CONCRETE NOTES:

- CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI IN 28 DAYS UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- TYPE I PORTLAND CEMENT SHALL BE USED IN THE MANUFACTURE OF ALL CONCRETE UNLESS NOTED OTHERWISE ON THE DRAWINGS. PORTLAND CEMENT SHALL CONFORM TO ASTM C-150.
- AGGREGATE, BOTH COARSE AND FINE, USED IN THE MANUFACTURE OF CONCRETE SHALL CONFORM TO ASTM C-33. THE MAXIMUM COARSE AGGREGATE SIZE SHALL BE 1-1/2 INCHES UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- REINFORCING BARS SHALL BE DEFORMED AND SHALL CONFORM TO ASTM A-615, GRADE 40 UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- WELDED PLAIN WIRE FABRIC FOR CONCRETE REINFORCEMENT SHALL CONFORM TO ASTM A-185.
- EMBEDDED STEEL MATERIAL SHALL CONFORM TO ASTM-36, UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- CONCRETE DESIGN IS IN ACCORDANCE WITH ACI 318-71, BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.
- PLAIN AND REINFORCED CONCRETE WORK SHALL CONFORM TO ACI 301-72, SPECIFICATIONS FOR STRUCTURAL CONCRETE.
- DETAILING OF REINFORCING SHALL CONFORM TO THE REQUIREMENTS OF ACI 315-74. MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES.
- FABRICATION OF REINFORCING MATERIALS SHALL CONFORM TO CRSI MANUAL OF STANDARD PRACTICE(1976).

CONSTRUCTION SEQUENCE NOTE:

- INSTALL CONSTRUCTION ENTRANCE, SILT FENCE, AND ROCK BERMS, AS SHOWN ON THE PLANS. CONTACT THE DESIGN ENGINEER FOR A PRE-CONSTRUCTION MEETING. PEDERNALES ELECTRIC COOPERATIVE, CITY OF CEDAR PARK (WATER), AND ATMOS ENERGY (GAS COMPANY) ARE NOTIFIED BY THE TEXAS EXCAVATION SYSTEM (1-800-344-8377).
BINKLEY & BARFIELD, INC.: (512) 658-8095
WILLIAMSON COUNTY: (512) 943-3330
- INSTALL EROSION CONTROLS, AND CLEAR AREAS ALONG CONSTRUCTION ROUTES.
- INSTALL TRAFFIC CONTROLS AS REQUIRED.
- CONSTRUCT PROJECT.
- TEST BURIED UTILITY LINES AS SPECIFIED.
- TEST STREET AND DRAINAGE CONSTRUCTION AS SPECIFIED.
- RE-VEGETATE DISTURBED AREAS AS REQUIRED.
- UPON ACCEPTANCE OF FINAL CONSTRUCTION AND PROPER RE-VEGETATION PER SPECIFICATIONS; REMOVE TEMPORARY EROSION CONTROLS.
- MAINTAIN INTEGRITY OF EXISTING FENCES, PROPERTY CORNERS, AND LANDSCAPING AS REQUIRED.

WILLIAMSON COUNTY CONSTRUCTION NOTES

B4 - CONSTRUCTION -- GENERAL

B4.1 A PRECONSTRUCTION MEETING SHALL BE SCHEDULED PRIOR TO THE START OF CONSTRUCTION. THE DESIGN ENGINEER, OWNER, CONTRACTOR, SUBCONTRACTORS, AND COUNTY ENGINEER SHALL ATTEND THIS MEETING. ALL ROADS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AS APPROVED BY THE COUNTY ENGINEER AND IN ACCORDANCE WITH THE SPECIFICATIONS FOUND IN THE CURRENT VERSION OF THE "TEXAS DEPARTMENT OF TRANSPORTATION MANUAL STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS, AND BRIDGES" UNLESS OTHERWISE STATED ON THE CONSTRUCTION DOCUMENTS APPROVED BY THE COUNTY ENGINEER.

B4.2 ALL MATERIALS SHALL BE SAMPLED AND TESTED BY AN INDEPENDENT TESTING LABORATORY IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS APPROVED BY THE COUNTY ENGINEER. THE OWNER SHALL PAY FOR ALL TESTING SERVICES AND SHALL FURNISH THE COUNTY ENGINEER WITH CERTIFIED COPIES OF THESE TEST RESULTS. THE COUNTY ENGINEER MUST APPROVE THE TEST RESULTS PRIOR TO CONSTRUCTING THE NEXT COURSE OF THE ROADWAY STRUCTURE. ANY MATERIAL WHICH DOES NOT MEET THE MINIMUM REQUIRED TEST SPECIFICATIONS SHALL BE REMOVED AND RE-COMPACTED OR REPLACED UNLESS ALTERNATIVE REMEDIAL ACTION IS APPROVED IN WRITING FROM THE COUNTY ENGINEER.

B4.3 EXCEPT FOR ELECTRICAL LINES, ALL UNDERGROUND NONFERROUS UTILITIES WITHIN A RIGHT-OF-WAY OR EASEMENT MUST BE ACCOMPANIED BY FERROUS METAL LINES TO AID IN TRACING THE LOCATION OF SAD UTILITIES THROUGH THE USE OF A METAL DETECTOR.

B4.4 ALL PAVEMENTS ARE TO BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER. THE DESIGN SHALL BE BASED ON A 20-YEAR DESIGN LIFE AND IN CONJUNCTION WITH RECOMMENDATIONS BASED UPON A SOILS REPORT OF SAMPLES TAKEN ALONG THE PROPOSED ROADWAYS. TEST BORINGS SHALL BE PLACED AT A MAXIMUM SPACING OF 500 FEET OR OTHER SAMPLING FREQUENCY APPROVED BY THE COUNTY ENGINEER BASED ON RECOMMENDATIONS PROVIDED BY THE GEOTECHNICAL ENGINEER. THE SOILS REPORT AND PAVEMENT DESIGN SHALL BE SUBMITTED TO THE COUNTY ENGINEER FOR REVIEW. THE PAVEMENT DESIGN MUST BE APPROVED BY THE COUNTY ENGINEER PRIOR TO OR CONCURRENTLY WITH THE REVIEW AND APPROVAL OF THE CONSTRUCTION PLANS. IN ADDITION TO THE BASIS OF THE PAVEMENT DESIGN, THE SOILS REPORT SHALL CONTAIN THE RESULTS OF SAMPLED AND TESTED SUBGRADE FOR PLASTICITY INDEX, PH, SULFATE CONTENT, AND MAXIMUM DENSITY.

B5 SUBGRADE

B5.1 THE PREPARATION OF THE SUB-GRADE SHALL FOLLOW GOOD ENGINEERING PRACTICES AS DIRECTED BY THE COUNTY ENGINEER IN CONJUNCTION WITH RECOMMENDATIONS OUTLINED IN THE GEOTECHNICAL REPORT. WHEN THE PLASTICITY INDEX (PI) IS GREATER THAN 20, A SUFFICIENT AMOUNT OF LIME SHALL BE ADDED AS DESCRIBED IN ITEM 260 OF THE CURRENT EDITION OF THE TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION UNTIL THE PI IS LESS THAN 20. IF THE ADDITION OF LIME AS DESCRIBED IN ITEM 260 IS NOT FEASIBLE, AN ALTERNATE STABILIZING DESIGN SHALL BE PROPOSED AND SUBMITTED TO THE COUNTY ENGINEER FOR APPROVAL. THE SUBGRADE SHALL BE PREPARED AND COMPACTED TO ACHIEVE A DRY DENSITY PER TXDOT ITEM 132. IN ADDITION, PROOF ROLLING MAY BE REQUIRED BY THE COUNTY ENGINEER.

B5.2 THE SUBGRADE SHALL BE INSPECTED AND APPROVED BY AN INDEPENDENT TESTING LABORATORY AND A CERTIFIED COPY OF ALL INSPECTION REPORTS FURNISHED TO THE COUNTY ENGINEER, WHO MUST APPROVE THE REPORT PRIOR TO APPLICATION OF THE BASE MATERIAL. ALL DENSITY TEST REPORTS SHALL INCLUDE A COPY OF THE WORK SHEET SHOWING THE PERCENTAGE OF THE MAXIMUM DRY (PROCTOR) DENSITY. THE NUMBER AND LOCATION OF ALL SUBGRADE TESTS SHALL BE DETERMINED BY THE COUNTY ENGINEER.

B6 BASE MATERIAL

B6.1 BASE MATERIAL SHALL CONFORM TO ITEM 247 OF THE CURRENT EDITION OF THE TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, "FLEXIBLE BASE". THE BASE MATERIAL SHALL BE TYPE A GRADE 1, TYPE A GRADE 2, OR AS APPROVED BY THE COUNTY ENGINEER

B6.2 EACH LAYER OF BASE COURSE SHALL BE TESTED FOR IN PLACE DRY DENSITY AND MEASURED FOR COMPACTED THICKNESS. THE NUMBER AND LOCATION OF ALL BASE TEST SAMPLES SHALL BE DETERMINED BY THE COUNTY ENGINEER.

B6.3 THE BASE SHALL BE PREPARED AND COMPACTED TO ACHIEVE A MINIMUM OF 100% OF THE MAXIMUM (PROCTOR) DRY DENSITY OR AS APPROVED BY THE COUNTY ENGINEER UPON RECOMMENDATION BY THE TESTING LABORATORY. THE MAXIMUM LIFT SHALL NOT EXCEED SIX INCHES. THE BASE MUST BE INSPECTED AND APPROVED BY AN INDEPENDENT TESTING LABORATORY AND A CERTIFIED COPY OF THE TEST RESULTS FURNISHED TO THE COUNTY ENGINEER FOR APPROVAL. PRIOR TO THE PLACEMENT OF THE FIRST LIFT OF BASE, THE STOCKPILE SHALL BE TESTED FOR THE SPECIFICATIONS FOUND IN ITEM 247 TABLE 1 AND THE RESULT FURNISHED TO THE COUNTY ENGINEER FOR APPROVAL

B7 BITUMINOUS PAVEMENT

B7.1 URBAN ROADS REQUIRE A MINIMUM 2 INCH WEARING SURFACE OF HMAC TYPE D. THE MIX SHALL BE FROM A TXDOT CERTIFIED PLANT. THE MIX DESIGN SHALL BE SUBMITTED TO THE COUNTY ENGINEER FOR APPROVAL PRIOR TO PLACEMENT OF THE MATERIAL. CONTRACTOR'S QUALITY CONTROL (CQC) TEST REPORTS SHALL BE SUBMITTED TO THE COUNTY ENGINEER ON A DAILY BASIS. AS A MINIMUM, DAILY CQC TESTING ON THE PRODUCED MIX SHALL INCLUDE: SIEVE ANALYSIS TEX-200-F, ASPHALT CONTENT TEX 210-F, HVEEM STABILITY TEX 208 F, LABORATORY COMPACTED DENSITY TEX-207-F, AND MAXIMUM SPECIFIC GRAVITY TEX-227 F. THE NUMBER AND LOCATION OF ALL HMAC TESTS SHALL BE DETERMINED BY THE COUNTY ENGINEER WITH A MINIMUM OF THREE, 6 INCH DIAMETER FIELD CORES SECURED AND TESTED BY THE CONTRACTOR FROM EACH DAY'S PAVING. EACH HMAC COURSE SHALL BE TESTED FOR IN-PLACE DENSITY, BITUMINOUS CONTENT AND AGGREGATE GRADATION, AND SHALL BE MEASURED FOR COMPACTED THICKNESS. THE NUMBER AND LOCATION OF ALL HMAC TEST SAMPLES SHALL BE DETERMINED BY THE COUNTY ENGINEER.

B7.2 RURAL ROADS MAY USE EITHER THE SPECIFICATIONS FOUND IN SECTION B7.1 OR A TWO-COURSE SURFACE IN ACCORDANCE WITH ITEM 316, TREATMENT WEARING SURFACE, OF THE CURRENT EDITION OF THE TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION. THE TYPE AND RATE OF ASPHALT AND AGGREGATE SHALL BE INDICATED ON THE PLANS AS A BASIS OF ESTIMATE AND SHALL BE DETERMINED AT THE PRECONSTRUCTION CONFERENCE. AGGREGATE USED IN THE MIX SHALL BE ON THE TXDOT QUALITY MONITORING SCHEDULE. AGGREGATE SHALL BE TYPE B GRADE 4. GRADATION TESTS SHALL BE REQUIRED FOR EACH 300 CUBIC YARDS OF MATERIAL PLACED WITH A MINIMUM OF TWO TESTS PER EACH GRADE PER EACH PROJECT. TEST RESULTS SHALL BE REVIEWED BY THE COUNTY ENGINEER PRIOR TO APPLICATION OF THE MATERIAL.

B8 CONCRETE PAVEMENT

B8.1 IN LIEU OF BITUMINOUS PAVEMENT, PORTLAND CEMENT CONCRETE PAVEMENT MAY BE USED. IN SUCH CASES, THE PAVEMENT THICKNESS SHALL BE A MINIMUM OF 9 INCHES OF CONCRETE, AND SHALL BE JOINTED AND REINFORCED IN ACCORDANCE WITH THE DETAIL INCLUDED IN APPENDIX J. THE MIX SHALL BE FROM A TXDOT CERTIFIED PLANT. THE MIX DESIGN SHALL BE SUBMITTED TO THE COUNTY ENGINEER FOR APPROVAL PRIOR TO PLACEMENT OF THE MATERIAL.

B9 - CONCRETE -- GENERAL

B9.1 UNLESS OTHERWISE SPECIFIED, CONCRETE SHALL BE IN ACCORDANCE WITH ITEM 421 OF THE CURRENT EDITION OF THE TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION AND BE PLACED IN ACCORDANCE WITH THE APPLICABLE ITEM.

B9.2 ALL CONCRETE SHALL BE TESTED FOR COMPRESSIVE STRENGTH. ONE SET OF THREE CONCRETE TEST CYLINDERS SHALL BE MOLDED FOR EVERY 50 CUBIC YARDS OF CONCRETE PLACED FOR EACH CLASS OF CONCRETE PER DAY, OR AT ANY OTHER INTERVAL AS DETERMINED BY THE COUNTY ENGINEER. A SLUMP TEST SHALL BE REQUIRED WITH EACH SET OF TEST CYLINDERS. ONE CYLINDER SHALL BE TESTED FOR COMPRESSIVE STRENGTH AT AN AGE OF SEVEN DAYS AND THE REMAINING TWO CYLINDERS SHALL BE TESTED AT 28 DAYS OF AGE.

B10 - ROAD NAMES, SIGNS AND MARKERS

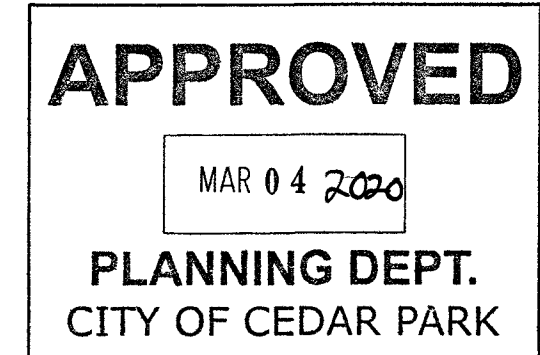
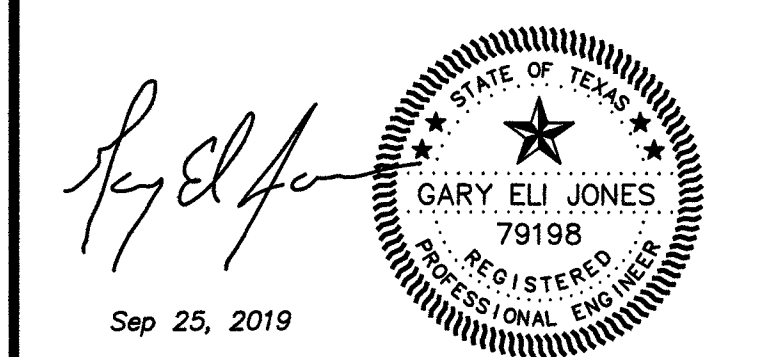
B10.1 ALT ROADS SHALL BE NAMED, WITH PRIOR APPROVAL FOR SAID NAME FROM THE WILLIAMSON COUNTY 911 ADDRESSING COORDINATOR. ROADS MUST BE NAMED IN A MANNER TO AVOID CONFUSION IN IDENTIFICATION ROADS THAT ARE EXTENSIONS OF EXISTING ROADS MUST CARRY THE NAMES OF THOSE IN EXISTENCE. ROADS THAT ARE NOT CONTINUOUS, OR WHICH HAVE 90 DEGREE TURNS, SHALL HAVE DIFFERENT NAMES. THE OWNER SHALL PROVIDE THE COORDINATOR WITH TWO DIGITAL FILES OF THE PLAT. ONE FILE SHALL BE IN AN ADOBE .PDF FORMAT, AND THE OTHER FILE SHALL BE IN AN AUTOCAD .DWG FORMAT GEOREFERENCED TO NAD 1983 STATE PLANE GRID COORDINATE SYSTEM, TEXAS CENTRAL ZONE (4203), WITH DRAWING UNITS OF US FEET. THE ROAD NAMES SHALL BE DISPLAYED ON STANDARD INTERSECTION ROAD MARKER SIGNS ERECTED BY THE OWNER IN COMPLIANCE WITH THE TXMUTCD "STREET NAME SIGNS" AND AT THE LOCATIONS AS INDICATED ON THE CONSTRUCTION PLANS.

B10.2 TRAFFIC CONTROL SIGNS (SUCH AS STOP, YIELD, AND SPEED LIMIT SIGNS) SHALL BE INSTALLED BY THE OWNER OF SAID SUBDIVISION IN COMPLIANCE WITH THE TXMUTCD AND AT THE LOCATIONS AS INDICATED ON THE APPROVED CONSTRUCTION PLANS. OTHER TRAFFIC CONTROL SIGNS, AS SHOWN ON THE CONSTRUCTION PLANS, SHALL BE INSTALLED TO INDICATE ANY UNUSUAL TRAFFIC OR ROAD HAZARD OR CONDITIONS THAT MAY EXIST. AIR TRAFFIC CONTROL DEVICES SHALL BE PLACED IN COMPLIANCE WITH THE TXMUTCD AND THE CONSTRUCTION COST SHALL BE BORNE BY THE OWNER.

B10.3 A SPEED LIMIT OF 25 MPH FOR LOCAL ROADS, 30 MPH FOR COLLECTOR ROADS AND 40 MPH FOR ARTERIAL ROADS WITHIN ALL PLATTED SUBDIVISIONS IS HEREBY ADOPTED. THIS LIMIT MAY BE CHANGED ONLY BY COMMISSIONER'S COURT UPON THE BASIS OF AN ENGINEERING AND TRAFFIC INVESTIGATION SHOWING THAT THE PRIMA FACIE MAXIMUM REASONABLE AND PRUDENT SPEED FOR A PARTICULAR ROAD (OR PART OF A ROAD) SHOULD BE DIFFERENT. THE PLACEMENT OF A STOP SIGN OR A YIELD SIGN ON THE MINOR ROAD AT INTERSECTIONS SHALL BE EVALUATED ON A CASE BY-CASE BASIS IN ACCORDANCE WITH THE TXMUTCD.

B10.4 FOR ANY ROAD THAT IS PROPOSED TO BE EXTENDED AT SOME TIME IN THE FUTURE, A MINIMUM OF FIVE METAL CHANNEL POSTS, EQUALLY SPACED, SHALL BE PLACED AT THE END OF THE ROAD. EACH POST SHALL HAVE AN 18"x18" RED DIAMOND OBJECT MARKER SIGN (TYPE OM-4 PER TXMUTCD) PLACED FOUR FEET ABOVE THE EXISTING GROUND.

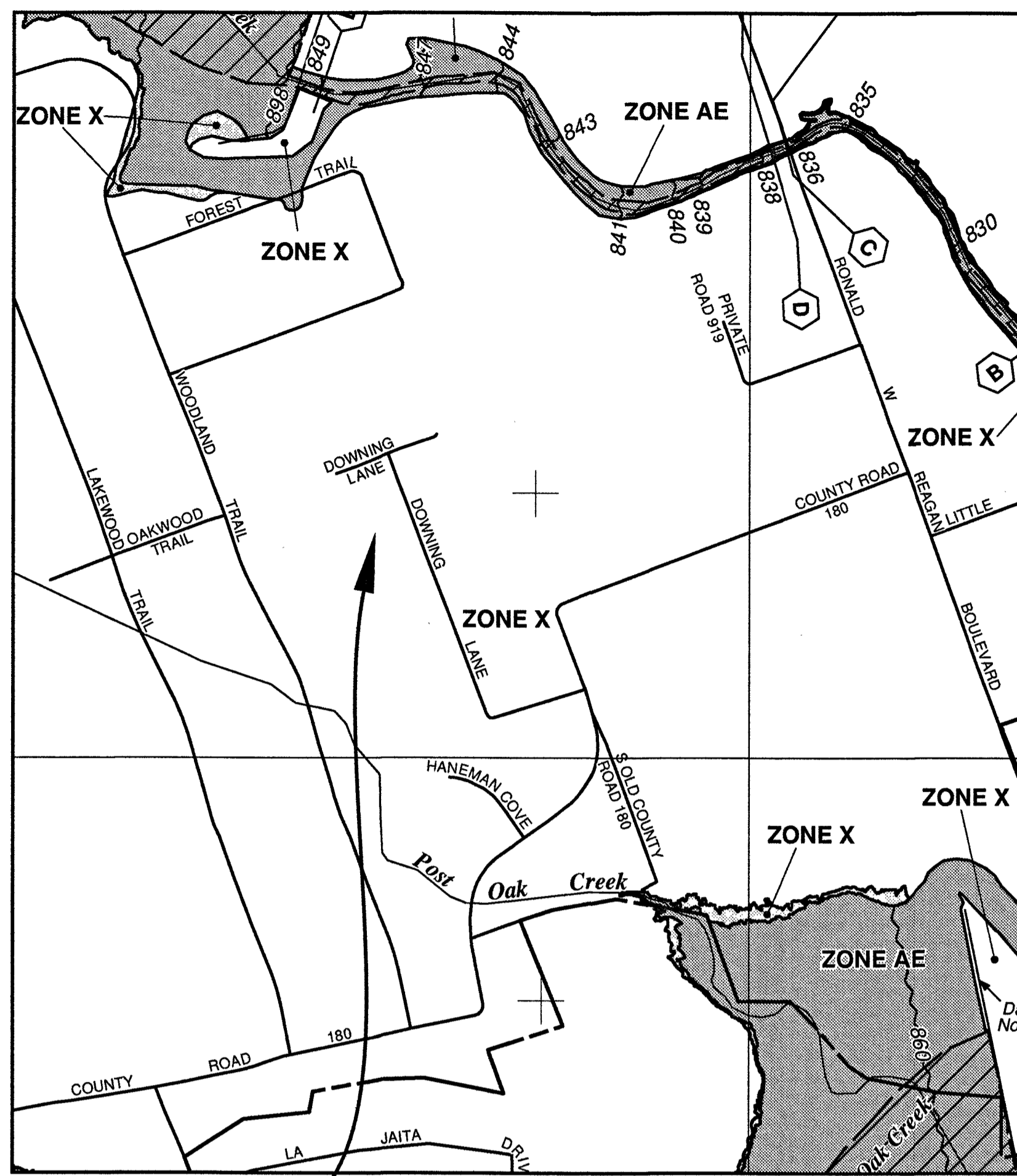
REV. NO.	BY	DATE	REVISION DESCRIPTION



GENERAL NOTES
SHEET 2 OF 2

ACCUSHARP
DEVELOPMENT PLAT
(PROJECT IN CEDAR PARK ETJ.)

CASE: DP-18-001	SHEET
DATE: Sep 25, 2019	3
DRAWN BY: GEJ	OF 25
DESIGNED BY: GEJ	
REVIEWED BY: GEJ	



FIRM FLOOD INSURANCE RATE MAP
WILLIAMSON COUNTY, TEXAS
AND INCORPORATED AREAS

PANEL 0470E

MAP NUMBER 48491C0470E
 MAP REVISED SEPTEMBER 26, 2008

Panel 470 of 750
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

COMMUNITY	NUMBER	PANEL	SUFFIX
WILLIAMSON COUNTY	481079	0470	E
ALBINA CITY OF	480224	0470	E
CEADAR PARK CITY OF	481282	0470	E
ROUND ROCK CITY OF	481048	0470	E

MAP SCALE 1" = 1000'

Panel 470 of 750 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

Panel 470 of 750 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

Panel 470 of 750 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

SITE LOCATION

LEGEND

- UNLESS NOTED OTHERWISE
- TxDOT TYPE II CONCRETE MONUMENT FOUND
 - TxDOT TYPE I CONCRETE MONUMENT FOUND
 - 1/2" IRON ROD FOUND
 - 1/2" IRON ROD WITH SURVEX PLASTIC CAP SET
 - CALCULATED POINT
 - POWER POLE
 - W WATER METER
 - W⊗ WATER VALVE
 - ⊗ IRRIGATION CONTROL VALVE
 - ⊕ FH FIRE HYDRANT
 - ⊕ ELECTRIC METER
 - ⊕ GAS METER
 - ⊕ WASTEWATER CLEANOUT
 - ⊕ CABLE TV BOX
 - ⊕ TELEPHONE PEDESTAL
 - SIGN POST
 - AC AIR CONDITIONING UNIT
 - OD CHAIN LINK FENCE
 - X WIRE FENCE
 - P.R.W.C. PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS
 - O.P.R.W.C. OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS
 - R.P.R.W.C. REAL PROPERTY RECORDS OF WILLIAMSON COUNTY, TEXAS
 - R.O.W. RIGHT-OF-WAY
 - () RECORD INFORMATION
 - TREE LOCATION
 - TREE
 - CRITICAL ROOT ZONE

- GRADING & DRAINAGE NOTES:**
- H/C SPACES SHALL NOT EXCEED 2% IN ANY DIRECTION.
 - SIDEWALKS SHALL NOT EXCEED 2% CROSS SLOPE NOR 5% RUN SLOPE UNLESS NOTED OTHERWISE.
 - USE DRY-STACK ROCK WALL OR STRUCTURAL WALL WHERE 3:1 SLOPE IS NOT ACHIEVABLE UNLESS NOTED OTHERWISE. NATURAL CUT STONE STACK, COA DETAIL FOR DRY STACK WALL, KEYSTONE-TYPE WALL ARE ALL ACCEPTABLE IF PRE-APPROVED BY ENGINEER.
 - WHERE AN ACCESSIBLE ROUTE AND OR SIDEWALK CROSSES UNDER A GUY WIRE, THE CONTRACTOR SHALL COORDINATE THE RE-LOCATION OF THE OBSTRUCTION WITH THE UTILITY OWNER SUCH THAT 6 FOOT IS CLEAR ABOVE ALL POINTS ALONG THE PATH. THIS PROJECT MAY INVOLVE SIGNIFICANT POWER POLE / ELECTRICAL SERVICE RELOCATIONS. THESE RELOCATIONS MAY IMPACT THE OWNER, OR OTHER CUSTOMERS OF THE ELECTRIC UTILITY. ANY RELOCATIONS OF POWER LINES SHALL BE BORNE BY THE CONTRACTOR, UNLESS AGREED UPON BEFORE CONSTRUCTION.
 - LIMITS OF CONSTRUCTION SHOWN ON E&S SHEET.
 - ALL ROOF DRAINS ARE REQUIRED TO DRAIN TO THE STORM WATER SYSTEM SHOWN
 - "PONDING" OR "BIRD BATHS" IN FINAL PAVEMENT SURFACE WILL NOT BE ACCEPTED.
 - BASED ON FIELD CONDITIONS, THE CONTRACTOR SHALL COORDINATE FIELD CHANGES WITH THE DESIGN ENGINEER TO INSURE PROPER INSTALLATION AND NECESSARY FIELD CHANGES TO THE DESIGN.
 - THE LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE. ONLY ACTUAL LOCATIONS AND DEPTHS OF UTILITIES MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY CONFLICTS IMMEDIATELY. ANY DAMAGE BY THE CONTRACTOR TO THE EXISTING UTILITIES, IF SHOWN ON THE PLANS OR NOT, SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR, AT HIS EXPENSE.
 - ANY DAMAGE TO EXISTING ROADS, DRIVEWAYS, SIDEWALKS, OR OTHER APPURTENANCES SHALL BE SAW CUT, REMOVED AND REPLACED WITH MATERIAL, AND BE INSTALLED TO ORIGINAL STANDARDS.
 - THE CONTRACTOR SHALL MAINTAIN DRAINAGE DURING CONSTRUCTION AS TO NOT IMPACT ADJACENT / NEIGHBORING PROPERTIES.
 - THE MAXIMUM SLOPE OF A RAMP IN NEW CONSTRUCTION IS 1:12. THE MAXIMUM RISE FOR ANY RAMP RUN IS 30 IN. THE MAXIMUM HORIZONTAL PROJECTION IS 30 FEET FOR A RAMP WITH A SLOPE BETWEEN 1:12 AND 1:15, AND 40 FEET FOR A RAMP WITH A SLOPE BETWEEN 1:16 AND 1:20. [ANSI 405.2 - 405.6] SLOPES ON ACCESSIBLE ROUTES MAY NOT EXCEED 1:20 UNLESS DESIGNED AS A RAMP. [ANSI 403.3]

- UTILITY CONSTRUCTION NOTES:**
- ANY WATER AND/OR WASTEWATER CALL LIST IS NOT A COMPREHENSIVE LIST OF ALL MATERIALS AND FITTINGS THAT MAY BE REQUIRED AND GENERALLY ONLY REPRESENT CHANGES IN HORIZONTAL ALIGNMENT. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE SITE, WORKING CONDITIONS, AND PROVIDE ALL MATERIALS, INCLUDING BUT NOT LIMITED TO, FITTINGS NEEDED TO COMPLETE INDICATED ALIGNMENT.
 - BBI HAS NOT BEEN EMPLOYED TO DESIGN DRY UTILITIES. HOWEVER, OVERHEAD UTILITIES ARE PROHIBITED AND NOT PROPOSED. ANY PROPOSED DRY UTILITY SHOWN ARE FOR INFORMATIONAL AND PERMITTING PURPOSES ONLY.

- SEQUENCE OF CONSTRUCTION**
- INSTALL ALL EROSION CONTROL.
 - CONDUCT PRE-CONSTRUCTION CONFERENCE
 - EXCAVATE DETENTION PONDS.
 - ESTABLISH SUBGRADE ON SITE.
 - CONSTRUCT DRIVEWAYS AND INSTALL ALL UNDERGROUND UTILITIES
 - CONSTRUCT BUILDING PAD PER STRUCTURAL ENGINEER'S SPECIFICATIONS.
 - PROCESS AND COMPACT SUBGRADE TO FINAL GRADES.
 - INSTALL PAVING
 - FINAL GRADE DETENTION POND AND OUTLET CONTROLS
 - FINAL BUILDING
 - INSTALL ALL LANDSCAPE AND IRRIGATION, RE-VEGETATE ALL DISTURBED AREAS.
 - REMOVE TEMPORARY EROSION CONTROL SUBSEQUENT TO ESTABLISHMENT OF VEGETATION.

- NOTES:**
- THIS SITE IS NOT WITHIN THE 100 YEAR FLOOD PLAIN PER FEMA MAP NO. 48491C0470E, SEPT. 26, 2008.
 - TREE(S) TO REMAIN AND BE REMOVED ON THIS SITE ARE SHOWN ON THE E AND S SHEET.
 - ALL DIMENSIONS ARE FROM FACE OF CURB UNLESS SPECIFIED OR SHOWN OTHERWISE.
 - UNDER NO CIRCUMSTANCE, REGARDLESS OF WHAT IS SHOWN IN THESE PLANS, IS THE CONTRACTOR RELIEVED OF HIS SOLE RESPONSIBILITY FOR SITE CONSTRUCTION IN COMPLIANCE WITH ALL ACCESSIBILITY LAWS AND/OR RULES BY THE ADA, TDLR, OR ANY OTHER REGULATORY AGENCY. SEE NOTES SHEET AND COVER SHEET FOR ADDITIONAL INFO.
 - THE BOUNDARY (PROPERTY LINES / ROW) IS SHOWN "AS-IS" ONLY; AS CREATED BY THE SURVEYOR. BBI HAS NOT VERIFIED THE BOUNDARY AS SHOWN AND ONLY INDICATES RECORD / DEED OR PLAT INFORMATION ROTATED AS BEST AS POSSIBLE TO THE LOCATED FIELD MONUMENTS AND BOUNDARY LINES SHOWN BY THE SURVEYOR. THE CONTRACTOR HAS THE SOLE RESPONSIBILITY TO CONSTRUCT THESE IMPROVEMENTS OUTSIDE OF EASEMENTS AND SETBACKS AS SHOWN ON THESE PLANS. LIKEWISE, THE CONTRACTOR SHOULD TAKE IN CONSIDERATION PERFORMING A BOUNDARY SURVEY BY A TX RPLS AND STAKING THE BUILDING APPROPRIATELY.
 - ALL GUTTER IS "SPILL" TYPE UNLESS SPECIFIED OTHERWISE.
 - ADJACENT ROADWAYS ARE TO BE KEPT CLEAN AND CLEAR AT ALL TIMES FROM CONSTRUCTION DEBRIS.
 - THE OVER-HEAD CLEARANCE ALONG ALL FIRE LANES SHALL BE 14' (MIN.). PRUNE TREES AS NECESSARY. NO TREE, SIGN, OR STRUCTURE MAY OBSTRUCT 14' CLEARANCE ABOVE ANY FIRE LANE.

- PAVEMENT DESIGN**
- Based on the design parameters in the Geotechnical Engineering Report for the proposed Acuarly Development by ECS Southwest, LLP (Report No. 17-4994), recommendations for "light duty," "moderate duty" and "heavy duty" pavement sections are included. "Light duty" pavements are intended for general parking areas with passenger vehicles only and have an approximate capacity of 20,000 ESAL. "Moderate duty" pavements are intended for areas subject to channelized traffic and delivery areas and have an approximate capacity of 80,000 ESAL. "Heavy duty" pavements are intended for areas subject to heavier vehicles with extensive turning, starting and stopping, such as pavement aprons associated with trash enclosures, and have an approximate capacity of 250,000 ESAL.
 - The minimum recommended thickness for both hot mixed asphalt concrete (HMAC) and reinforced Portland cement concrete (PCC) pavement sections are presented in the following table for the described "light," "moderate" and "heavy" traffic conditions.

COMPONENT	LIGHT-DUTY 20,000 ESALS		MODERATE-DUTY 80,000 ESALS		HEAVY-DUTY 250,000 ESALS	
	RIGID	ASPHALT	RIGID	ASPHALT	RIGID	ASPHALT
Portland Cement Reinforced Concrete (PCC)	5.0 in	—	5.5 in	—	6.5 in	—
Hot Mixed Asphalt Concrete (HMAC)	—	2.0 in	—	2.5 in	—	—
Crushed Limestone Base (CLB)	—	7.0 in	—	9.0 in	—	—

- The pavement sections described above are considered suitable for general-purpose usage for the anticipated subgrade conditions and were designed using the AASHTO Pavement and Analysis System. An aggressive maintenance program to keep joints and cracks sealed to prevent moisture infiltration will help extend the pavement life.
- We recommend that rigid pavement sections be used in all heavy truck traffic areas. The concrete pavement shall extend throughout the areas that require extensive turning and maneuvering of the delivery vehicles, etc.

- PAVEMENT MATERIALS**
- Portland Cement Concrete - Concrete used for paving shall have a minimum compressive strength of 3,000 psi at 28-days. The air content at the point of placement shall range from 2 to 4 percent. The concrete pavements shall be reinforced and jointed per current ACI recommendations.
 - Hot Mix Asphalt Concrete (HMAC) Surface Course - The asphalt concrete surface course shall be plant mixed, hot laid Type D (Fine Graded Surface) or Type C (Coarse Graded Surface Course) meeting the specifications requirements of TxDOT Item 340 and specific criteria for the job mix formula. The mix shall be compacted to between 92 and 97 percent of the maximum theoretical density as determined by TEX-227-F.
 - Crushed Limestone Base Course - Crushed limestone base shall be placed in maximum 6 inch compacted lifts. The base materials shall be compacted to at least 98 percent of the maximum dry density as determined by TxDOT 113-E. Flexible base materials shall be

moisture conditioned to between minus two (-2) and plus three (+3) percentage points of the optimum moisture content during compaction. Flexible base materials shall meet all requirements specified in 2004 TxDOT Standard Specification Item 247, Type A, Grade 1 or 2.

- RIGID PAVEMENT**
- Construction joints are used to provide clean breaks between pavement sections that result from the construction process. Isolation joints (or expansion joints) are used to separate the pavement from other structures or pavements and will include the use of compressible materials in the joint as opposed to contraction or construction joints.
 - Contraction (control) joints shall be spaced no greater than 15 feet between the nearest parallel joints with joint depths of at least one-quarter (1/4) of the slab thickness. Contraction and construction joints shall be no wider than one-eighth (1/8) of an inch whereas isolation joints may be up to one (1) inch wide.
 - Reinforcing steel shall be used to span between construction and isolation (expansion) joints and shall consist of at-minimum No. 3 bars spaced 18 inches on-centers each way. The rebar shall be Grade 60 steel.
 - Dowels shall be used to transfer loads across joints. Smooth dowels can be used for this purpose and shall be utilized as recommended in the following table.

DOWEL DESIGN INFORMATION					
SLAB THICKNESS, IN.	DOWEL DIAMETER, IN.	MIN. DOWEL EMBEDMENT EACH SIDE, IN.	MIN. DOWEL LENGTH, IN.	DOWEL SPACING ON-CENTERS, IN.	
5.0	1/2	5	12	12	
5.5	3/4	6	14	12	
6.5	1	7	16	12	

- Actual joint spacing shall be based on actual pavement areas and final panel lengths so that joints are evenly spaced. Joints shall be designed to form approximately square panels where geometrically feasible. The values provided herein are guidelines and the recommendations selected by the project civil engineer and any guidelines not provided or mentioned herein shall not exceed the American Concrete Institute (ACI) 308R recommendations.

- SITE PREPARATION, GRADING AND DRAINAGE**
- Preparation of the subgrade soils for areas to receive structures, fills or pavements shall be conducted in accordance with the recommendations presented below.

General Site Preparation

 - Existing structures, foundations, vegetation, organic laden soil, loose or soft soils and any other deleterious materials must be removed from the proposed construction areas and properly disposed.
 - Excavations resulting from the removals shall be cleaned down to firm soils and backfilled with general fill in accordance with this report.
 - Abandoned subsurface utilities and permeable backfills shall be removed and/or grouted a sufficient distance from the proposed buildings to prevent the conduit or

water beneath the proposed structure.

- After stripping and any required cuts have been completed, the subgrade soils shall be scarified, moisture conditioned and compacted to at least 95 percent of the maximum dry density as determined by TxDOT 114-E to a depth of at least 8 inches. The soils shall be moisture conditioned to between optimum and plus four (+4) percentage points of the optimum moisture content just prior to compaction.
- Proof-rolling shall be performed where possible with a heavy (minimum 20 ton) rubber-tired vehicle such as a loaded dump truck. Soils that are observed to rut or deflect excessively under the moving load shall be under-cut and replaced with compacted structural fill that meets the requirements of the section titled General Fill. All proof-rolling and under-cutting activities shall be observed by the Geotechnical Testing Representative and shall be performed during periods of dry weather.
- After stripping, removals, subgrade preparation, proof-rolling and evaluation has been completed, fill placement may begin where required. Excavated soil that meets the material requirements in the General Fill section below may be used as compacted fill. If suitable fill soils have to be imported to the site, they must meet the material and compaction requirements of the General Fill section of this report.

Building Pad Grading

G. After stripping (as discussed above) and the required cuts have been completed, the subgrade soils shall be scarified, moisture conditioned and compacted to at least 95 percent of the maximum dry density as determined by Tex-114-E to a depth of at least 8 inches. The soils shall be moisture conditioned to between optimum and plus four (+4) percentage points of the optimum moisture content just prior to compaction.

- Proof-rolling shall be performed where possible with a heavy (minimum 20 ton) rubber-tired vehicle such as a loaded dump truck. Soils that are observed to rut or deflect excessively under the moving load shall be under-cut and replaced with compacted structural fill that meets the requirements of the section titled General Fill. All proof-rolling and under-cutting activities shall be observed by the Geotechnical Testing Representative and shall be performed during periods of dry weather.
- After stripping, removals, subgrade preparation and evaluation has been completed, fill placement may begin. Fills in the building pad areas shall consist of materials meeting the requirements of the Select Fill section below. Consideration shall be given to creating an "all weather" working surface with the upper 6 inches of the select fill building pads. Such a working surface shall consist of compacted TOOT Item 247 Type A, Grade 1 or 2 Base material.
- The upper 18 inches of fill outside of the structures and adjoining concrete flatwork shall consist of a properly compacted low permeability clay (CL) soil to reduce infiltration of moisture into the fill materials comprising the building pads. This clay layer may be replaced with asphalt or concrete pavement that extends to the edge of the structure foundation.

- GENERAL FILL**
- General fill can consist of on-site or imported soils, provided they meet the requirements described below. All general fill materials shall be clean of organics, construction debris, deleterious materials, and shall be free of rocks larger than 4 inches in greatest dimension. General fill materials which are imported shall have a P_i of less than 30. Proposed general fill shall be evaluated and tested prior to placement in the field.

- General fill shall be placed in horizontal loose lifts of not more than 8 inches in thickness. Lift thickness shall be decreased when using light compaction equipment. General fill shall be compacted to at least 95% of the maximum dry density at moisture contents within the range of optimum to plus four (+4) percentage points of the optimum moisture content (Tex-114E).

- SELECT FILL**
- Select fill materials shall be clean of organics, construction debris, deleterious materials, and shall be free of rocks larger than 4 inches in greatest dimension. Select fill shall have a Plasticity Index of between 5 and 20. Select fill shall be evaluated and tested prior to placement in the field.
 - Select fill shall be placed in horizontal loose lifts of not more than 8 inches in thickness. Select fill shall be compacted to at least 95% of the maximum dry density at moisture contents within the range of minus one (-1) to plus three (+3) percentage points of the optimum moisture content (Tex-114-E).

- UTILITY TRENCH CONSTRUCTION**
- Utility trenches in the building pads shall be back-filled above the utility bedding and shading materials with select fill, and general fill material outside the building pad areas. The backfill materials shall be placed in lifts not to exceed 8 inches loose measure, or 6 inches compacted measure. Thinner lifts may be required when using hand held compaction equipment. Backfill materials shall be moisture conditioned to between optimum and plus three (+3) percentage points of the optimum moisture content and compacted to at least 95 percent of the maximum dry density as determined by TxDOT 114-E.
 - Utility trenches shall be sealed with lean concrete, lean clayey soil, controlled low-strength material or flowable fill where the utility approaches and enters the building pad areas. This would reduce the potential for migration of water beneath the buildings through the bedding and shading materials in the utility trench.

REV. NO.	BY	DATE	REVISION DESCRIPTION

Binkley & Barfield, Inc.
 consulting engineers
 Texas Registration Number F-257
 2401 DOUBLE CREEK DRIVE, SUITE 150, ROUND ROCK, TX 78664

[Signature]
 GARY ELI JONES
 79198
 REGISTERED PROFESSIONAL ENGINEER
 Sep 25, 2019

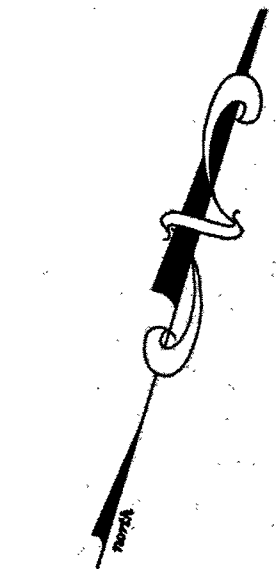
APPROVED
 MAR 04 2020
 PLANNING DEPT.
 CITY OF CEDAR PARK

FEMA MAP AND SITE SPECIFIC NOTES

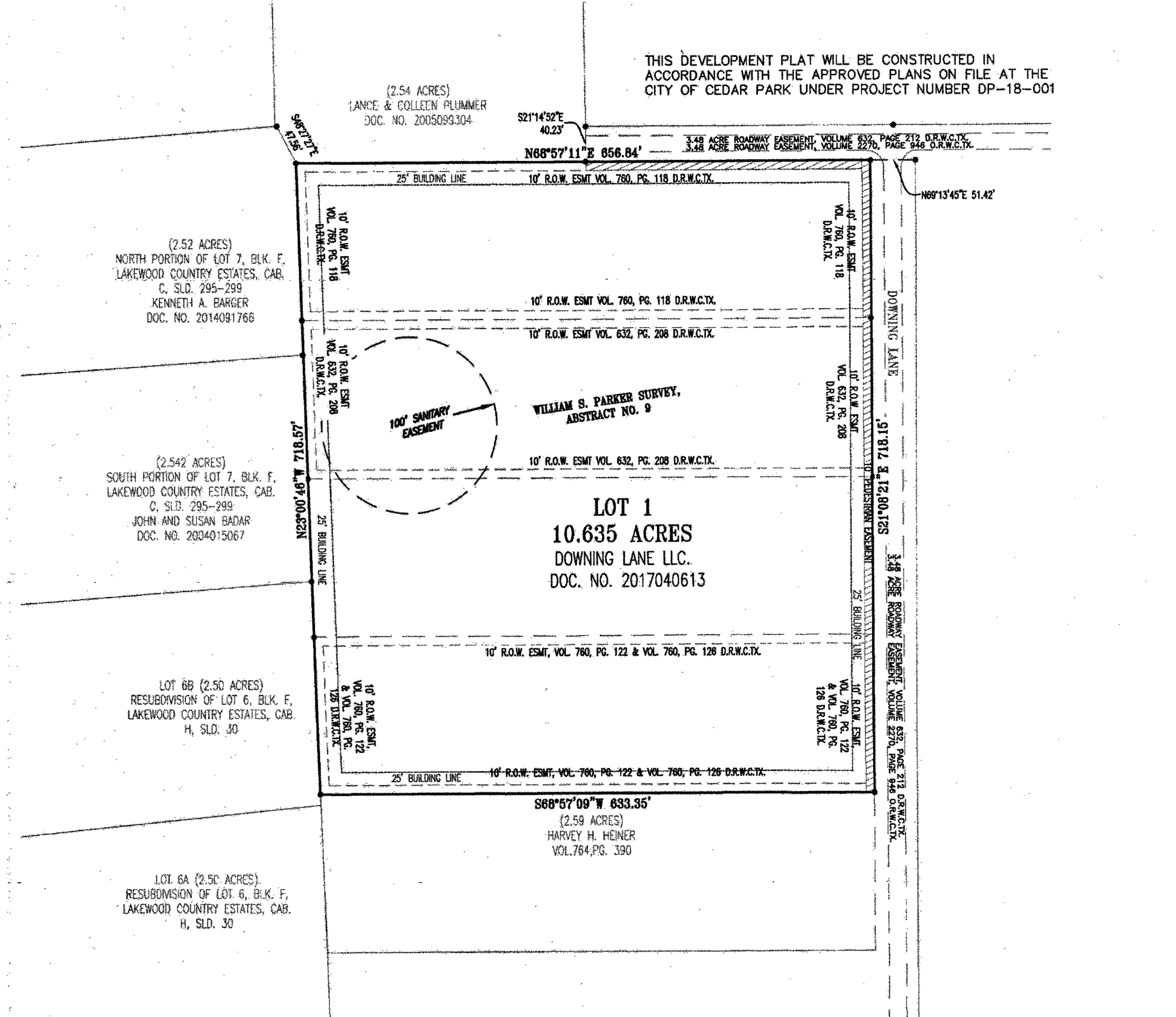
ACCUSHARP DEVELOPMENT PLAT
 (PROJECT IN CEDAR PARK ETJ.)

CASE: DP-18-001	SHEET
DATE: Sep 25, 2019	4
DESIGNED BY: GEJ	OF 25
REVIEWED BY: GEJ	

ACCUSHARP SUBDIVISION



SCALE: 1" = 100'



THIS DEVELOPMENT PLAT WILL BE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS ON FILE AT THE CITY OF CEDAR PARK UNDER PROJECT NUMBER DP-18-001

(2.54 ACRES)
NORTH PORTION OF LOT 7, BLK. F, LAKEWOOD COUNTRY ESTATES, C.A.B. C. S.D. 295-299
KENNETH A. BARGER
DOC. NO. 2014091766

(2.542 ACRES)
SOUTH PORTION OF LOT 7, BLK. F, LAKEWOOD COUNTRY ESTATES, C.A.B. C. S.D. 295-299
JOHN AND SUSAN BADAR
DOC. NO. 2004015067

LOT 88 (2.50 ACRES)
RESUBDIVISION OF LOT 6, BLK. F, LAKEWOOD COUNTRY ESTATES, C.A.B. H, S.D. 30

LOT 8A (2.50 ACRES)
RESUBDIVISION OF LOT 6, BLK. F, LAKEWOOD COUNTRY ESTATES, C.A.B. H, S.D. 30

LOT 1
10.635 ACRES
DOWNING LANE LLC.
DOC. NO. 2017040613

(2.59 ACRES)
HARVEY H. HEINER
VOL. 784 PG. 390

LEGEND

- CONCRETE MONUMENT FOUND
 - 1/2" IRON ROD FOUND (UNLESS OTHERWISE NOTED)
 - 1/2" CAPPED IRON ROD SET (UNLESS OTHERWISE NOTED)
 - IRON PFC FOUND
 - ▲ 800 NAIL FOUND
 - ▲ COTTON SPINDLE FOUND
 - ▲ CALCULATED POINT
- O.P.R.M.C.T. OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS
P.R.M.C.T. PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS

SHEET NO. 1 OF 2

Carlson, Brigrance & Doering, Inc.
FIRM ID #H3791 REG. # 10024900
Civil Engineering 5501 West William Cannon Austin, Texas 78749 Phone No. (512) 280-5160 Fax No. (512) 280-5165

FIELD NOTES

BEING ALL OR PART OF THAT CERTAIN TRACT OF LAND OUT OF AND A PART OF THE WILLIAM S. PARKER SURVEY, ABSTRACT NUMBER 9, IN WILLIAMSON COUNTY, TEXAS, BEING MORE PARTICULARLY DESCRIBED AS ALL OF A 10.635 ACRE TRACT OF LAND CONVEYED TO DOWNING LANE LLC. IN DOCUMENT NUMBER 2017040613, OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS (O.P.R.M.C.T.), SAID 10.635 ACRES OF LAND MORE FULLY DESCRIBED BY NOTES AND BOUNDS AS FOLLOWS:

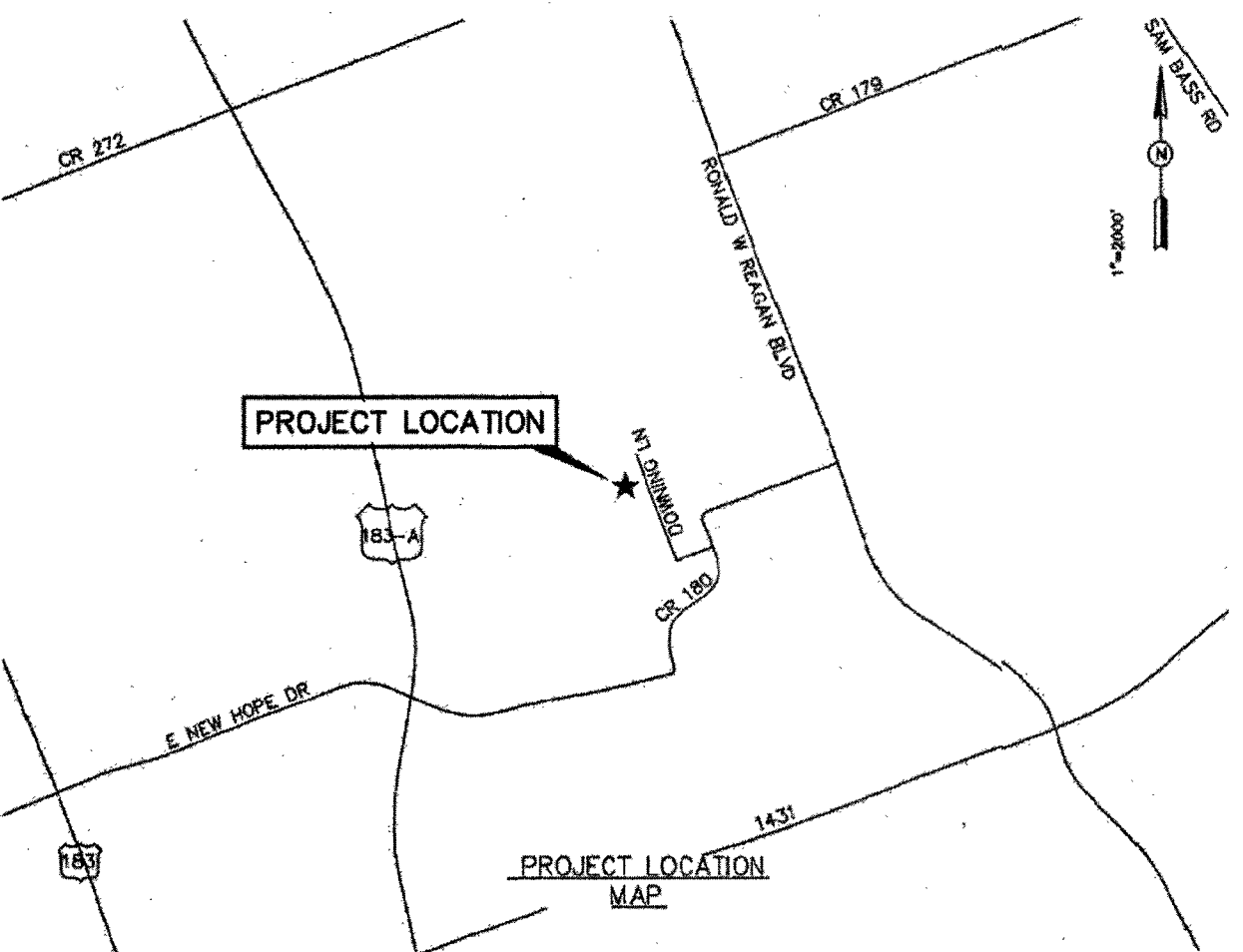
BEGINNING, AT AN IRON ROD FOUND, BEING THE NORTHERNMOST CORNER OF SAID 10.635 ACRE TRACT, AT A POINT OF INTERSECTION OF THAT CERTAIN 3.48 ACRE ROADWAY EASEMENT AS RECORDED IN VOLUME 832, PAGE 212 OF THE DEED RECORDS OF WILLIAMSON COUNTY, TEXAS (D.R.M.C.T.), AND VOLUME 2270, PAGE 946 OF THE OFFICIAL RECORDS OF WILLIAMSON COUNTY, TEXAS (O.R.M.C.T.), ALSO KNOWN AS DOWNING LANE, FOR THE NORTHERNMOST CORNER AND THE POINT OF BEGINNING OF THE HEREIN DESCRIBED TRACT,

THENCE, WITH THE COMMON BOUNDARY OF SAID 10.635 ACRE TRACT AND WITH THE WESTERN RIGHT-OF-WAY OF SAID DOWNING LANE, S21°08'21"E, A DISTANCE OF 718.15 FEET TO AN IRON ROD FOUND, BEING THE EASTERNMOST CORNER OF SAID 10.635 ACRE TRACT, BEING ALSO A POINT ON A WESTERN RIGHT-OF-WAY LINE OF SAID DOWNING LANE, AND BEING ALSO THE NORTHERNMOST CORNER OF A CALLED 2.59 ACRE TRACT CONVEYED TO HARVEY H. HEINER IN VOLUME 784, PAGE 390 (D.R.M.C.T.), FOR THE EASTERNMOST CORNER OF THE HEREIN DESCRIBED TRACT,

THENCE, WITH THE COMMON BOUNDARY LINE OF SAID 10.635 ACRE TRACT AND SAID 2.59 ACRE TRACT, S89°57'09"W, A DISTANCE OF 633.35 FEET TO AN IRON ROD FOUND, BEING THE SOUTHERNMOST CORNER OF SAID 10.635 ACRE TRACT, BEING ALSO THE WESTERNMOST CORNER OF SAID 2.59 ACRE TRACT, AND BEING ALSO A POINT ON AN EASTERN BOUNDARY LINE OF LOT 6, BLOCK F, LAKEWOOD COUNTRY ESTATES, A SUBDIVISION RECORDED IN CABINET H, SLICE 30 OF THE PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS (P.R.M.C.T.), FOR THE SOUTHERNMOST CORNER OF THE HEREIN DESCRIBED TRACT,

THENCE, WITH THE COMMON BOUNDARY LINE OF SAID 10.635 ACRE TRACT, SAID LOT 6B, A CALLED 2.542 ACRE SOUTH PORTION OF LOT 7, BLOCK F, LAKEWOOD COUNTRY ESTATES, PHASE ONE, A SUBDIVISION RECORDED IN CABINET C, SLICES 295-299 (P.R.M.C.T.), AND FURTHER DESCRIBED AND CONVEYED TO JOHN AND SUSAN BADAR IN DOCUMENT NUMBER 2004015067 (O.P.R.M.C.T.), AND THE CALLED 2.52 ACRE NORTH PORTION OF LOT 7, BLOCK F OF SAID LAKEWOOD COUNTRY ESTATES, PHASE ONE, AND FURTHER DESCRIBED AND CONVEYED TO KENNETH A. BARGER IN DOCUMENT NUMBER 2014091766 (O.P.R.M.C.T.), N27°00'46"W, A DISTANCE OF 718.57 FEET TO AN IRON ROD FOUND, BEING THE WESTERNMOST CORNER OF SAID 10.635 ACRE TRACT, BEING ALSO AN EASTERN CORNER OF SAID 2.52 ACRE NORTH PORTION OF LOT 7, BLOCK F, AND BEING THE WESTERNMOST CORNER OF A CALLED 2.54 ACRE TRACT OF LAND CONVEYED TO LANCE AND COLLEEN PLUMMER IN DOCUMENT NUMBER 2005059334 (O.P.R.M.C.T.), FOR THE WESTERNMOST CORNER OF THE HEREIN DESCRIBED TRACT,

THENCE, WITH THE COMMON BOUNDARY LINE OF SAID 10.635 ACRE TRACT, SAID 2.54 ACRE TRACT, AND SAID DOWNING LANE, N68°57'11"E, A DISTANCE OF 656.54 FEET TO THE POINT OF BEGINNING AND CONTAINING 10.635 ACRES OF LAND.



Doc # 2020013787

BEARING BASIS: A 10.635 ACRE TRACT OF LAND, RECORDED IN DOCUMENT NO. 2017040613, OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS

SUBMITAL DATE: 5/21/19 PATH-J:\4177-051\DWG\PLAT.dwg

ACCUSHARP SUBDIVISION

STATE OF TEXAS:
COUNTY OF WILLIAMSON:
KNOW ALL MEN BY THESE PRESENTS: THAT DONNING LANE LLC, HEREIN BY AND THROUGH MR. GERALD CAVANAUGH, PRESIDENT, OWNER OF THAT CERTAIN TRACT OF LAND OUT OF AND A PART OF THE WILLIAM S. PARKER SURVEY, ABSTRACT NO. 9, SITUATED IN WILLIAMSON COUNTY, TEXAS, AND BEING ALL OF THAT CERTAIN TRACT OF LAND DESCRIBED IN DOCUMENT NO. 2017040613, OF THE OFFICIAL RECORDS OF WILLIAMSON COUNTY, TEXAS, AND DO HEREBY SUBDIVIDE 10.635 ACRES OF LAND, IN ACCORDANCE WITH THE ATTACHED MAP OR LAT, SUBJECT TO ANY EASEMENTS OR RESTRICTIONS HERETOFORE GRANTED AND NOT RELEASED, TO BE KNOWN AS:

ACCUSHARP SUBDIVISION

DO HEREBY DEDICATE TO THE PUBLIC THE USE OF THE STREETS AND EASEMENTS, SHOWN HEREON, AND DO HEREBY STATE THAT THESE ARE NO LIEN HOLDERS OF THE CERTAIN TRACT OF LAND.

WITNESS MY HAND, THIS 11th DAY OF December, 2019 A.D.

GERALD CAVANAUGH
10312 MILKY WAY
AUSTIN, TX 78720

STATE OF TEXAS:
COUNTY OF WILLIAMSON:
BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED MR. GERALD CAVANAUGH, KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT OF WRITING, AND HE ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATIONS THEREIN EXPRESSED AND IN THE CAPACITY THEREIN STATED.

WITNESS MY HAND AND SEAL OF OFFICE, THIS 11th DAY OF December, 2019, A.D.

SHARARA MCGEE
NOTARY PUBLIC STATE OF TEXAS
MY COM. EXP. 02/20/23
NOTARYID: 1316205-9

STANDARD GENERAL NOTES:

1. CONSTRUCTION PLANS AND SPECIFICATIONS FOR ALL SUBDIVISION IMPROVEMENTS SHALL BE REVIEWED AND APPROVED BY THE CITY OF CEDAR PARK PRIOR TO ANY CONSTRUCTION WITHIN THE SUBDIVISION.
2. ALL SUBDIVISION CONSTRUCTION SHALL CONFORM TO CITY OF CEDAR PARK CODE OF ORDINANCES, CONSTRUCTION STANDARDS AND GENERALLY ACCEPTED ENGINEERING PRACTICES.
3. ON-SITE STORM WATER DETENTION FACILITIES WILL BE PROVIDED TO REDUCE POST-DEVELOPMENT PEAK RATE OF DISCHARGE OF THE 2, 10, 25, AND 100 YEAR STORM EVENTS.
4. THE OWNER OF THIS SUBDIVISION AND HIS OR HER SUCCESSORS AND ASSIGNS, ASSUME RESPONSIBILITY FOR PLANS FOR CONSTRUCTION OF SUBDIVISION IMPROVEMENTS WHICH COMPLY WITH APPLICABLE CODES AND REQUIREMENTS OF THE CITY OF CEDAR PARK. THE OWNER UNDERSTANDS AND ACKNOWLEDGES THAT PLAT VIOLATION OR REPLACING MAY BE REQUIRED AT THE OWNER'S SOLE EXPENSE, IF PLANS TO CONSTRUCT THIS SUBDIVISION DO NOT COMPLY WITH SUCH CODES AND REQUIREMENTS.
5. WATER SERVICE FOR THIS SUBDIVISION WILL BE PROVIDED BY THE CITY OF CEDAR PARK. NO LOT IN THIS SUBDIVISION SHALL BE OCCUPIED UNTIL CONNECTED TO THE CITY OF CEDAR PARK WATER DISTRIBUTION FACILITY.
6. SEWER SERVICE FOR THIS SUBDIVISION WILL BE PROVIDED BY ON-SITE SEWAGE FACILITIES.
7. THIS SUBDIVISION PLAT WAS APPROVED AND RECORDED BEFORE THE CONSTRUCTION AND ACCEPTANCE OF STREETS AND OTHER SUBDIVISION IMPROVEMENTS. THE OWNER OF THIS SUBDIVISION AND HIS OR HER SUCCESSORS AND ASSIGNS ARE RESPONSIBLE FOR THE CONSTRUCTION OF ALL STREETS, WATER SYSTEMS, WASTEWATER SYSTEMS AND OTHER FACILITIES NECESSARY TO SERVE THE LOTS WITHIN THE SUBDIVISION.
8. SITE DEVELOPMENT CONSTRUCTION PLANS SHALL BE REVIEWED AND APPROVED BY THE CITY OF CEDAR PARK PRIOR TO ANY CONSTRUCTION.
9. WATER AND WASTEWATER SYSTEMS SHALL CONFORM TO TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TEQ) AND STATE BOARD OF INSURANCE REQUIREMENTS. THE OWNER UNDERSTANDS AND ACKNOWLEDGES THAT PLAT VIOLATION OR REPLACING MAY BE REQUIRED, AT THE OWNER'S SOLE EXPENSE, IF PLANS TO DEVELOP THIS SUBDIVISION DO NOT COMPLY WITH SUCH CODES AND REQUIREMENTS.
10. NO BUILDINGS, FENCES, LANDSCAPING OR OTHER STRUCTURES ARE PERMITTED WITHIN DRAINAGE EASEMENTS SHOWN, EXCEPT AS APPROVED BY THE CITY OF CEDAR PARK PUBLIC WORKS DEPARTMENT.
11. PROPERTY OWNER SHALL PROVIDE FOR ACCESS TO DRAINAGE EASEMENTS AS MAY BE NECESSARY AND SHALL NOT PROHIBIT ACCESS BY CITY OF CEDAR PARK.
12. ALL EASEMENTS ON PRIVATE PROPERTY SHALL BE MAINTAINED BY THE PROPERTY OWNER OR HIS OR HER ASSIGNS.
13. FISCAL SURETY FOR SUBDIVISION CONSTRUCTION, IN A FORM ACCEPTABLE TO THE CITY OF CEDAR PARK, SHALL BE PROVIDED PRIOR TO PLAT APPROVAL BY THE PLANNING AND ZONING COMMISSION.
14. IN ADDITION TO THE EASEMENT SHOWN HEREON, A TEN (10) FOOT WIDE PUBLIC UTILITY EASEMENT (P.U.E.) IS HEREBY DEDICATED ADJACENT TO STREET ROW ON ALL LOTS, A FIVE (5) FOOT WIDE P.U.E. IS HEREBY DEDICATED ALONG EACH SIDE (L) LINE. A SEVEN AND ONE HALF (7 1/2) FOOT WIDE P.U.E. IS HEREBY DEDICATED ADJACENT TO ALL REAR LOT LINES.
15. COMMUNITY IMPACT FEES FOR INDIVIDUAL LOTS TO BE PAID PRIOR TO ISSUANCE OF ANY BUILDING PERMITS.
16. THE DEVELOPER IS RESPONSIBLE FOR ALL RELOCATION AND MODIFICATIONS TO EXISTING UTILITIES.
17. NO PORTION OF THIS TRACT IS WITHIN A FLOOD HAZARD AREA AS SHOWN ON THE FEDERAL FLOOD INSURANCE ADMINISTRATION RATE MAP NO. 48491C 0470E FOR WILLIAMSON COUNTY, TEXAS, DATED SEPTEMBER 26, 2008.
18. TEMPORARY AND PERMANENT EASEMENTS, TO BE PROVIDED AS REQUIRED FOR OFF-SITE WATER, WASTEWATER AND DRAINAGE IMPROVEMENTS.
19. ALL PROPOSED ACCESS POINTS AND/OR ACCESS EASEMENTS INTERSECTING WITH PUBLIC ROADWAY ROW SHALL BE IN COMPLIANCE WITH CITY ACCESS STANDARDS AS DESCRIBED IN CHAPTER 14 OF CITY CODE.
20. THIS SITE IS LOCATED WITHIN THE EDWARDS AQUIFER CONTRIBUTING ZONE. DEVELOPMENT OF THIS SITE WILL COMPLY WITH ALL APPLICABLE TEQ EDWARDS AQUIFER RULES.
21. THIS SUBDIVISION IS NOT SUBJECT TO THE LAKE TRAVIS NON-POINT SOURCE POLLUTION CONTROL ORDINANCE OF THE CEDAR PARK CITY CODE. A NON-POINT SOURCE POLLUTION DEVELOPMENT PERMIT IS NOT REQUIRED PRIOR TO ANY CONSTRUCTION WITHIN THE SUBDIVISION.
22. PRIOR TO SUBDIVISION/SITE PLAT APPROVAL, THE ENGINEER SHALL SUBMIT TO THE CITY OF CEDAR PARK DOCUMENTATION OF SUBDIVISION/SITE REGISTRATION WITH THE TEXAS DEPARTMENT OF LICENSING AND REGULATIONS (TDLR) AND PROVIDE DOCUMENTATION OF REVIEW AND COMPLIANCE OF THE SUBDIVISION CONSTRUCTION PLANS WITH TEXAS ARCHITECTURAL BARBERS ACT (TABA).
23. ALL PROPOSED FENCES AND WALLS ADJACENT TO INTERSECTING PUBLIC ROADWAY RIGHT-OF-WAY OR ADJACENT TO PRIVATE ACCESS POINTS SHALL BE IN COMPLIANCE WITH CITY CODE SECTION 14.05.007 SIGHT DISTANCE REQUIREMENTS. INSTALLATION OF A FENCE OR WALL WHICH DOES NOT COMPLY WITH THE CITY'S SIGHT DISTANCE REQUIREMENTS OR FENCING REGULATIONS IS A VIOLATION OF THE CITY'S ORDINANCE AND MAY BE PUNISHABLE PURSUANT TO SECTION 1.01.009.

BASED UPON THE REPRESENTATIONS OF THE ENGINEER OR SURVEYOR WHOSE SEAL IS AFFIXED HERETO, AND AFTER REVIEW OF THE PLAT AS REPRESENTED BY THE SAID ENGINEER OR SURVEYOR, I FIND THAT THIS PLAT COMPLIES WITH THE WILLIAMSON COUNTY FLOODPLAIN REGULATIONS. THIS CERTIFICATION IS MADE SOLELY UPON SUCH REPRESENTATIONS AND SHOULD NOT BE RELIED UPON FOR VERIFICATIONS OF THE FACTS ALLEGED. WILLIAMSON COUNTY DISCLAIMS ANY RESPONSIBILITY TO ANY MEMBER OF THE PUBLIC FOR INDEPENDENT VERIFICATION OF THE REPRESENTATIONS, FACTUAL OR OTHERWISE, CONTAINED IN THIS PLAT AND THE DOCUMENTS ASSOCIATED WITH IT.

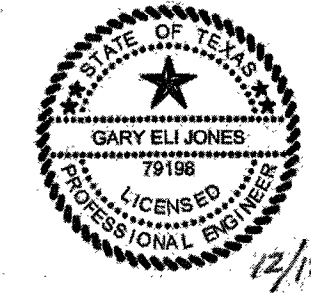
JERRON EVERSTON, PE, DR, CFM
WILLIAMSON COUNTY FLOODPLAIN ADMINISTRATOR
12/17/19

STATE OF TEXAS:
COUNTY OF TRAVIS:
I, AARON V. THOMASON, R.P.L.S. NO. 6214 CARLSON, BRIGANCE & DOERING, INC. 5501 WEST WILLIAM CANNON DRIVE, AUSTIN, TEXAS 78749 carson@cbdoeng.com



SURVEYED BY: [Signature] 11/20/2019
DATE

STATE OF TEXAS:
COUNTY OF TRAVIS:
I, GARY ELI JONES, P.E., AN AUTHORIZED UNDER THE LAWS OF THE STATE OF TEXAS TO PRACTICE THE PROFESSION OF ENGINEERING, AND DO HEREBY STATE THAT THIS PLAT CONFORMS WITH THE APPLICABLE ORDINANCES OF THE CITY OF CEDAR PARK, TEXAS AND THAT NO PORTION OF THIS TRACT IS WITHIN A FLOOD HAZARD AREA AS SHOWN ON THE FEDERAL FLOOD INSURANCE ADMINISTRATION RATE MAP NO. 48491C 0470E FOR WILLIAMSON COUNTY, TEXAS, DATED SEPTEMBER 26, 2008. THIS TRACT IS NOT LOCATED WITHIN THE EDWARDS AQUIFER RECHARGE ZONE.



ENGINEERING BY: [Signature] 12/12/19
DATE
GARY ELI JONES, P.E. NO. 79198
CARLSON, BRIGANCE & DOERING, INC.
5501 WEST WILLIAM CANNON DRIVE, AUSTIN, TEXAS 78749

NOTE:
ALL WALL-MOUNTED EQUIPMENT, INCLUDING METERS, SHALL BE SCREENED FROM PUBLIC STREETS.
ALL NEW NONRESIDENTIAL UTILITY INSTALLATIONS, INCLUDING BUT NOT LIMITED TO ELECTRICAL, GAS, TELEVISION AND TELEPHONE/TELECOMMUNICATION, SHALL BE PLACED UNDERGROUND WHERE SERVICE IS PROVIDED ADJACENT TO PUBLIC STREET OR RIGHT-OF-WAY. WHERE ELECTRICAL SERVICE IS PROVIDED FROM AN ALLEY OR REAR EASEMENT NOT LOCATED ADJACENT TO A PUBLIC STREET, PRIMARY ELECTRICAL SERVICE MAY BE PROVIDED OVERHEAD ALONG THE PROPERTY LINE. PRIMARY AND SECONDARY SERVICES ROUTED ON THE SITE SHALL BE PLACED UNDERGROUND.

OCCUPANCY OF ANY LOT IS PROHIBITED UNTIL AN ON-SITE SEWAGE FACILITY HAS BEEN INSTALLED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE TEQ, THE WILLIAMSON COUNTY ENGINEER DEPARTMENT AND HAS BEEN INSPECTED AND APPROVED BY THE COUNTY OFFICER.

BASED UPON THE ABOVE REPRESENTATIONS OF THE ENGINEER OR SURVEYOR WHOSE SEAL IS AFFIXED HERETO, AND AFTER A REVIEW OF THE SURVEY AS REPRESENTED BY THE SAID ENGINEER OR SURVEYOR, I FIND THAT THIS PLAT COMPLIES WITH THE REQUIREMENTS OF EDWARDS AQUIFER REGULATIONS FOR WILLIAMSON COUNTY AND WILLIAMSON COUNTY ON-SITE SEWAGE FACILITY REGULATIONS. THIS CERTIFICATION IS MADE SOLELY UPON SUCH REPRESENTATIONS AND SHOULD NOT BE RELIED UPON FOR VERIFICATIONS OF THE FACTS ALLEGED. THE WILLIAMSON COUNTY ENGINEER'S OFFICE AND WILLIAMSON COUNTY DISCLAIM ANY RESPONSIBILITY TO ANY MEMBER OF THE PUBLIC FOR INDEPENDENT VERIFICATION OF THE REPRESENTATIONS, FACTUAL OR OTHERWISE, CONTAINED IN THIS PLAT AND THE DOCUMENTS ASSOCIATED WITH IT.

JERRON EVERSTON, PE, DR, CFM
COUNTY ENGINEER
12/17/19

APPROVED THIS 21st DAY OF February, 2020, A.D., BY THE CITY PLANNING AND ZONING COMMISSION OF THE CITY OF CEDAR PARK, TEXAS AS THIS SUBDIVISION IS WITHIN THE ZONING OF THE CITY OF CEDAR PARK, AND IS AUTHORIZED TO BE FILED FOR RECORD BY THE COUNTY CLERK OF WILLIAMSON COUNTY, TEXAS.

SARA GROFF, CHAIRPERSON
PLANNING AND ZONING COMMISSION
MARK MCCOY, SECRETARY
PLANNING AND ZONING COMMISSION

I, CHRIS COPPLE, DIRECTOR OF DEVELOPMENT SERVICES OF THE CITY OF CEDAR PARK, TEXAS, DO HEREBY ATTEST AND AUTHORIZE THIS PLAT TO BE FILED FOR RECORD BY THE COUNTY CLERK OF WILLIAMSON COUNTY, TEXAS.

CHRIS COPPLE, ACP
DIRECTOR OF DEVELOPMENT SERVICES
CITY OF CEDAR PARK

STATE OF TEXAS:
COUNTY OF WILLIAMSON:
KNOW ALL MEN BY THESE PRESENTS: I, NANCY RISTER, CLERK OF THE COUNTY COURT OF SAID COUNTY, DO HEREBY CERTIFY THAT THE FOREGOING INSTRUMENT IN WRITING, WITH ITS CERTIFICATE OF AUTHENTICATION WAS FILED FOR RECORD IN MY OFFICE, ON THIS 11th DAY OF February, 2020 A.D., AT 8:15 O'CLOCK A.M. AND DULY RECORDED THIS 11th DAY OF February, 2020 A.D., AT 8:30 O'CLOCK A.M. IN THE PLAT RECORDS, OF SAID COURT IN DOCUMENT # 2020013787.

WITNESS MY HAND AND SEAL OF THE COUNTY COURT OF SAID COUNTY, AT MY OFFICE IN GEORGETOWN, TEXAS, THE LAST DATE SHOWN ABOVE WRITTEN.

BRUNDA MCKENZIE, DEPUTY
BY DEPUTY
NANCY E. RISTER, CLERK
COUNTY COURT, WILLIAMSON COUNTY, TEXAS



SHEET NO. 2 OF 2

Carlson, Brigrance & Doering, Inc.
FIRM ID #H3791 REG. # 10024900
Civil Engineering 5501 West William Cannon Austin, Texas 78749 Phone No. (512) 280-5160 Fax No. (512) 280-5165

PATH-J:\4177-051\DWG\PLAT.dwg

REV. NO.	BY	DATE	REVISION DESCRIPTION

Binkley & Barfield, Inc.
consulting engineers
Texas Registration Number F-257
2401 DOUBLE CREEK DRIVE, SUITE 150, ROUND ROCK, TX 78664

GARY ELI JONES
79198
REGISTERED PROFESSIONAL ENGINEER
Mar 04, 2020

THIS PLAN SET FOR REVIEW ONLY
NOT FOR CONSTRUCTION



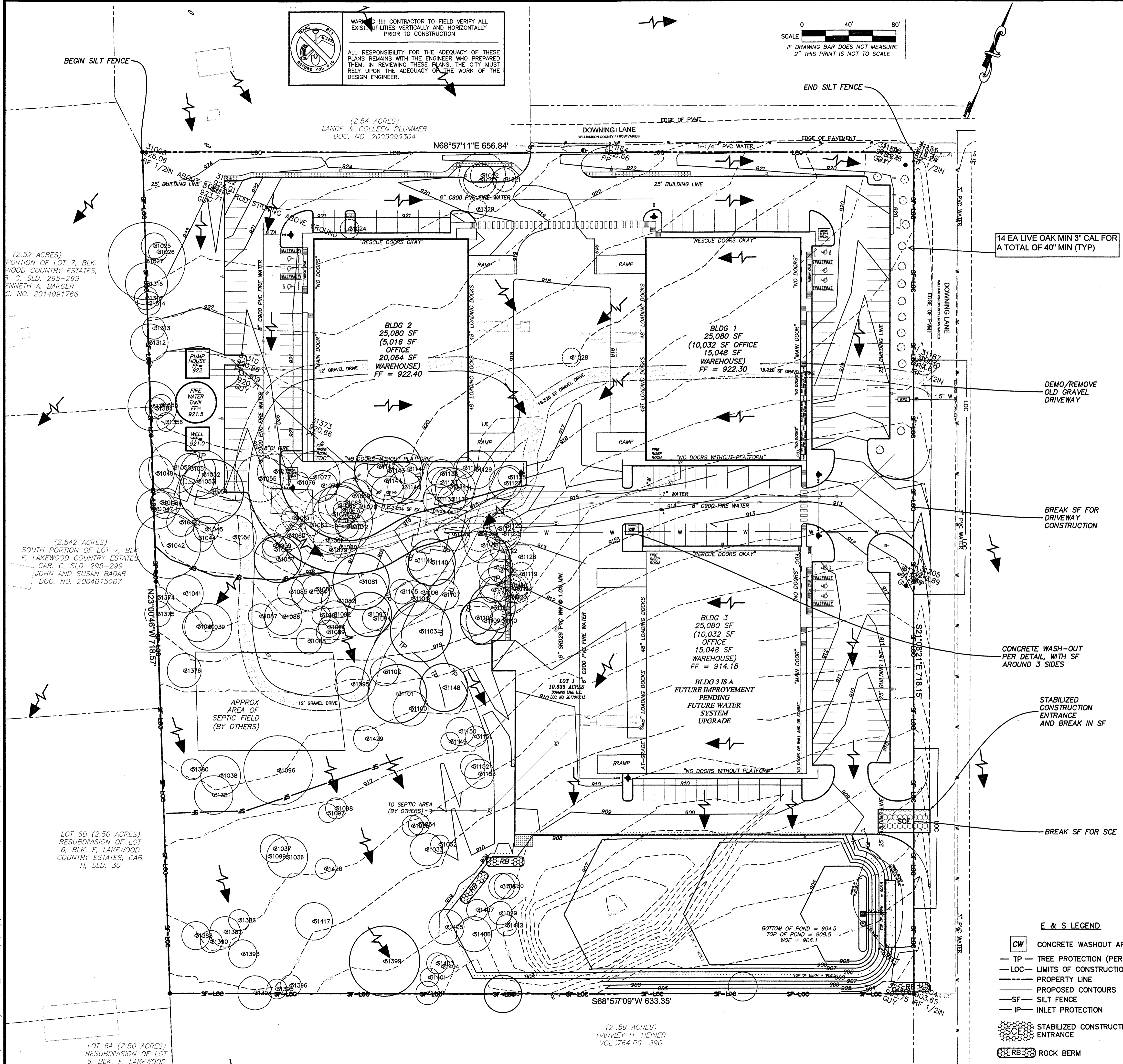
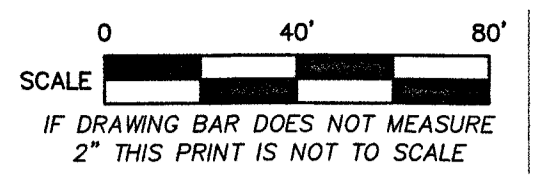
PLAT
ACCUSHARP
DEVELOPMENT PLAT
(PROJECT IN CEDAR PARK ETJ)

CASE: DP-18-001	SHEET
DATE: Mar 04, 2020	5
DRAWN BY: GEJ	OF 25
DESIGNED BY: GEJ	
REVIEWED BY: GEJ	

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WARNING: CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION.

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE CITY MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

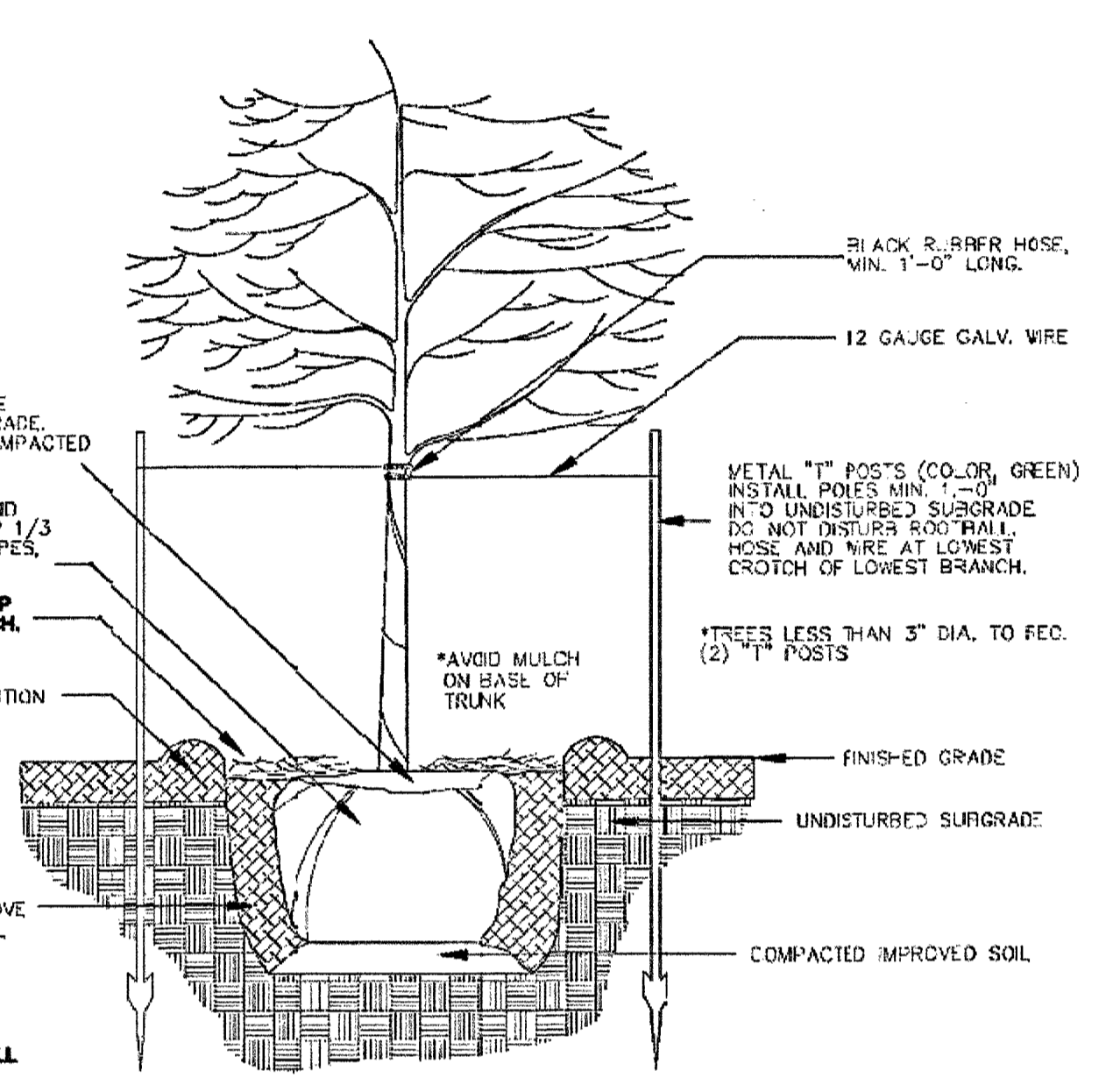


TO SEE A "TREE SURVEY" AND TREE TABLE, WITH TREES TO BE PROTECTED AND REMOVED, SEE SHEET 25 "TREE SURVEY".

THIS SHEET DEMONSTRATES THE REQUIRED TREE PROTECTION.

MITIGATION FOR HERITAGE TREES (<16")
 TREE 31022 = 20"
 TREE 31055 = 20"
 TOTAL = 40" OF MITIGATION REQUIRED

REPLACEMENT OF TREES SHALL COMPLY WITH THE CITY OF CEDAR PARK PREFERRED PLANT LIST.



TREE STAKING DETAIL
 NOT TO SCALE

NOTE: WHEN PHASING IS PROPOSED, SILT FENCE LOCATION SHOWN ASSUMES ALL PHASES UNDER CONCURRENT CONSTRUCTION.

THE CONTRACTOR WILL BE REQUIRED TO INSPECT ALL EQUIPMENT ON A DAILY BASIS TO MINIMIZE THE POTENTIAL FOR LEAKS FROM ON-BOARD FUEL TANKS. NO STORAGE TANKS FOR HAZARDOUS MATERIALS WILL BE ALLOWED ON-SITE DURING CONSTRUCTION. HYDRAULIC AND/OR HYDROCARBON FLUID HOSES, TANKS AND RESERVOIRS ARE INCLUDED IN THE REQUIRED DAILY INSPECTION.

NO ABOVE GROUND STORAGE TANKS ARE PERMITTED ON THIS PROJECT UNLESS APPROVED IN WRITING BEFOREHAND.

ALL DISTURBED AREAS SHALL BE RE-VEGETATED TO MEET THE REQUIREMENTS OF THE CITY OF CEDAR PARK'S ORDINANCES

ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY INSPECTOR AT TIME OF CONSTRUCTION

PERMANENT BMP'S INCLUDE ALL ROCK BERMS, GRASSY SWALES, AND POND.
 TEMPORARY BMP'S INCLUDE SILT FENCE, SCE, CONC, WASH OUT AND TREE PROTECTION

E & S LEGEND

	CONCRETE WASHOUT AREA
	TREE PROTECTION (PER DETAIL)
	LIMITS OF CONSTRUCTION
	PROPERTY LINE
	PROPOSED CONTOURS
	SILT FENCE
	INLET PROTECTION
	STABILIZED CONSTRUCTION ENTRANCE
	ROCK BERM

APPROVED
 MAR 04 2020
 PLANNING DEPT.
 CITY OF CEDAR PARK

REV. NO.	BY	DATE	REVISION DESCRIPTION

Binkley & Barfield, Inc.
 consulting engineers
 Texas Registration Number F-257
 2401 DOUBLE CREEK DRIVE, SUITE 150, ROUND ROCK, TX 78664

Gary Eli Jones
 GARY ELI JONES
 79198
 REGISTERED PROFESSIONAL ENGINEER
 Sep 25, 2019

DEMO, EROSION, SEDIMENTATION CONTROL AND TREE PROTECTION
ACCUSHARP DEVELOPMENT PLAT
 (PROJECT IN CEDAR PARK ETJ.)

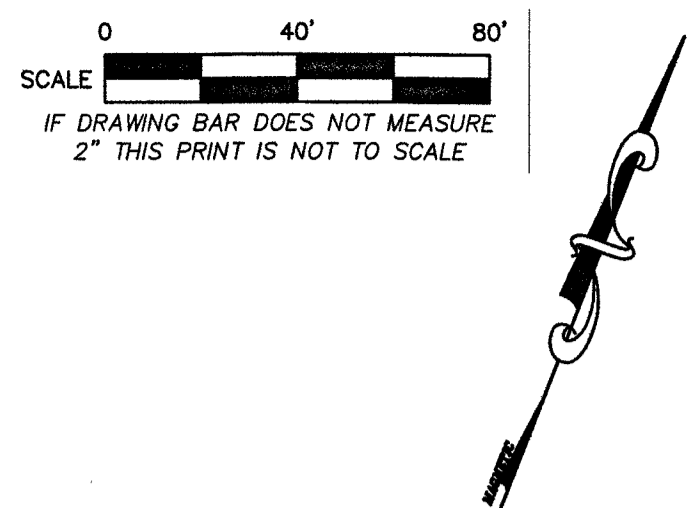
CASE: DP-18-001	SHEET
DATE: Sep 25, 2019	6
DRAWN BY: GEJ	OF 25
DESIGNED BY: GEJ	
REVIEWED BY: GEJ	

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6" TOP OF CURB 35' MAX 6" GAP
NO PARKING - FIRE LANE NO PARKING - FIRE LANE

FIRE LANE MARKING DETAIL
scale: NTS

FIRE APPARATUS ACCESS ROADS SHALL BE MARKED BY LINES OF RED TRAFFIC PAINT OR DYE A MINIMUM OF 6" IN WIDTH TO SHOW THE BOUNDARIES OF THE LANE. THE WORDS "NO PARKING - FIRE LANE" SHALL APPEAR IN 4 INCH WHITE LETTERS AND NO GREATER THAN 35 FEET APART. THESE WORDS SHALL BE MARKED WITHIN THE RED STRIPE. FIRE LANE STRIPING SHALL BE CONTINUOUS THROUGHOUT. CURB FACING SHALL BE USED WHEN AVAILABLE. WHERE THERE IS NO CURB, LAY DOWN STRIPING SHALL BE USED.



FIRE APPARATUS ACCESS ROADS SHALL
A. COMPLY WITH 2015 IFC SECTION 503 AND APPENDIX D
B. BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS
C. NOT BE BLOCKED WITHOUT THE APPROVAL OF THE FIRE CODE OFFICIAL
D. NOTE ON PLANS ALL OF THE FOLLOWING: FIRE APPARATUS ACCESS ROADS SHALL:
A. HAVE AN INSIDE RADIUS OF 25 FEET THROUGHOUT THE TURNING MOVEMENT, AND AN OUTSIDE RADIUS OF 50 FEET, ALL RADI LABELLED ON PLANS
B. BE INSTALLED SUCH THAT NO DEAD-END STRETCH IS GREATER THAN 150 FEET IN LENGTH WITHOUT AN APPROVED AREA FOR TURNING AROUND FIRE APPARATUS*
*SEE DIAGRAMS OF APPROVED FIRE ACCESS ROAD TURNAROUNDS IN APPENDIX A AT THE END OF THIS DOCUMENT
C. HAVE A MINIMUM INSIDE RADIUS OF 28 FEET FOR ALL TURNAROUNDS
D. HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 20 FEET; 26 FEET REQUIRED WHEN HYDRANTS ARE PRESENT ALONG THE FIRE APPARATUS ACCESS ROAD OR FOR AERIAL APPARATUS ACCESS ROADS
E. IF LONGER THAN 500 FEET, HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 28 FEET
F. HAVE AN UNOBSTRUCTED VERTICAL CLEARANCE OF NOT LESS THAN 13 FEET 6 INCHES; AERIAL APPARATUS ACCESS ROADS SHALL HAVE NO VERTICAL OVERHANGS
G. BE MARKED BY LINES OF RED TRAFFIC PAINT OR DYE A MINIMUM OF 6 INCHES IN WIDTH TO SHOW THE BOUNDARIES OF THE LANE
H. THE WORDS "NO PARKING - FIRE LANE" SHALL APPEAR IN 4 INCH WHITE LETTERS NO GREATER THAN 35 FEET APART
I. THESE WORDS SHALL BE MARKED WITHIN THE RED STRIPE
II. FIRE LANE STRIPING SHALL BE CONTINUOUS THROUGHOUT
III. CURB FACING SHALL BE USED WHERE AVAILABLE
A. WHERE THERE IS NO CURB, LAY DOWN STRIPING SHALL BE USED
B. BE MAINTAINED IN AN EASILY DISTINGUISHABLE CONDITION THROUGHOUT CONSTRUCTION*
*WHERE THIS IS IMPOSSIBLE OR IMPRACTICAL, SIGNS APPROVED BY THE FIRE CODE OFFICIAL MAY BE USED
I. ALL CONSTRUCTION VEHICLES AND CONSTRUCTION WORKER VEHICLES MUST BE PARKED ON SITE
II. NO VEHICLE SHALL BE ALLOWED TO PARK OR STOP IN THE FIRE APPARATUS ACCESS ROADS, WHETHER OCCUPIED OR UNOCCUPIED
*THESE REQUIREMENTS ARE REPEATED IN THE FOLLOWING SECTION, FIRE PROTECTION DURING CONSTRUCTION
IV. FIRE LANE SHALL EXTEND TO WITHIN
A. 150 FEET OF ALL PORTIONS OF THE FACILITY
B. ALL PORTIONS OF THE EXTERIOR WALLS OF THE FIRST STORY OF THE BUILDING AS MEASURED BY AN APPROVED ROUTE AROUND THE EXTERIOR OF THE BUILDING
C. INTO INTERIOR COURTYARDS AS APPROVED BY THE FIRE CODE OFFICIAL
V. PLEASE NOTE THAT FIRE APPARATUS ACCESS ROADS SHALL BE INSTALLED
A. PRIOR TO COMBUSTIBLE MATERIALS ARRIVING ON SITE AND
B. PRIOR TO THE ONSET OF VERTICAL CONSTRUCTION
FIRE PROTECTION DURING CONSTRUCTION
I. NOTE ON PLANS ALL OF THE FOLLOWING:
A. DURING CONSTRUCTION, FIRE APPARATUS ACCESS ROADS SHALL:
I. BE MAINTAINED IN AN EASILY DISTINGUISHABLE CONDITION THROUGHOUT CONSTRUCTION*
II. WHERE THIS IS IMPOSSIBLE OR IMPRACTICAL, SIGNS APPROVED BY THE FIRE CODE OFFICIAL MAY BE USED
A. ALL CONSTRUCTION VEHICLES AND CONSTRUCTION WORKER VEHICLES MUST BE PARKED ON SITE
B. NO VEHICLE SHALL BE ALLOWED TO PARK OR STOP IN THE FIRE APPARATUS ACCESS ROADS, WHETHER OCCUPIED OR UNOCCUPIED
*THESE REQUIREMENTS ARE ALSO LISTED IN ABOVE SECTION REGARDING FIRE APPARATUS ACCESS ROADS.
II. AN APPROVED WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OR PERMANENT, SHALL BE MADE AVAILABLE PRIOR TO COMBUSTIBLE MATERIALS ARRIVING ON SITE AND PRIOR TO THE ONSET OF VERTICAL CONSTRUCTION
III. STRUCTURES UNDER CONSTRUCTION, ALTERATION OR DEMOLITION SHALL BE PROVIDED WITH NOT LESS THAN ONE APPROVED PORTABLE FIRE EXTINGUISHER IN ACCORDANCE WITH IFC SECTION 906 (MINIMUM SIZE OF 3A-40B-C) AND SIZED FOR NOT LESS THAN ORDINARY HAZARDS AS FOLLOWS:
A. AT EACH STAIRWAY ON ALL FLOOR LEVELS WHERE COMBUSTIBLE MATERIALS HAVE ACCUMULATED
B. IN EVERY STORAGE AND CONSTRUCTION SHED
C. ANYWHERE SPECIAL HAZARDS EXIST, INCLUDING BUT NOT LIMITED TO, THE STORAGE AND USE OF FLAMMABLE AND COMBUSTIBLE LIQUIDS

FIRE HYDRANTS
I. A HYDRANT IS REQUIRED
A. WITHIN 400 FEET OF ALL EXTERIOR PORTIONS OF BUILDINGS, MEASURED AS THE HOSE LIES ALONG AN APPROVED ROUTE
II. MORE FIRE HYDRANTS REQUIRED
A. IN ACCORDANCE WITH APPENDICES B AND C OF THE INTERNATIONAL FIRE CODE
B. WITHIN 100' OF ALL FDCs ON THE SAME SIDE OF THE FIRE LANE AS THE FDC
III. WITH REGARD TO ALL HYDRANTS
A. A MINIMUM 36 INCHES OF CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE HYDRANT, AND GROUND SHALL PROVIDE LEVEL FOOTING FOR OPERATION OF HYDRANT
B. HYDRANTS SHALL BE INSTALLED AT LEAST 3' FROM BACK OF CURB (INCLUDING PARKING CURBS), BUT NOT MORE THAN 6' FROM BACK OF CURB AT THE FIRE LANE.
C. CENTER OF 5.25" CAP SHALL MEASURE AT LEAST 18" FROM FINISHED GROUND, BUT NOT MORE THAN 24".
D. A BLUE REFLECTOR IS REQUIRED TO BE MOUNTED IN THE CENTER OF THE ADJACENT FIRE LANE TO MARK HYDRANT LOCATION
IV. NOTE ON PLANS THE FOLLOWING REGARDING FIRE HYDRANTS
A. WHERE FIRE HYDRANTS ARE SUBJECT TO IMPACT BY A MOTOR VEHICLE, GUARD POSTS SHALL BE CONSTRUCTED AS SET FORTH IN IFC SECTION 312 AND COMPLY WITH THE FOLLOWING REQUIREMENTS:
I. CONSTRUCTED OF STEEL NOT LESS THAN 4 INCHES IN DIAMETER, FILLED COMPLETELY WITH CONCRETE
II. SPACED NOT MORE THAN 4 FEET ON CENTER BETWEEN POSTS
III. SET NOT LESS THAN 3 FEET DEEP IN A CONCRETE FOOTING OF NOT LESS THAN 15 INCHES IN DIAMETER
IV. SET WITH THE TOP OF THE POSTS NOT LESS THAN 3 FEET ABOVE GRADE
V. LOCATED NOT LESS THAN 3 FEET FROM THE PROTECTED OBJECT

FIRE DEPARTMENT CONNECTIONS (FDC)
I. NOTE ON PLANS THE FOLLOWING:
A. FIRE DEPARTMENT CONNECTIONS MUST
I. BE INSTALLED ON THE FRONT OF THE BUILDING
II. IN A LOCATION THAT IS EASILY VISIBLE FROM THE APPROVED FIRE APPARATUS ACCESS ROAD
III. HAVE A MINIMUM OF 36 INCHES OF CLEAR SPACE MAINTAINED AROUND THE CIRCUMFERENCE OF THE FDC
IV. HAVE A FIRE HYDRANT WITHIN 100 FEET OF THE FDC AND BE LOCATED IN SUCH A WAY THAT THE CONNECTION DOES NOT OBSTRUCT THE FIRE APPARATUS ACCESS ROAD FOR OTHER ARRIVING FIRE APPARATUS
V. NOT BE BLOCKED FROM VIEW OR USE BY
A. STRUCTURAL MEMBERS
B. PARKING SPACES
C. TREES
D. LANDSCAPING, ETC.
V. A WHITE REFLECTOR IS REQUIRED TO BE MOUNTED IN THE CENTER OF THE ADJACENT DRIVE TO MARK THE FDC
VI. WHERE AN FDC IS SUBJECT TO IMPACT BY A MOTOR VEHICLE
A. GUARD POSTS SHALL BE CONSTRUCTED AS SET FORTH IN IFC SECTION 312 AND COMPLY WITH THE FOLLOWING REQUIREMENTS:
I. GUARD POSTS SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:
II. CONSTRUCTED OF STEEL NOT LESS THAN 4 INCHES IN DIAMETER, FILLED COMPLETELY WITH CONCRETE
III. SPACED NOT MORE THAN 4 FEET ON CENTER BETWEEN POSTS
IV. SET NOT LESS THAN 3 FEET DEEP IN A CONCRETE FOOTING OF NOT LESS THAN 15 INCHES IN DIAMETER
V. SET WITH THE TOP OF THE POSTS NOT LESS THAN 3 FEET ABOVE GRADE
VI. LOCATED NOT LESS THAN 3 FEET FROM THE PROTECTED OBJECT
VII. A REMOTE FDC MAY BE USED WHERE APPROVED BY THE FIRE CODE OFFICIAL; THIS IS RARE.
A. DETAILED PLANS SHALL BE REQUIRED IN THIS CASE

FLAMMABLE/COMBUSTIBLE WASTE AND STORAGE
I. NOTE ON PLANS THE FOLLOWING:
A. FLAMMABLE AND COMBUSTIBLE LIQUID STORAGE AREAS SHALL
I. BE MAINTAINED CLEAR OF COMBUSTIBLE VEGETATION AND WASTE MATERIALS
II. NOT BE USED FOR THE STORAGE OF OTHER COMBUSTIBLE MATERIALS.
B. COMBUSTIBLE DEBRIS, RUBBISH, AND WASTE MATERIAL SHALL
I. NOT BE ALLOWED TO ACCUMULATE WITHIN BUILDINGS
II. BE REMOVED FROM BUILDINGS AT THE END OF EACH SHIFT OR WORK DAY
III. NOT BE DISPOSED OF BY BURNING ON SITE
*NOTE THAT OPEN BURNING OF ANY TYPE IS PROHIBITED ON CONSTRUCTION SITES WITHIN THE JURISDICTION OF THE CEDAR PARK FIRE DEPARTMENT
IV. MATERIALS SUSCEPTIBLE TO SPONTANEOUS IGNITION, SUCH AS OILY RAGS, SHALL BE STORED IN A UL LISTED DISPOSAL CONTAINER
A. CONTENTS OF SUCH CONTAINERS SHALL BE REMOVED AND DISPOSED OF DAILY
B. STORAGE OF COMBUSTIBLE RUBBISH SHALL NOT PRODUCE CONDITIONS THAT WILL CREATE A NUISANCE OR BE A HAZARD TO PUBLIC HEALTH, SAFETY OR WELFARE
III. COMBUSTIBLE WASTE MATERIAL CREATING A FIRE HAZARD SHALL NOT BE ALLOWED TO ACCUMULATE IN BUILDINGS OR STRUCTURES, OR ON PREMISES
IV. OUTSIDE STORAGE OF COMBUSTIBLE MATERIALS SHALL NOT BE LOCATED WITHIN 10 FEET OF A PROPERTY LINE

SECURITY GATES
I. THE INSTALLATION OF SECURITY GATES ACROSS FIRE APPARATUS ACCESS ROADS SHALL
A. BE LOCATED IN A MANNER THAT ALLOWS THE ENTIRE FIRE APPARATUS TO BE CLEAR OF THE STREET BEFORE NEEDING TO STOP TO OPERATE THE GATE
B. BE APPROVED BY THE FIRE CODE OFFICIAL
C. HAVE AN APPROVED MEANS OF EMERGENCY OPERATION
II. MECHANICAL GATES REQUIRE A KNOX KEY SWITCH
III. MANUAL GATES REQUIRE AN EXTERIOR GRADE KNOX PAD LOCK
IV. THE SECURITY GATES AND EMERGENCY OPERATION COMPONENTS SHALL BE MAINTAINED OPERATIONAL AT ALL TIMES
V. SHALL HAVE AN UNOBSTRUCTED WIDTH OF 20'; GREATER WIDTH WHERE REQUIRED BY THE FIRE CODE OFFICIAL

TRAFFIC CONTROL DEVICES AND MISCELLANEOUS NOTES:
I. NO TRAFFIC CALMING DEVICES WILL BE INSTALLED IN ANY FIRE LANE UNTIL SPECIFICALLY AUTHORIZED BY THE FIRE CODE OFFICIAL.
II. CONTRACTOR SHALL DEMONSTRATE THAT ALL PORTIONS OF THE FIRE LANE IS CAPABLE OF SUPPORTING 75,000 POUNDS.
III. FIRE DEPARTMENT CONNECTIONS SHALL COMPLY WITH THE 2015 IFC SECTION 912.

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2401 DOUBLE CREEK DRIVE, SUITE 150, ROUND ROCK, TX 78664

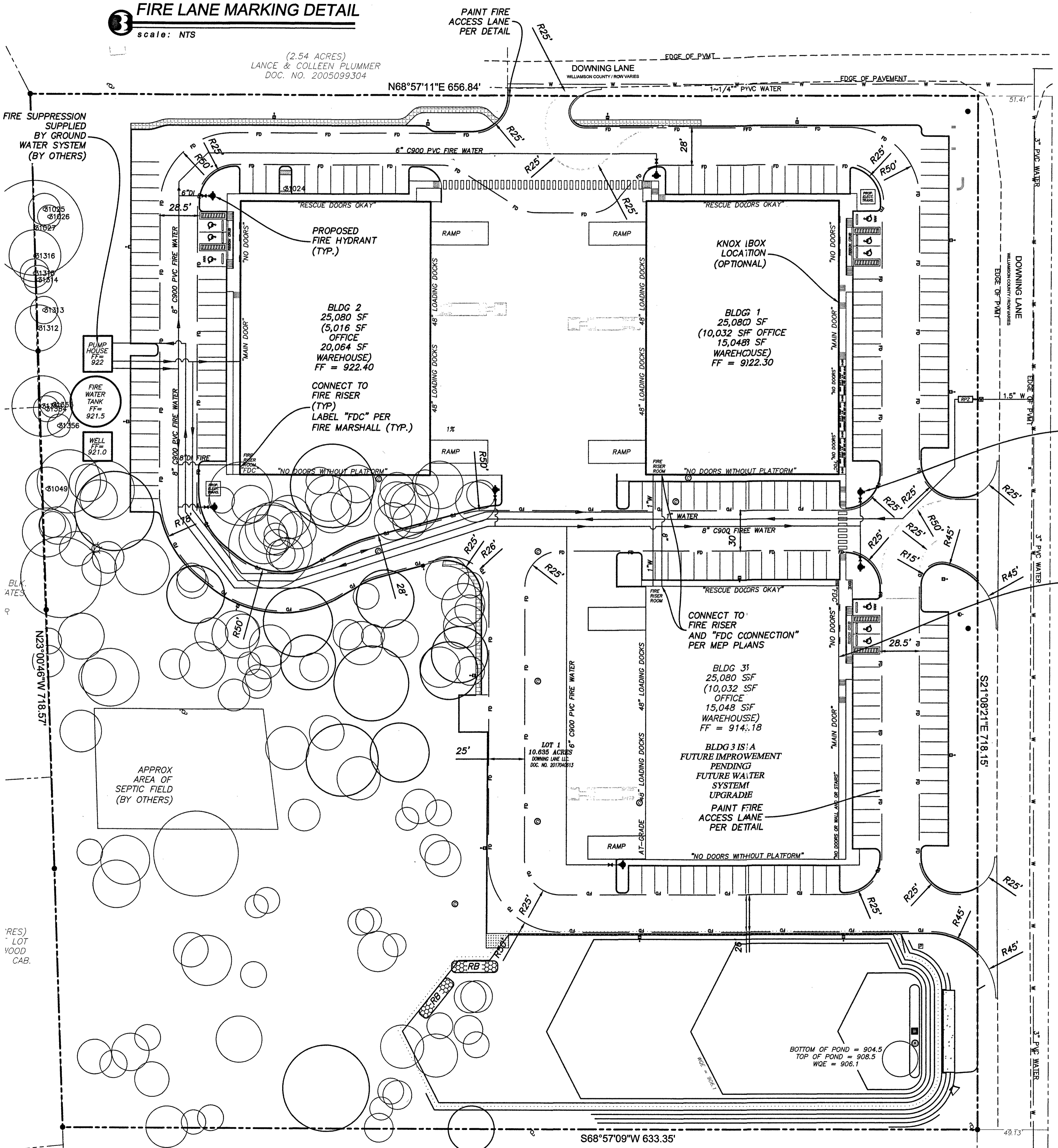
Gary Eli Jones
REGISTERED PROFESSIONAL ENGINEER
STATE OF TEXAS
79198
Sep 25, 2019

EMERGENCY ACCESS AND FIRE CONTROL

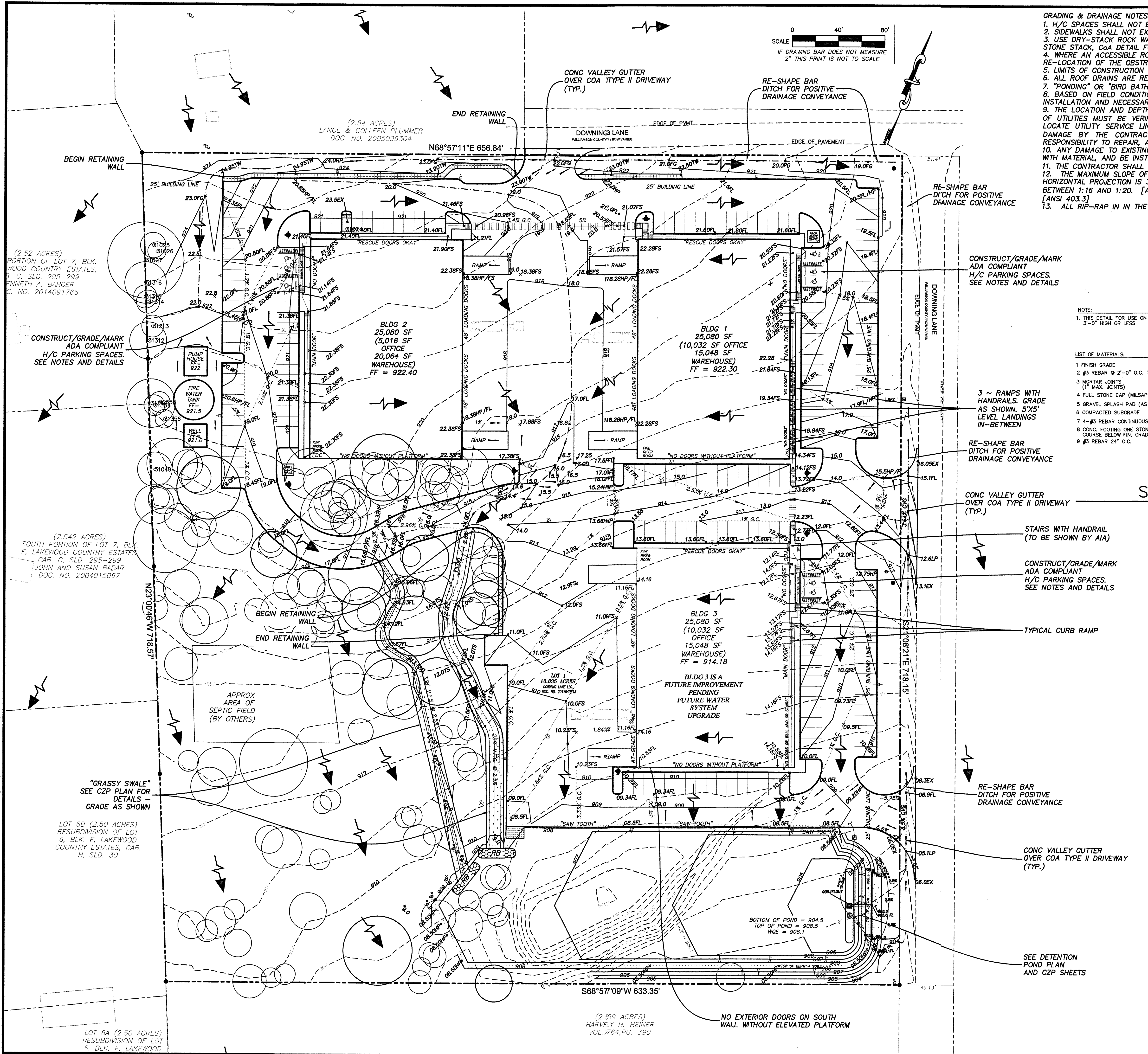
ACCUSHARP DEVELOPMENT PLAT
(PROJECT IN CEDAR PARK ETJ)

CASE: DP-18-001	SHEET
DATE: Sep 25, 2019	8
DRAWN BY: GEJ	OF 25
DESIGNED BY: GEJ	
REVIEWED BY: GEJ	

APPROVED
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PLANNING DEPT.
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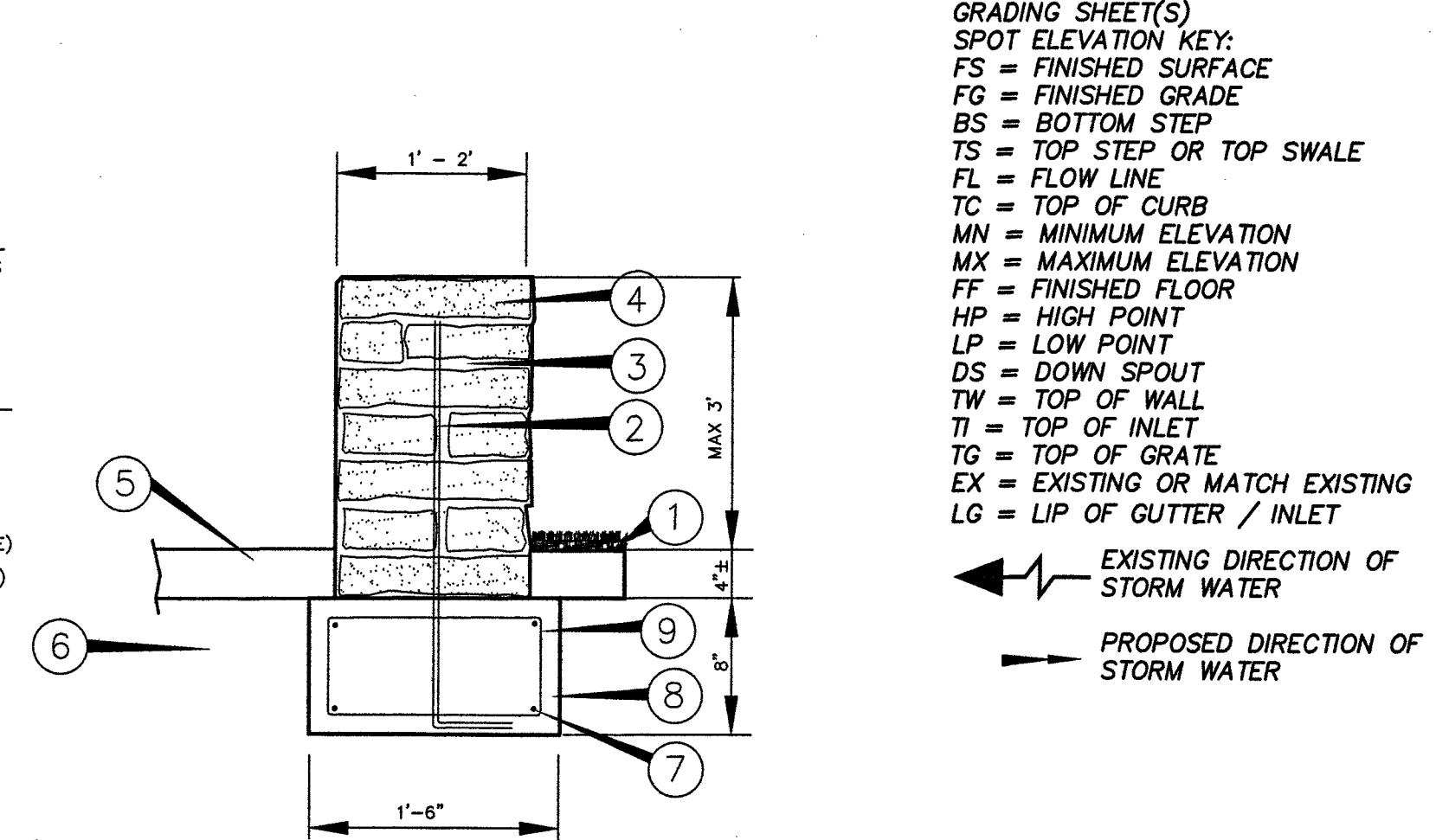


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(RES) LOT WOOD CAR



- GRADING & DRAINAGE NOTES:**
- H/C SPACES SHALL NOT EXCEED 2% IN ANY DIRECTION.
 - SIDEWALKS SHALL NOT EXCEED 2% CROSS SLOPE NOR 5% RUN SLOPE UNLESS NOTED OTHERWISE.
 - USE DRY-STACK ROCK WALL OR STRUCTURAL WALL WHERE 3:1 SLOPE IS NOT ACHIEVABLE UNLESS NOTED OTHERWISE. NATURAL CUT STONE STACK, COA DETAIL FOR DRY STACK WALL, KEYSTONE-TYPE WALL ARE ALL ACCEPTABLE IF PRE-APPROVED BY ENGINEER.
 - WHERE AN ACCESSIBLE ROUTE AND OR SIDEWALK CROSSES UNDER A GUY WIRE, THE CONTRACTOR SHALL COORDINATE THE RE-LOCATION OF THE OBSTRUCTION WITH THE UTILITY OWNER SUCH THAT 6 FOOT IS CLEAR ABOVE ALL POINTS ALONG THE PATH.
 - LIMITS OF CONSTRUCTION SHOWN ON E&S SHEET.
 - ALL ROOF DRAINS ARE REQUIRED TO DRAIN TO THE STORM WATER SYSTEM SHOWN.
 - "PONDING" OR "BIRD BATHS" IN FINAL PAVEMENT SURFACE WILL NOT BE ACCEPTED.
 - BASED ON FIELD CONDITIONS, THE CONTRACTOR SHALL COORDINATE FIELD CHANGES WITH THE DESIGN ENGINEER TO INSURE PROPER INSTALLATION AND NECESSARY FIELD CHANGES TO THE DESIGN.
 - THE LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS OF UTILITIES MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY CONFLICTS IMMEDIATELY. ANY DAMAGE BY THE CONTRACTOR TO THE EXISTING UTILITIES, IF SHOWN ON THE PLANS OR NOT, SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR, AT HIS EXPENSE.
 - ANY DAMAGE TO EXISTING ROADS, DRIVEWAYS, SIDEWALKS, OR OTHER APPURTENANCES SHALL BE SAW CUT, REMOVED AND REPLACED WITH MATERIAL, AND BE INSTALLED TO ORIGINAL STANDARDS.
 - THE CONTRACTOR SHALL MAINTAIN DRAINAGE DURING CONSTRUCTION AS TO NOT IMPACT ADJACENT / NEIGHBORING PROPERTIES.
 - THE MAXIMUM SLOPE OF A RAMP IN NEW CONSTRUCTION IS 1:12. THE MAXIMUM RISE FOR ANY RAMP RUN IS 30 IN. THE MAXIMUM HORIZONTAL PROJECTION IS 30 FEET FOR A RAMP WITH A SLOPE BETWEEN 1:12 AND 1:15, AND 40 FEET FOR A RAMP WITH A SLOPE BETWEEN 1:16 AND 1:20. [ANSI 405.2 - 405.6] SLOPES ON ACCESSIBLE ROUTES MAY NOT EXCEED 1:20 UNLESS DESIGNED AS A RAMP. [ANSI 403.3]
 - ALL RIP-RAP IN IN THE RIGHT OF WAY OR IN PUBLIC DRAINAGE EASEMENTS SHALL BE MORTARED.

- NOTE:**
- THIS DETAIL FOR USE ON WALLS 3'-0" HIGH OR LESS
- LIST OF MATERIALS:**
- FINISH GRADE
 - #3 REBAR @ 2'-0" O.C. TIED
 - MORTAR JOINTS (1" MAX. JOINTS)
 - FULL STONE CAP (MILSPA STONE)
 - GRAVEL SPLASH PAD (AS REQ'D)
 - COMPACTED SUBGRADE
 - 4-#3 REBAR CONTINUOUS
 - CONC. FOOTING ONE STONE COURSE BELOW FIN. GRADE
 - #3 REBAR 24" O.C.



STONE RETAINING WALL
N.T.S.

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Binkley & Barfield, Inc.
consulting engineers
Texas Registration Number F-257
2401 DOUBLE CREEK DRIVE, SUITE 150, ROUND ROCK, TX 78664

GARY ELI JONES
REGISTERED PROFESSIONAL ENGINEER
79198
Sep 25, 2019

ALL LANE CLOSURES SHALL OCCUR ONLY BETWEEN THE HOURS OF 9 AM AND 4 PM. ANY NIGHT TIME LANE CLOSURES REQUIRE APPROVAL BY THE DIRECTOR OF ENGINEERING AND SHALL OCCUR BETWEEN THE HOURS OF 8 PM AND 6 AM. LANE CLOSURES OBSERVED BY CITY DURING THE PEAK HOURS OF 6 AM TO 9 AM, OR 4 PM TO 8 PM WILL BE SUBJECT TO FINE PER CHAPTER 1 OF CITY ORDINANCE, AND/OR SUBSEQUENT ISSUANCE OF WORK STOPPAGE.

WARNING !!! CONTRACTOR TO FIELD VERIFY ALL EXIST. UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION

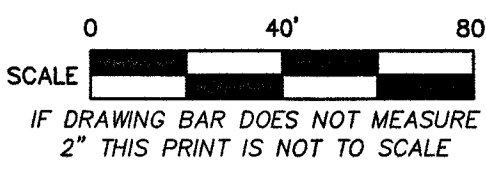
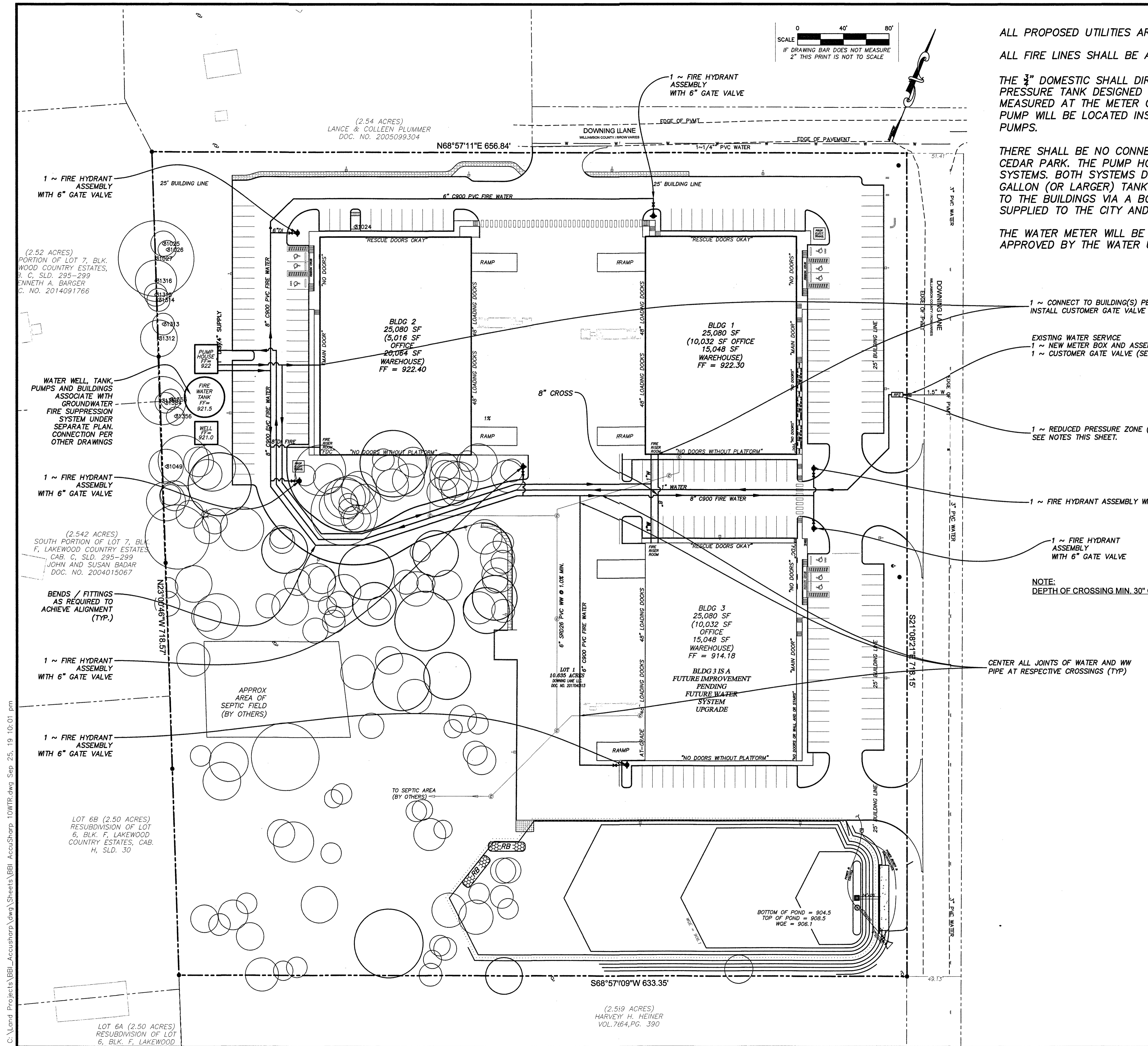
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APPROVED
MAR 04 2020
PLANNING DEPT.
CITY OF CEDAR PARK

GRADING PLAN
ACCUSHARP DEVELOPMENT PLAT
(PROJECT IN CEDAR PARK ETJ)

CASE: DP-18-001	SHEET
DATE: Sep 25, 2019	9
DRAWN BY: GJ	OF 25
DESIGNED BY: GJ	
REVIEWED BY: GJ	

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ALL PROPOSED UTILITIES ARE TO BE UNDER-GROUND

ALL FIRE LINES SHALL BE AWWA C900 & DR14. ALL DOMESTIC LINES SHALL BE DR14.

THE 3/4\"/>

THERE SHALL BE NO CONNECTION BETWEEN THE WELL / FIRE SYSTEM AND POTABLE SYSTEM FROM CEDAR PARK. THE PUMP HOUSE SHALL ENCLOSE BOTH SYSTEMS, BUT THEY ARE ENTIRELY SEPARATE SYSTEMS. BOTH SYSTEMS DESIGNED BY OTHERS. THE POTABLE WATER SYSTEM SHALL FEED A 200 GALLON (OR LARGER) TANK AT ATMOSPHERIC CONDITIONS, AND THAT SYSTEM SHALL RE-BOOST WATER TO THE BUILDINGS VIA A BOOSTER PUMP AND PRESSURE TANK. RECORD DRAWINGS SHALL BE SUPPLIED TO THE CITY AND THE SITE SHALL BE OPEN TO INSPECTION.

THE WATER METER WILL BE SET TO RESTRICT FLOW TO 5 GALLONS PER MINUTE, UNTIL SUCH TIME AS APPROVED BY THE WATER UTILITY IN WRITING.

1 ~ CONNECT TO BUILDING(S) PER AIA / MEP (TYP)
INSTALL CUSTOMER GATE VALVE AT EACH BUILDING

EXISTING WATER SERVICE
1 ~ NEW METER BOX AND ASSEMBLY PER DETAIL
1 ~ CUSTOMER GATE VALVE (SEE DETAIL)

1 ~ REDUCED PRESSURE ZONE (RPZ) BACK-FLOW PREVENTION DEVICE IN HOT BOX
SEE NOTES THIS SHEET.

1 ~ FIRE HYDRANT ASSEMBLY WITH GATE VALVE (TYP.)

1 ~ FIRE HYDRANT ASSEMBLY WITH GATE VALVE

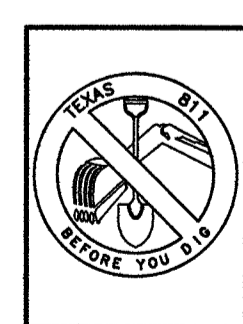
NOTE:
DEPTH OF CROSSING MIN. 30\"/>

CENTER ALL JOINTS OF WATER AND WW PIPE AT RESPECTIVE CROSSINGS (TYP)

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"THE RPZ BPA SHALL BE LOCATED OUTSIDE ANY PUBLIC UTILITY EASEMENT BUT AS CLOSE AS POSSIBLE TO THE PROPERTY LINE. INSTALLED A MINIMUM 12 INCHES ABOVE GRADE. IN A LOCATION WHERE IT CANNOT BE SUBMERGED, IS PROTECTED AGAINST FREEZING, AND RECOMMENDED THAT THE ASSEMBLY BE INSTALLED IN AN ENCLOSURE THAT IS WEATHER PROOF."



WARNING IIII CONTRACTOR TO FIELD VERIFY ALL EXIST. UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE CITY MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

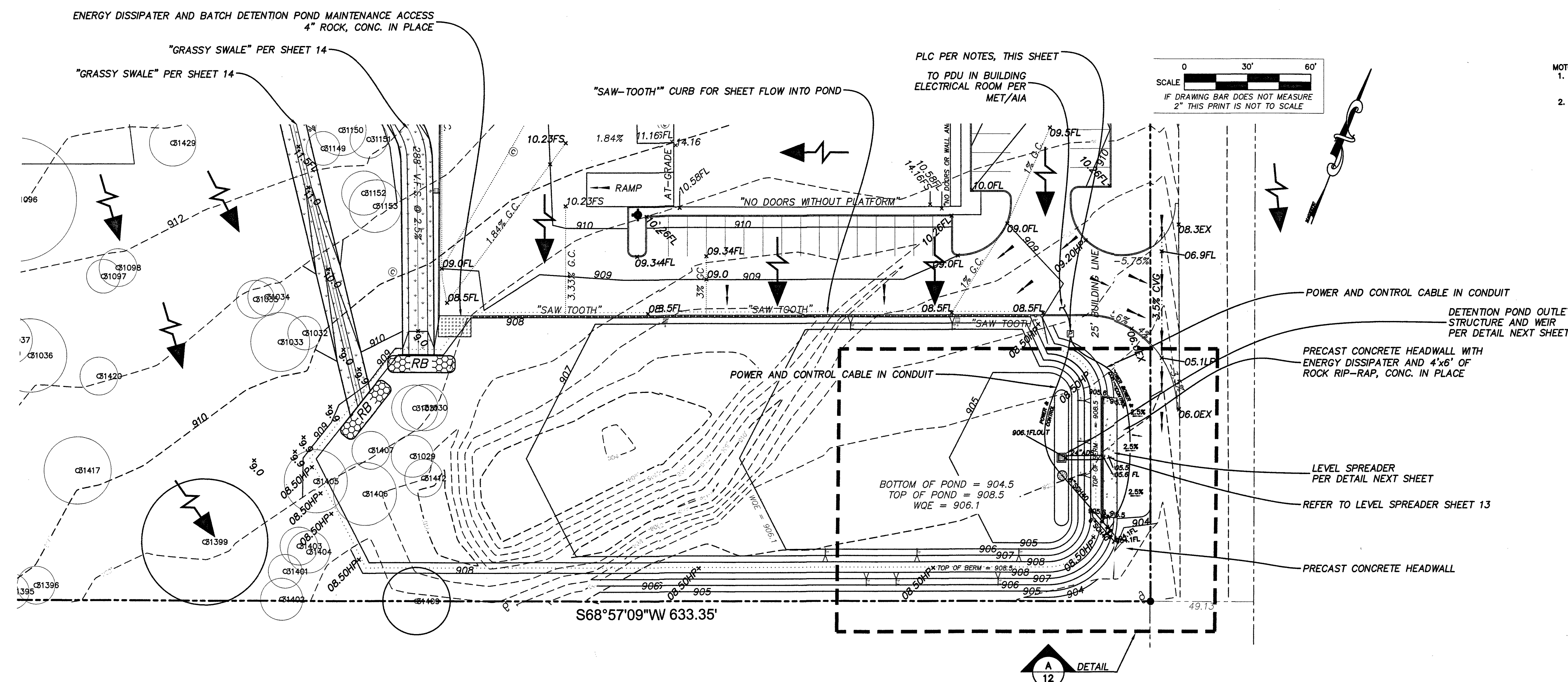
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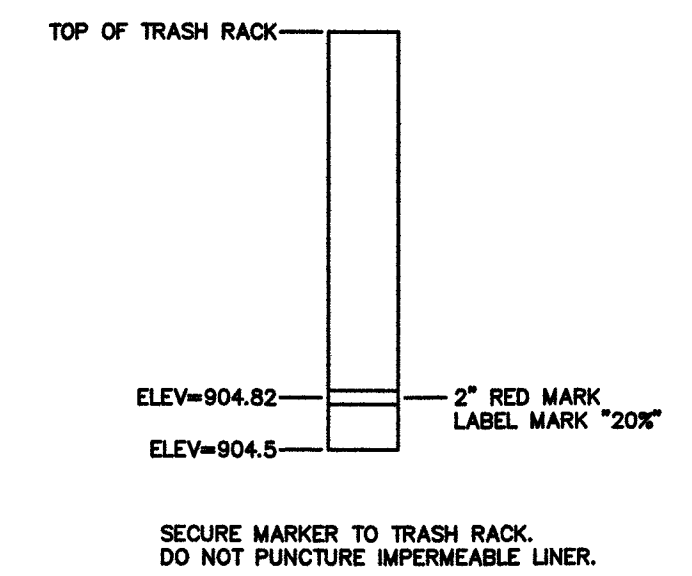
WATER DISTRIBUTION PLAN
ACCUSHARP DEVELOPMENT PLAT
(PROJECT IN CEDAR PARK ETJ)

CASE DP-18-001	SHEET 10
DATE: Sep 25, 2019	OF 25
DRAWN BY: GEJ	
DESIGNED BY: GEJ	
REVIEWED BY: GEJ	

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MOTOR CONTROL CENTER NOTES:
 1. THE MCC SHALL CONTAIN A PROGRAMMABLE LOGIC CONTROLLER CAPABLE OF OPERATING THE 3" MOTOR ACTUATED VALVE ACCORDING TO THE DRAW-DOWN TABLE.
 2. THE MCC SHALL BE IN A NEMA 3R OR 4X HOUSING MOUNTED TO UNI-STRUT WITH A CONCRETE MOW STRIP. (PROVIDE SUBMITTAL)



SEDIMENT DEPTH MARKER
 scale: NTS

- GRADING SHEET(S)**
 SPOT ELEVATION KEY:
 FS = FINISHED SURFACE
 FG = FINISHED GRADE
 BS = BOTTOM STEP
 TS = TOP STEP
 FL = FLOW LINE
 TC = TOP OF CURB
 MN = MINIMUM ELEVATION
 MX = MAXIMUM ELEVATION
 FF = FINISHED FLOOR
 HP = HIGH POINT
 LP = LOW POINT
 DS = DOWN SPOUT
 TW = TOP OF WALL
 TI = TOP OF INLET
 TG = TOP OF GRATE
 EX = EXISTING OR MATCH EXISTING
 LG = LIP OF GUTTER / INLET

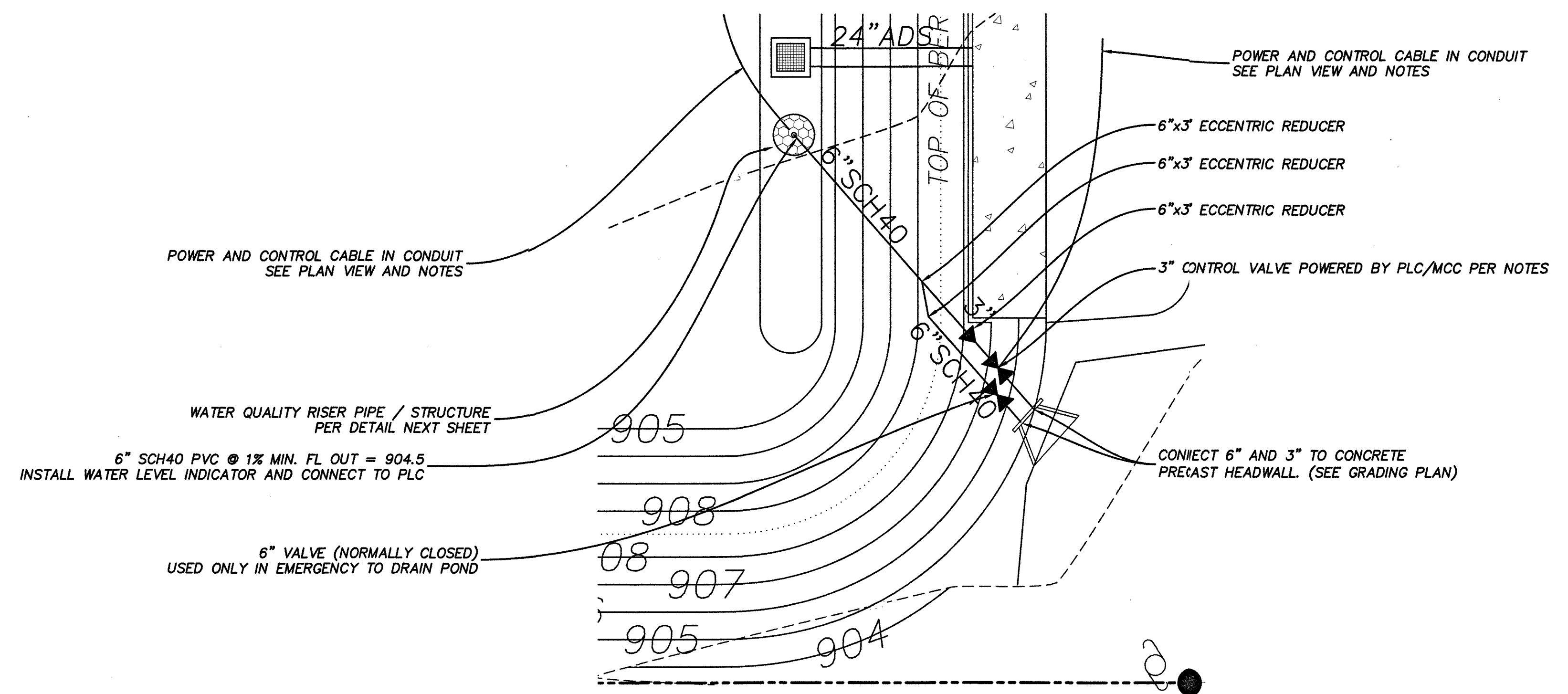
The facility should have a separate drain pipe with a manual valve that can completely or partially drain the pond for maintenance purposes. To allow for possible sediment accumulation, the submerged end of the pipe should be protected, and the drain pipe should be sized one pipe schedule higher than the calculated diameter needed to drain the pond within 24 hours. The valves should be located at a point where they can be operated in a safe and convenient manner.

BATCH DETENTION POND STAGE VS STORAGE		
Elev.	Area sf	Total cf
904.5	0	0
905	3,820	161
906	14,940	10,774
906.1	16,227	12,332
907.00	27,073	31,780
908	39,436	65,035
908.5	41,682	85,876

MINIMUM WQV = 11,511 cf
 WQV PROVIDED AT 906.1 = 12,332 C

BASIN DRAWDOWN TIME (>12 HR HOLD)	
WQ VOL @ 906.1 =	12,332 CF
3" DISCHARGE (Q) =	0.1313 CFS
DRAWDOWN TIME =	26.1 HOURS

Hazen Williams Equation w/ C=140



DETAIL A - CONTROL VALVE AREA
 scale: NTS

REV. NO.	BY	DATE	REVISION DESCRIPTION

Binkley & Barfield, Inc.
 consulting engineers
 Texas Registration Number F-257
 2401 DOUBLE CREEK DRIVE, SUITE 150, ROUND ROCK, TX 78664

GARY ELI JONES
 79198
 REGISTERED PROFESSIONAL ENGINEER
 STATE OF TEXAS
 Sep 25, 2019

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**BATCH DETENTION /
 WQ POND PLAN**
**ACCUSHARP
 DEVELOPMENT PLAT**
 (PROJECT IN CEDAR PARK ETJ)

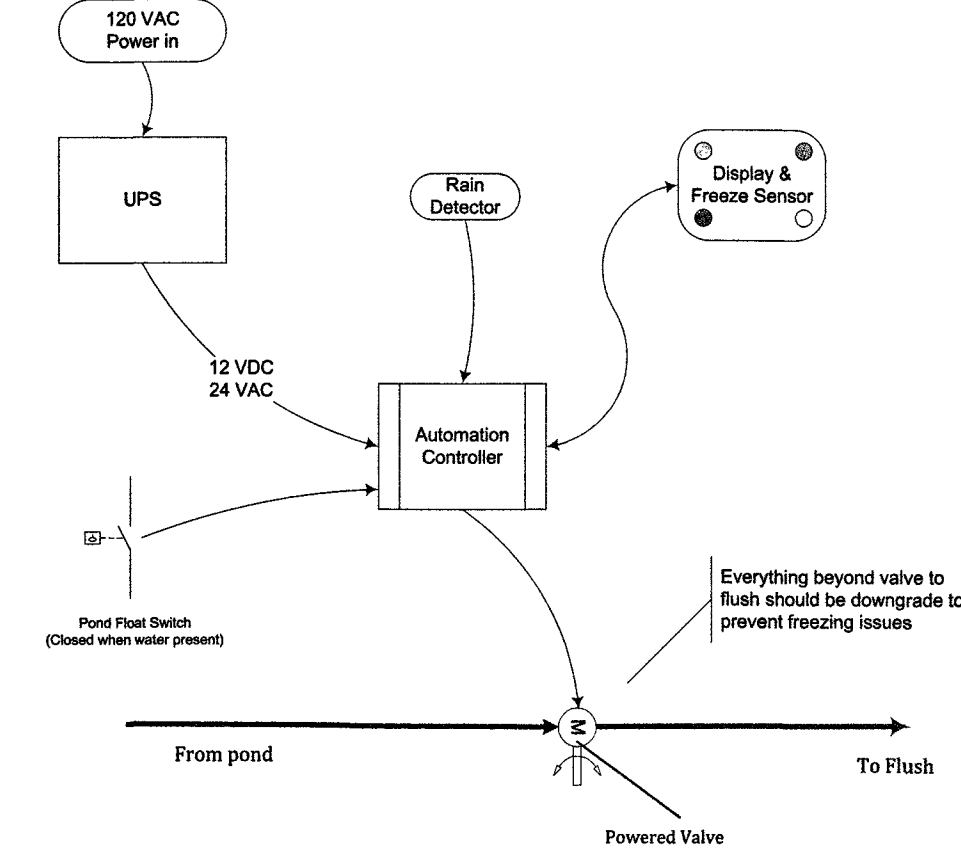
CASE DP-18-001	SHEET
DATE: Sep 25, 2019	12
DESIGNED BY: GEJ	OF 25
REVIEWED BY: GEJ	

Rainwater Automation

Storm Water Management System

This document explains how the automation controller manages a storm water retention pond application per TCEQ specifications section 3.2.13 / controller section.

The diagram depicted below shows the major components of the system:



The automation controller is housed in a waterproof enclosure designed to meet NEMA 4X/IP66 ratings. For installation in direct exposure to the elements we recommend an additional vented outdoor enclosure to hold the controller in addition to the power supplies, UPS & surge protectors. The controller is based on the Amtel microprocessor platform which we've found to be extremely reliable. We've had rain water systems running for many years and the only failures we've seen have been from the result of lightning. The internal component circuit boards can be easily replaced should a failure occur.

We use a 2.5" Jandy valve with Intermatic actuator as we have found this to be extremely reliable and easily available for replacement should the need arise. The system can support 2 in parallel if larger volumes of water need to be released. Since the valve is ultimately controlled by a relay in the controller, virtually any type of valve could be interfaced to the controller if extremely large flows are deemed necessary.

The logic of the controller allows for some field customization should the TCEQ requirements change or if the practicality of the installation warrants some additional tuning. The system is smarter than just a timer associated to a float switch and can detect rainfall amounts and times and use this to determine if there are problems associated with a bad float switch, plugged drain line or other conditions. These errors are clearly indicated on a remote display which can be placed anywhere for optimum visibility. Other operating conditions (valve position, float switch) are also displayed as well as a "system functioning normal" for confidence that the system is working properly.

The controller uses very low power (a few hundred milliamperes) and could easily be run from a solar installation. This would require an inverter to create the 224VAC necessary for the valve actuator. If power is readily available we prefer using a small UPS (300VA would run the system for many hours) to keep the system running in the event of a power failure. This solution is simpler, cheaper and requires less maintenance than a solar installation. It does require adequate protection for the UPS from the elements in an outdoor enclosure as advised above.

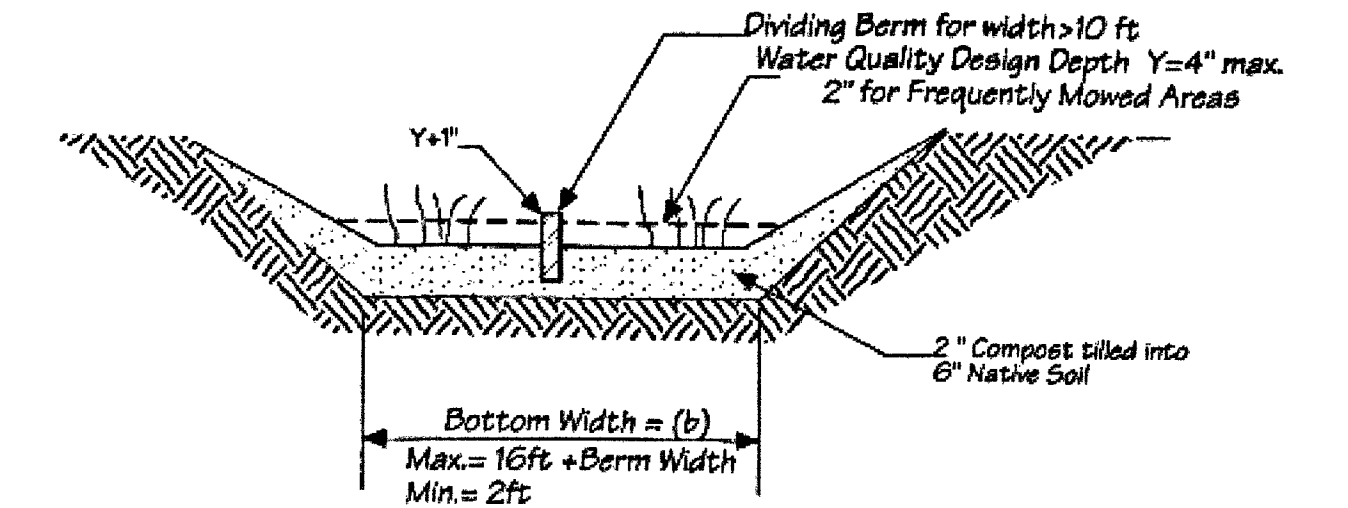
The following page shows the programmed logic flow of the controller:

NOTES:

- NO BASIN LINER DUE TO LOCATION OF THE POND IN THE CONTRIBUTING ZONE.
- POST THE FOLLOWING SIGN UNDER THE VISIBLE ALARM FOR EMERGENCY CONTACT: (COORDINATE WITH OWNER FOR #)

EMERGENCY CONTACT:
OWNER: 512-693-6111
TCEQ: 512-339-2929

- POND BOTTOM SHALL BE VEGETATED PER THE SEEDING SPECIFICATION ON THE EROSION CONTROL PLAN SHEET.
- POND DESIGN MAY NOT USE CONCRETE STRUCTURAL WALL, SHOWN FOR ILLUSTRATIVE PURPOSES ONLY.

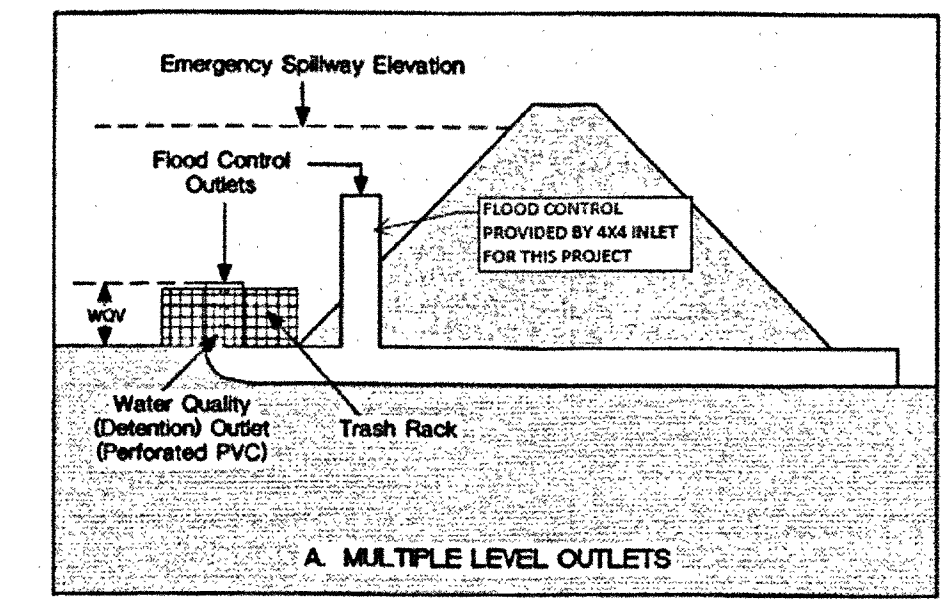
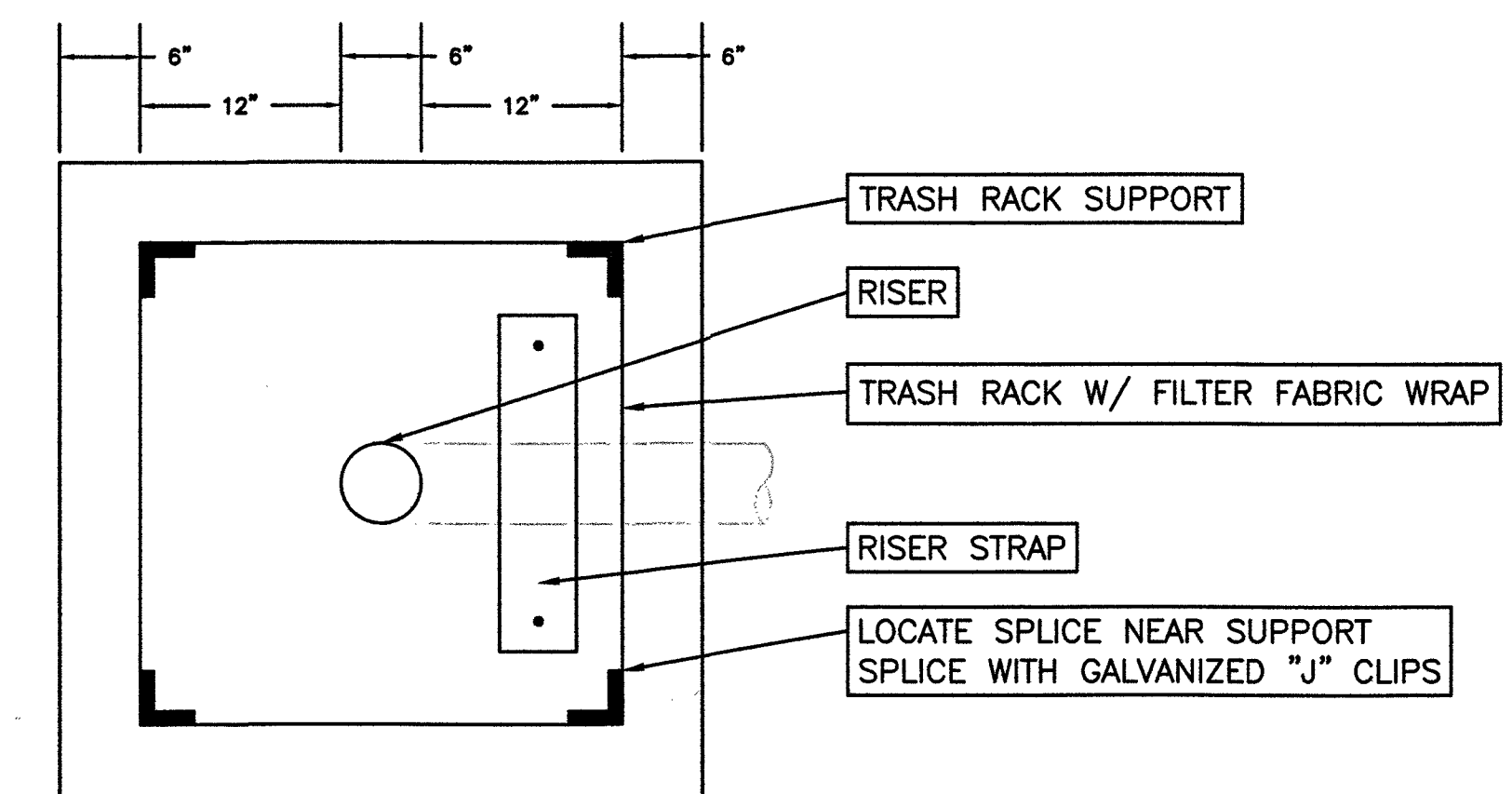
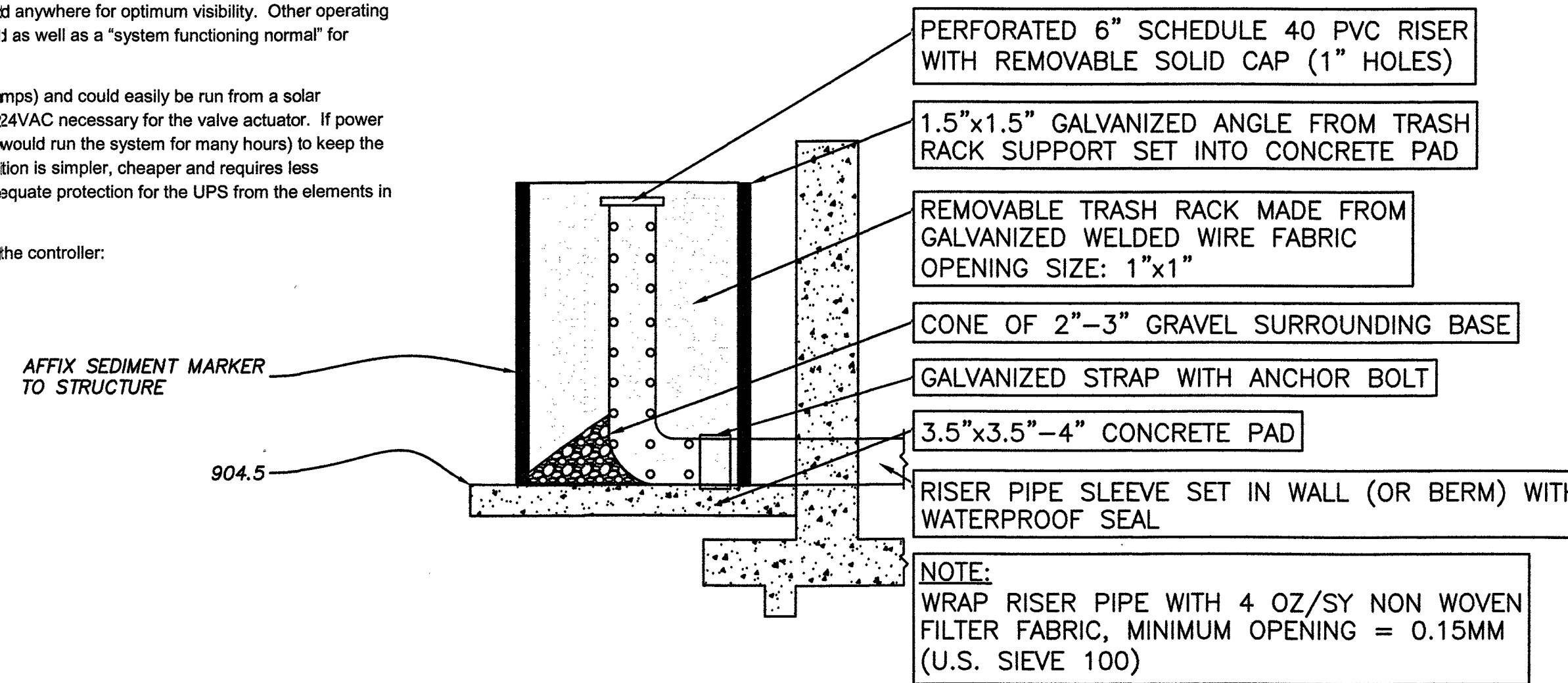


TYPICAL SWALE SECTION

NTS

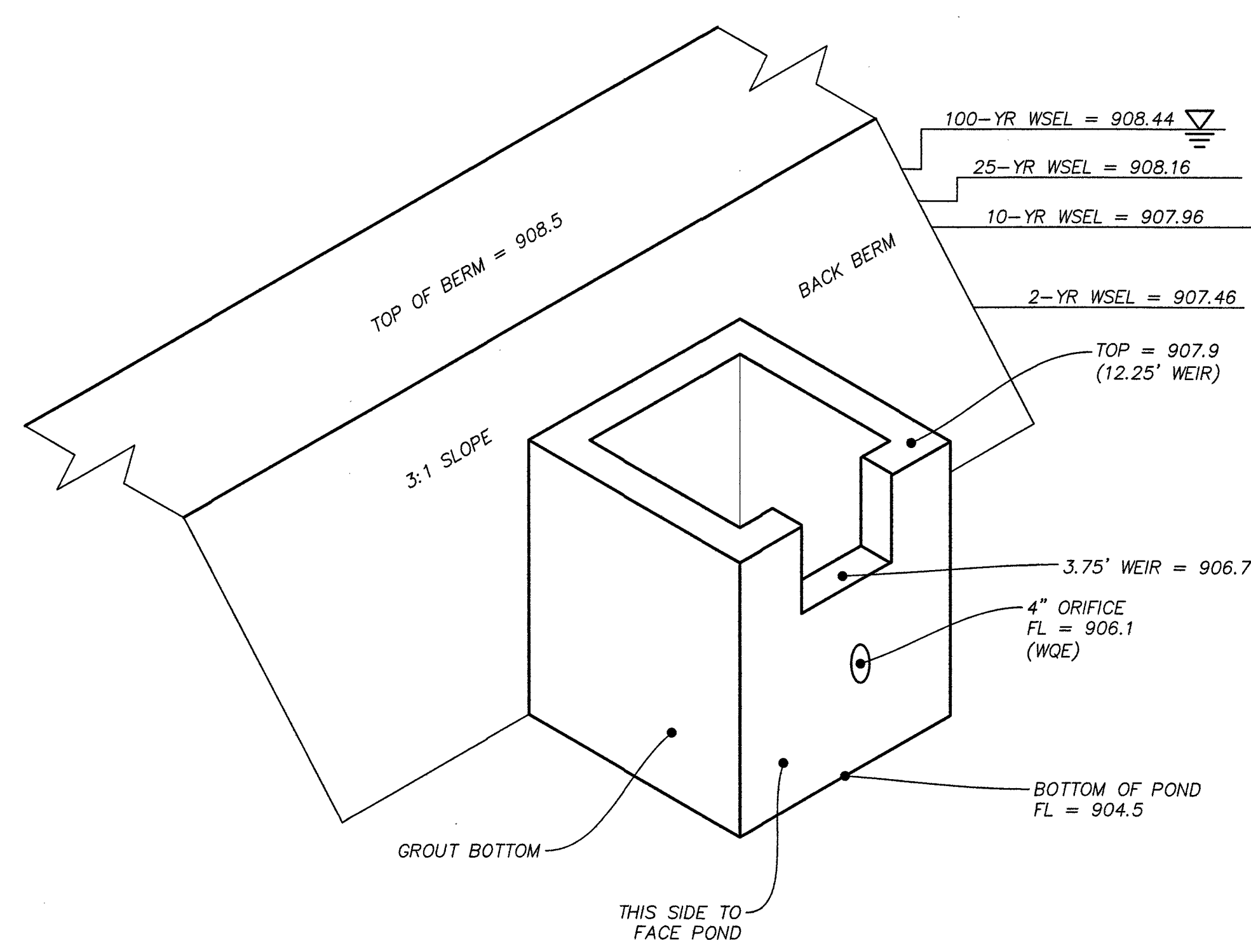
VEGETATIVE SWALE

scale: NTS



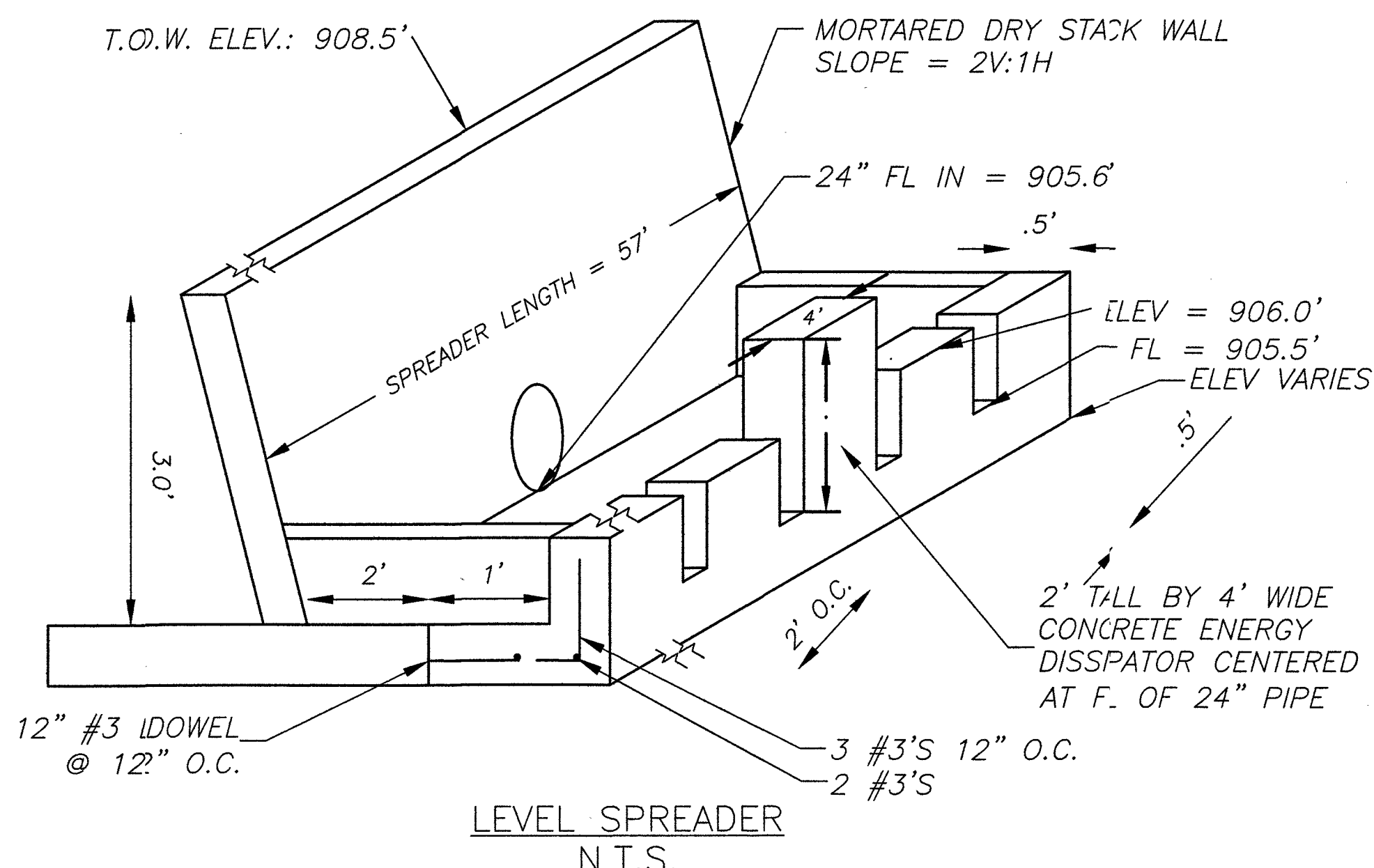
BATCH DETENTION WATER QUALITY RISER PIPE

scale: NTS



DETENTION POND OUTLET STRUCTURE

scale: NTS



LEVEL SPREADER
N.T.S.

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GARY ELI JONES
79198
REGISTERED PROFESSIONAL ENGINEER
Sep 25, 2019

BATCH DETENTION POND
OUTLET STRUCTURE &
DETAILS

ACCUSHARP
DEVELOPMENT PLAT
(PROJECT IN CEDAR PARK ETJ)

CASE: DP-18-001
DATE: Sep 25, 2019
DRAWN BY: GEJ
DESIGNED BY: GEJ
REVIEWED BY: GEJ

SHEET
13
OF 25

WQ-W-1
DA = 0.888 Ac.
EXISTING I.C. = 0
PROPOSED I.C. = 0.639 Ac.

OS-E
2.30 AC

WQ-C-2
DA = 2.703 Ac.
EXISTING I.C. = 0
PROPOSED I.C. = 2.406 Ac.

SCALE
0 40' 80'
IF DRAWING BAR DOES NOT MEASURE
2" THIS PRINT IS NOT TO SCALE

(2.52 ACRES)
PORTION OF LOT 7, BLK.
WOOD COUNTRY ESTATES,
P. C. SLD. 295-299
KENNETH A. BARGER
C. NO. 2014091766

(2.542 ACRES)
SOUTH PORTION OF LOT 7, BLK.
LAKEWOOD COUNTRY ESTATES,
CAB. C. SLD. 295-299
JOHN AND SUSAN BADAR
DOC. NO. 2004015067

BEGIN 338' VEGETATIVE
FILTER SWALE @ 2.5%
3' FLAT BOTTOM 12'
TOP OF SWALE SEE
DETAIL NEXT SHEET

WQ-E-3
DA = 3.046 Ac.
EXISTING I.C. = 0
PROPOSED I.C. = 2.894 Ac.

BEGIN 288' VEGETATIVE
FILTER SWALE @ 2.5%
10' FLAT BOTTOM 15'
TOP OF SWALE SEE
DETAIL NEXT SHEET

CENTER DIVERSION
BERM (BOARD) IN
SWALE PER DETAIL

AST NOTE: NO ABOVE GROUND FUEL
STORAGE TANKS (TEMPORARY OR
PERMANENT)
ARE ALLOWED ON THIS PROJECT.

GRADING SHEET(S)
SPOT ELEVATION KEY:
FS = FINISHED SURFACE
FG = FINISHED GRADE
BS = BOTTOM STEP
TS = TOP STEP
FL = FLOW LINE
TC = TOP OF CURB
MN = MINIMUM ELEVATION
MX = MAXIMUM ELEVATION
FF = FINISHED FLOOR
HP = HIGH POINT
LP = LOW POINT
DS = DOWN SPOUT
TW = TOP OF WALL
TI = TOP OF INLET
TG = TOP OF GRATE
EX = EXISTING OR MATCH EXISTING
LG = LIP OF GUTTER / INLET

END VEGETATIVE FILTER
SWALE AT DETENTION
POND WITH PERMANENT
ROCK BERM

WQ-S-4
DA = 0.799 Ac.
EXISTING I.C. = 0
PROPOSED I.C. = 0.01 Ac.

(2.59 ACRES)
HARVEY H. HEINER
VOL. 764, PG. 390

LOT 6A (2.50 ACRES)
RESUBDIVISION OF LOT
6, BLK. F, LAKEWOOD
COUNTRY ESTATES, CAB.
H, SLD. 30

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Gary Eli Jones
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REGISTERED PROFESSIONAL ENGINEER
STATE OF TEXAS
Sep 25, 2019

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TCEQ WPAP CONTRIBUTING ZONE PLAN		SHEET 14 OF 25
ACCUSHARP DEVELOPMENT PLAT (PROJECT IN CEDAR PARK ETJ)		
CASE DP-18-001	DATE: Sep 25, 2019	SHEET 14 OF 25
DRAWN BY: GEJ	DESIGNED BY: GEJ	
REVIEWED BY: GEJ		

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GRASSY SWALE		
Drainage Basin/Outfall Area No. =	WQ-W-1	
County =	Williamson	
TOTAL DRAINAGE AREA =	0.89	Ac
PRE-DEVELOPMENT I.C. =	0.10	Ac
POST DEVELOPMENT I.C. =	0.64	Ac
POST DEVELOPMENT I.C. FRACTION =	0.72	
P =	32	inches
LM TOTAL PROJECT =	470	lbs.
GRASSY SWALE EFFICIENCY =	70	%
Ac =	0.89	Ac
A _i =	0.64	Ac
A _p =	0.25	Ac
L _R = L _M =	499	lbs
GRASSY SWALE CALCULATIONS		
DA to be Treated by the Swale = A =	0.89	acres
Impervious Cover in Drainage Area =	0.64	acres
Rainfall intensity = i =	1.1	in/hr
Swale Slope =	0.025	ft/ft
Side Slope (z) =	3	
Design Water Depth = y =	0.33	ft
Weighted Runoff Coefficient = C =	0.62	
ACS = cross-sectional area of flow in Swale =	1.08	sf
PW = Wetted Perimeter =	4.36	feet
RH = ACS/PW =	0.25	feet
n = Manning's roughness coefficient =	0.2	
b = 0.134 x Q / -zy =	2.25	feet
y1.67 S0.5		
Q = CIA =	0.61	cfs
V (Velocity of Flow in the swale) = Q/ACS =	0.57	ft/sec
L = Min Swale Length = V (ft/sec) * 300 (sec) =	169.56	feet

LENGTH OF SWALE PROVIDED = 338'

REQUIRED LOAD REMOVAL ENTIRE PROJECT	
County =	Williamson
Total project area included in plan * =	7.44 acres
Predevelopment I.C. * =	0.5 acres
Total post-development I.C. * =	5.95 acres
Total post-development I.C. fraction * =	0.8
P =	32 inches
L _M TOTAL PROJECT =	4744 lbs.
L _M WQ-W-1 =	499 lbs
L _M WQ-C-2 =	1871 lbs
L _M WQ-E-3 =	2374 lbs
TOTAL =	4744 lbs

GRASSY SWALE		
Drainage Basin/Outfall Area No. =	WQ-C-2	
County =	Williamson	
TOTAL DRAINAGE AREA =	2.70	Ac
PRE-DEVELOPMENT I.C. =	0.40	Ac
POST DEVELOPMENT I.C. =	2.41	Ac
POST DEVELOPMENT I.C. FRACTION =	0.89	
P =	32	inches
LM TOTAL PROJECT =	1750	lbs.
GRASSY SWALE EFFICIENCY =	70	%
Ac =	2.70	Ac
A _i =	2.41	Ac
A _p =	0.29	Ac
L _R = L _M =	1871	lbs
GRASSY SWALE CALCULATIONS		
DA to be Treated by the Swale = A =	2.7	acres
Impervious Cover in Drainage Area =	2.41	acres
Rainfall intensity = i =	1.1	in/hr
Swale Slope =	0.025	ft/ft
Side Slope (z) =	3	
Design Water Depth = y =	0.33	ft
Weighted Runoff Coefficient = C =	0.7	
ACS = cross-sectional area of flow in Swale =	3.66	sf
PW = Wetted Perimeter =	12.08	feet
RH = ACS/PW =	0.3	feet
n = Manning's roughness coefficient =	0.2	
b = 0.134 x Q / -zy =	9.97	feet
y1.67 S0.5		
Q = CIA =	2.07	cfs
V (Velocity of Flow in the swale) = Q/ACS =	0.57	ft/sec
L = Min Swale Length = V (ft/sec) * 300 (sec) =	169.56	feet

LENGTH OF SWALE PROVIDED = 288'

BATCH DETENTION POND		
Drainage Basin/Outfall Area No. =	WQ-E-3	
County =	Williamson	
TOTAL DRAINAGE AREA =	3.05	Ac
PRE-DEVELOPMENT I.C. =	0.00	Ac
POST DEVELOPMENT I.C. =	2.89	Ac
POST DEVELOPMENT I.C. FRACTION =	0.95	
P =	32	inches
LM TOTAL PROJECT =	2515	lbs.
BATCH DETENTION EFFICIENCY =	91	%
Ac =	3.05	Ac
A _i =	2.89	Ac
A _p =	0.16	Ac
L _R =	2914	lbs
Desired L _M THIS BASIN =	2374	lbs.
F =	0.81	
Rainfall Depth =	1.12	inches
Post Development runoff Coefficient =	0.77	
On-site Water Quality Volume =	9592	CF
Off-site area draining to BMP =	0	Ac
Off-site Impervious cover draining to BMP =	0	Ac
Impervious fraction of off-site area =	0	
Off-site runoff Coefficient =	0	
Off-site Water Quality Volume =	0	CF
Storage for Sediment =	1918	CF
Total Capture Volume REQ'D =	11511	CF

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Gary Eli Jones
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 79198
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 Sep 25, 2019

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TCEQ WPAP CONTRIBUTING ZONE PLAN EXHIBITS

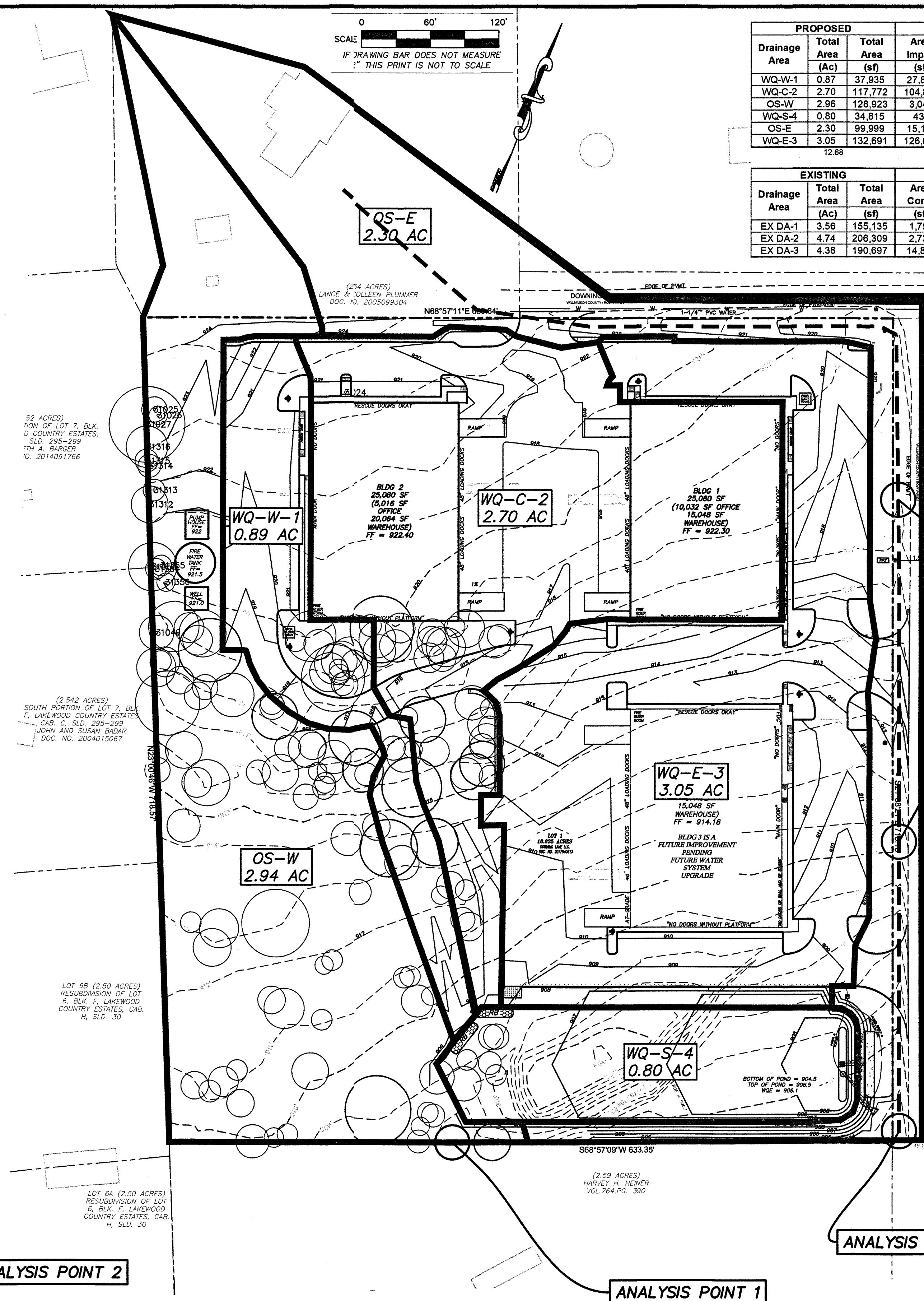
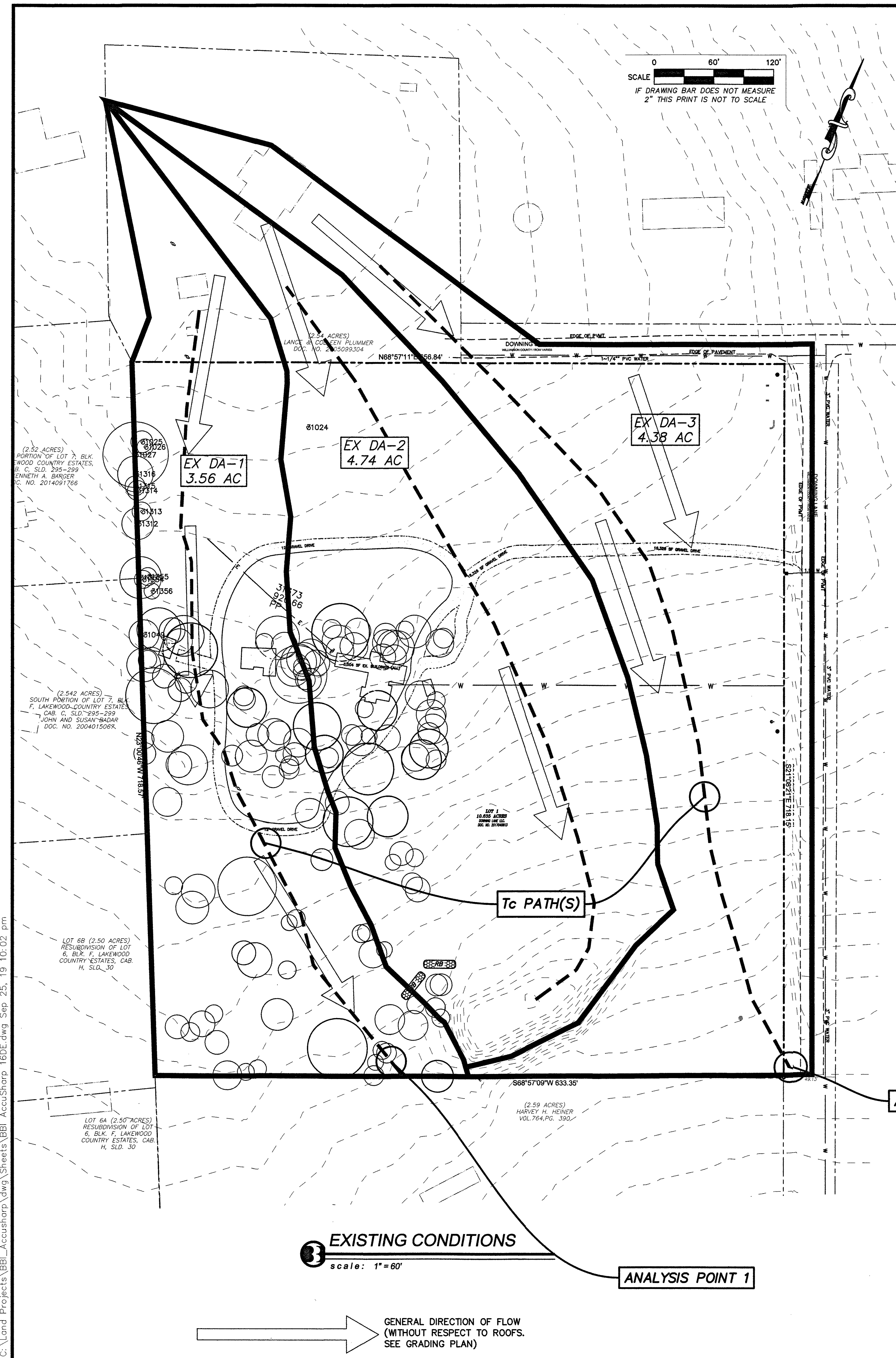
ACCUSHARP DEVELOPMENT PLAT
 (PROJECT IN CEDAR PARK ETJ)

CASE: DP-18-001
 DATE: Sep 25, 2019
 DRAWN BY: GEJ
 DESIGNED BY: GEJ
 REVIEWED BY: GEJ

SHEET 15 OF 25

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Drainage Area	PROPOSED			IMPERVIOUS			GRASS		
	Total Area (Ac)	Total Area (sf)	Area Imper. (sf)	Area Imper. (Ac)	Area Imper. (%)	Area Grass (sf)	Area Grass (Ac)	Area Grass (%)	
WQ-W-1	0.87	37,935	27,835	0.639	73.4%	10,100	0.23	26.6%	
WQ-C-2	2.70	117,772	104,805	2,406	89.0%	12,967	0.30	11.0%	
OS-W	2.96	128,923	3,049	0.070	2.4%	125,874	2.89	97.6%	
WQ-S-4	0.80	34,815	436	0.010	1.3%	34,379	0.79	98.7%	
OS-E	2.30	99,999	15,164	0.348	15.2%	84,835	1.95	84.8%	
WQ-E-3	3.05	132,691	128,063	2,894	95.0%	6,628	0.15	5.0%	

Drainage Area	EXISTING			IMPERVIOUS			GRASS		
	Total Area (Ac)	Total Area (sf)	Area Conc. (sf)	Area Conc. (Ac)	Area Conc. (%)	Area Gravel (sf)	Area Gravel (Ac)	Area Gravel (%)	
EX DA-1	3.56	155,135	1,758	0.04	1.1%	5,694	0.13	3.7%	
EX DA-2	4.74	206,309	2,731	0.06	1.3%	8,140	0.19	3.9%	
EX DA-3	4.38	190,697	14,842	0.34	7.8%	2,827	0.06	1.5%	

NOTE: THE FLOW FROM OFF-SITE HAS NOT BEEN INCREASED FROM THE EXISTING CONDITION.

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DRAINAGE EXHIBIT - EXISTING AND PROPOSED CONDITIONS

ACCUSHARP DEVELOPMENT PLAT (PROJECT IN CEDAR PARK ETJ)

CASE DP-18-001	SHEET 16 OF 25
DATE: Sep 25, 2019	DESIGNED BY: GEJ
DRAWN BY: GEJ	REVIEWED BY: GEJ

3 PROPOSED CONDITIONS
 scale: 1" = 60'

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3 EXISTING CONDITIONS
 scale: 1" = 60'

GENERAL DIRECTION OF FLOW (WITHOUT RESPECT TO ROOFS. SEE GRADING PLAN)

Flow Units CFS
 Elevation Type Elevation
 Hydrology Method SCS TR-20
 Time of Concentration (TOC) Method ... SCS TR-55
 Link Routing Method Hydrodynamic

Rainfall Details

Data Source ID	Rainfall Type	Rain Units	State	County	Rainfall Depth (inches)
2 YR SCS Type III 24 Hr	Cumulative	inches	Texas	Williamson	3.44
10 YR SCS 24 HR Type III	Cumulative	inches	Texas	Williamson	6.10
25 YR SCS 24 HR Type III	Cumulative	inches	Texas	Williamson	7.64
100-YR SCS 24 HR Type III	Cumulative	inches	Texas	Williamson	10.20

Drainage Basin Characteristics - Proposed Conditions								
Drainage Area	Area (Acres)	I.C. (%)	Curve No.	Tc (min)	Q2 (cfs)	Q10 (cfs)	Q25 (cfs)	Q100 (cfs)
WQ-W-1	0.87	73.4%	77.0	5.00	2.34	4.43	5.67	7.72
WQ-C-2	2.70	89.0%	77.0	5.00	7.95	14.47	18.27	24.59
OS-W	2.96	2.4%	77.0	18.45	3.44	8.91	12.26	17.89
WQ-S-4	0.80	1.3%	77.0	5.00	1.21	3.11	4.28	6.24
OS-E	2.30	15.2%	77.0	19.62	2.98	7.14	9.68	13.94
WQ-E-3	3.05	95.0%	77.0	5.00	9.26	16.61	20.87	27.97

Drainage Basin Characteristics - Existing Conditions								
Drainage Area	Area (Acres)	I.C. (%)	Curve No.	Tc (min)	Q2 (cfs)	Q10 (cfs)	Q25 (cfs)	Q100 (cfs)
EX DA-1	3.56	4.8%	77.0	18.45	4.25	10.84	14.87	21.63
EX DA-2	4.74	5.3%	77.0	18.23	5.71	14.50	19.87	28.93
EX DA-3	4.38	9.3%	77.0	19.34	5.39	13.36	18.23	26.42

EXISTING

Analysis Point 1		
2 YR	10 YR	100 YR
4.25	10.84	21.63
CFS	CFS	CFS

Analysis Point 2		
2 YR	10 YR	100 YR
10.76	27.42	54.78
CFS	CFS	CFS

PROPOSED

Analysis Point 1			
	Existing Flows	Proposed Flows	
2 YR	4.25	3.44	CFS
10 YR	10.84	8.91	CFS
25 YR	14.87	12.26	CFS
100 YR	21.63	17.89	CFS

Analysis Point 2			
	Existing Flows	Proposed Flows	
2 YR	10.76	10.73	CFS
10 YR	27.42	24.17	CFS
25 YR	37.63	35.15	CFS
100 YR	54.78	54.67	CFS

NOTE: ALL PROPOSED FLOWS LEAVING PROPERTY ARE LESS THAN EXISTING

NOTE: ALL PROPOSED FLOWS LEAVING PROPERTY ARE LESS THAN EXISTING

Detention Analysis Summary

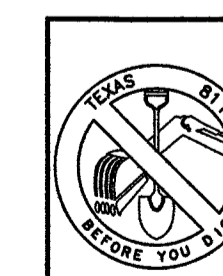
	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage (Acre-feet)	Peak Elevation (m.s.l.)	Time of Peak Outflow (hr:min)
2-YR	20.74	7.84	0.788	907.46	12:20
10-YR	38.62	17.03	1.172	907.96	12:15
25-YR	49.08	25.48	1.354	908.16	12:12
100-YR	66.51	41.05	1.612	908.44	12:11

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 REGISTERED PROFESSIONAL ENGINEER
 Sep 25, 2019



WARNING !!! CONTRACTOR TO FIELD VERIFY ALL EXIST. UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION

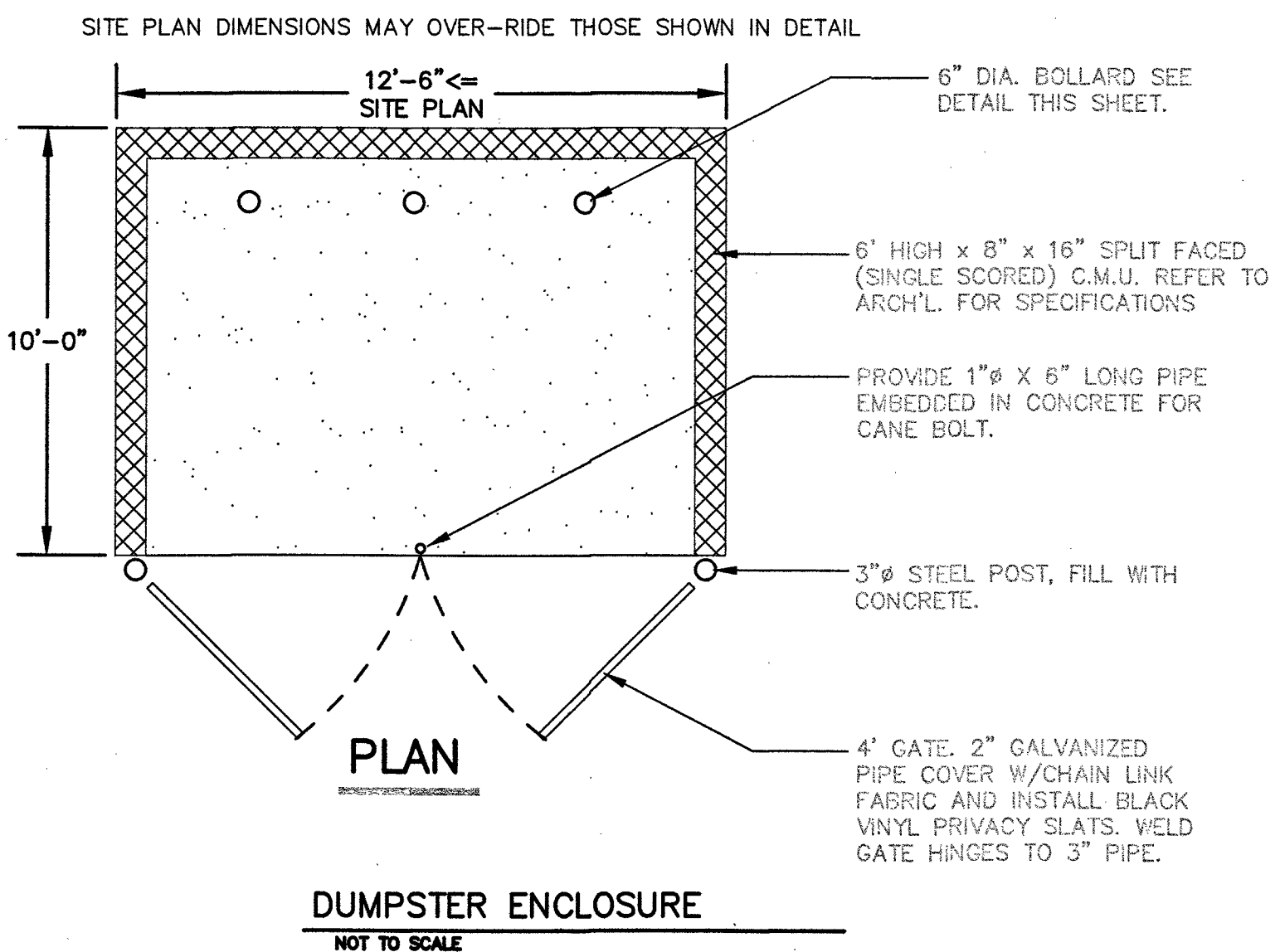
ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE CITY MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

APPROVED
 MAR 04 2020
 PLANNING DEPT.
 CITY OF CEDAR PARK

DRAINAGE MODEL OUTPUT TABLES

ACCUSHARP DEVELOPMENT PLAT
 (PROJECT IN CEDAR PARK ETJ)

CASE: DP-18-001	SHEET
DATE: Sep 25, 2019	17
DRAWN BY: GEJ	OF 25
DESIGNED BY: GEJ	
REVIEWED BY: GEJ	

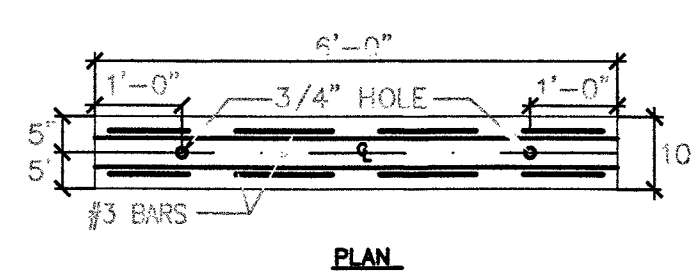


DUMPSTER PAD & ENCLOSURE
NOT TO SCALE

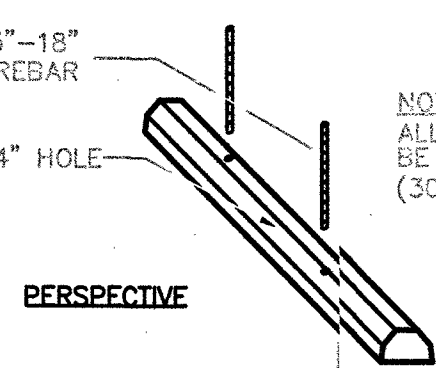
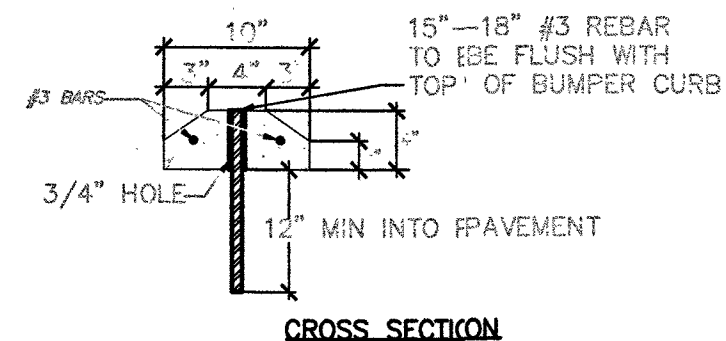
CEDAR PARK DUMPSTER NOTES:

ALL REFUSE AND/OR RECYCLING CONTAINERS, SHALL BE COMPLETELY SCREENED FROM PUBLIC VIEW AND THE VIEW OF ADJOINING PROPERTIES. (SEC. 14.07.009 (A) (3)).
 ALL CONTAINERS SHALL BE SCREENED ON THREE SIDES BY WALLS OTHER THAN WOOD, WITH THE RESILIENCE OF METAL OR CONCRETE, NOT LESS THAN THE HEIGHT OF THE BIN OR CONTAINER. (SEC. 14.07.009 (A) (3) (A)).
 AN OPENING SHALL BE SITUATED SO THE CONTAINER IS NOT VISIBLE FROM ADJACENT PROPERTIES, PUBLIC STREETS, OR VISIBLE TO THE PUBLIC MANEUVERING ON SITE, UNLESS THE OPENING IS EQUIPPED WITH AN OPAQUE GATE. GATES MUST HAVE TIEBACKS TO SECURE IN OPEN POSITION AND FASTENERS TO KEEP THEM CLOSED. (SEC. 14.07.009 (A) (3) (B)).
 DUMPSTER PADS SHALL BE PLACED ON CONCRETE SIX (6) INCHES IN THICKNESS, TWELVE (12) FEET IN WIDTH AND TEN (10) FEET IN DEPTH. THE DUMPSTER PAD FOR A METAL SIDE LOADED CONTAINER SHALL BE NINE (9) FEET IN WIDTH AND SIX (6) FEET IN DEPTH. A 300/90-GALLON PAD SITE SHALL BE THREE (3) FEET IN WIDTH AND THREE (3) FEET IN DEPTH. (SEC. 14.07.009 (A) (3) (C)).

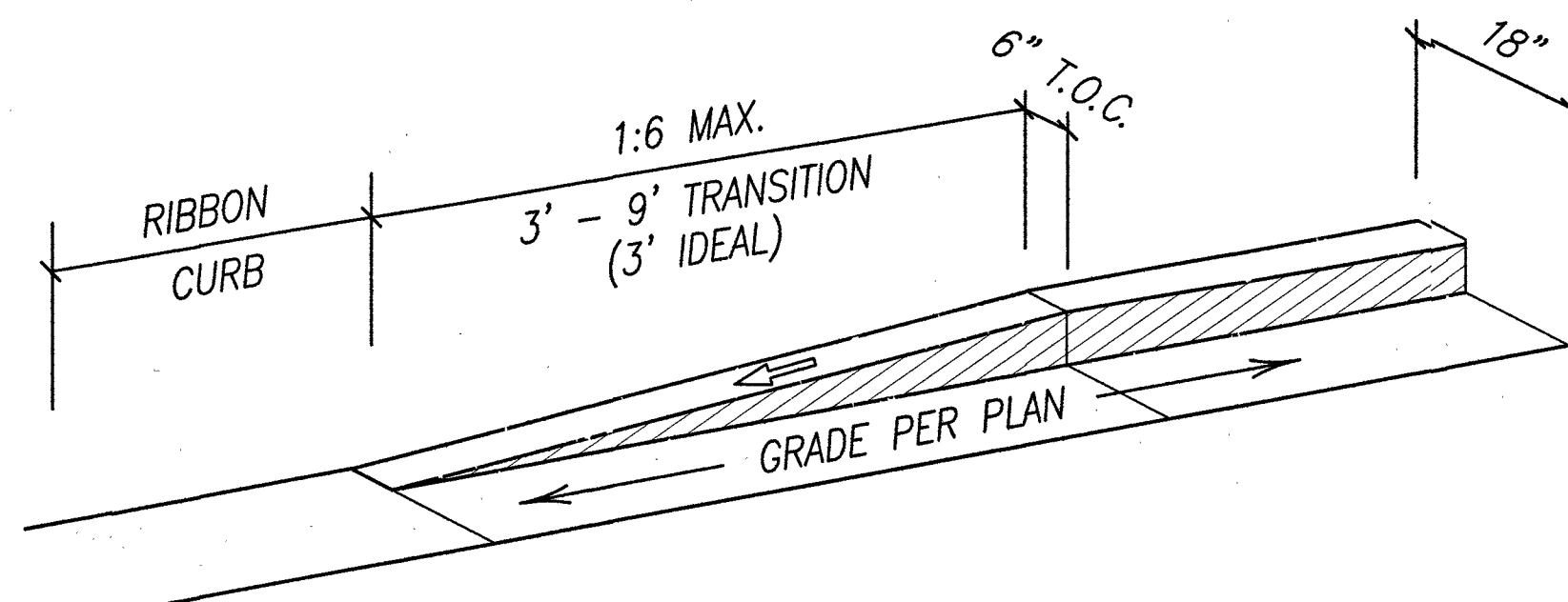
DUMPSTER PAD & ENCLOSURE
NOT TO SCALE



WHEEL STOP, TYPICAL
NOT TO SCALE

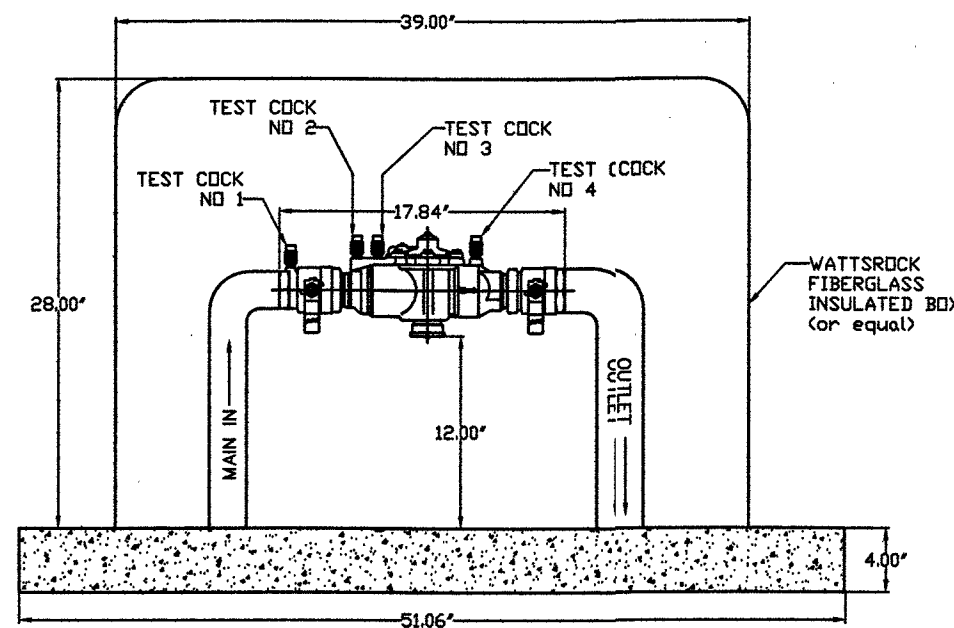


NOTE: ALL CONCRETE SHALL BE CLASS "A" (3000 P.S.I. MIN.)



RIBBON CURB / RAISED CURB TRANSITION
NOT TO SCALE

THE ASSEMBLY SHALL BE INSTALLED A MINIMUM 12 INCHES ABOVE GRADE AND IN A LOCATION IN WHERE IT CANNOT BE SUBMERGED.

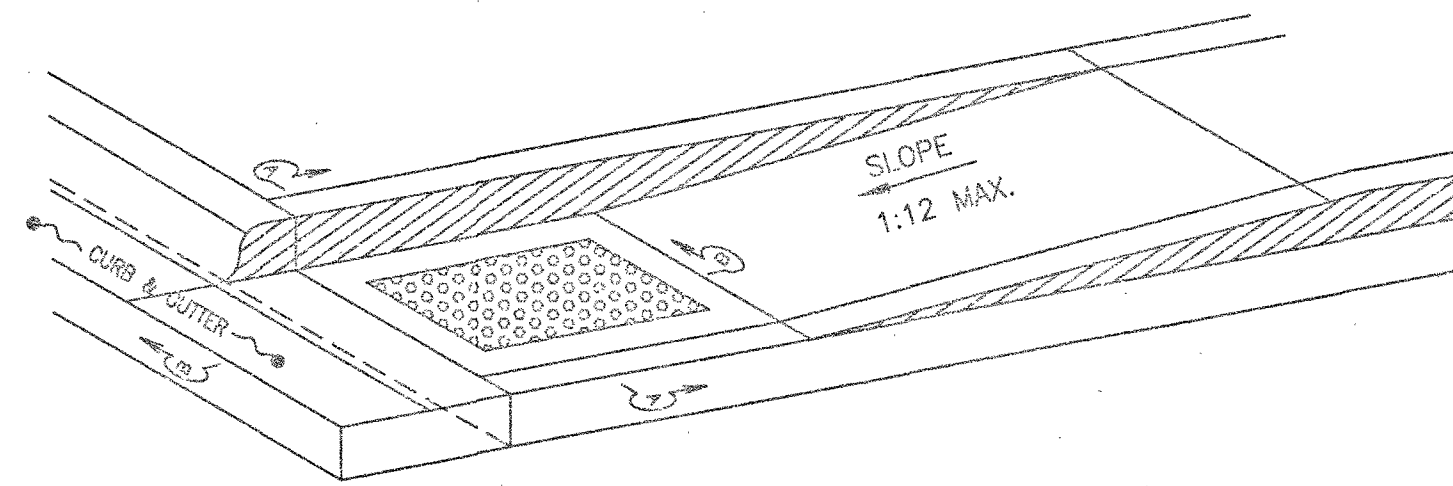


1" WATTS SERIES 009 (or equal) REDUCED PRESSURE ZONE BACKFLOW SIDE VIEW

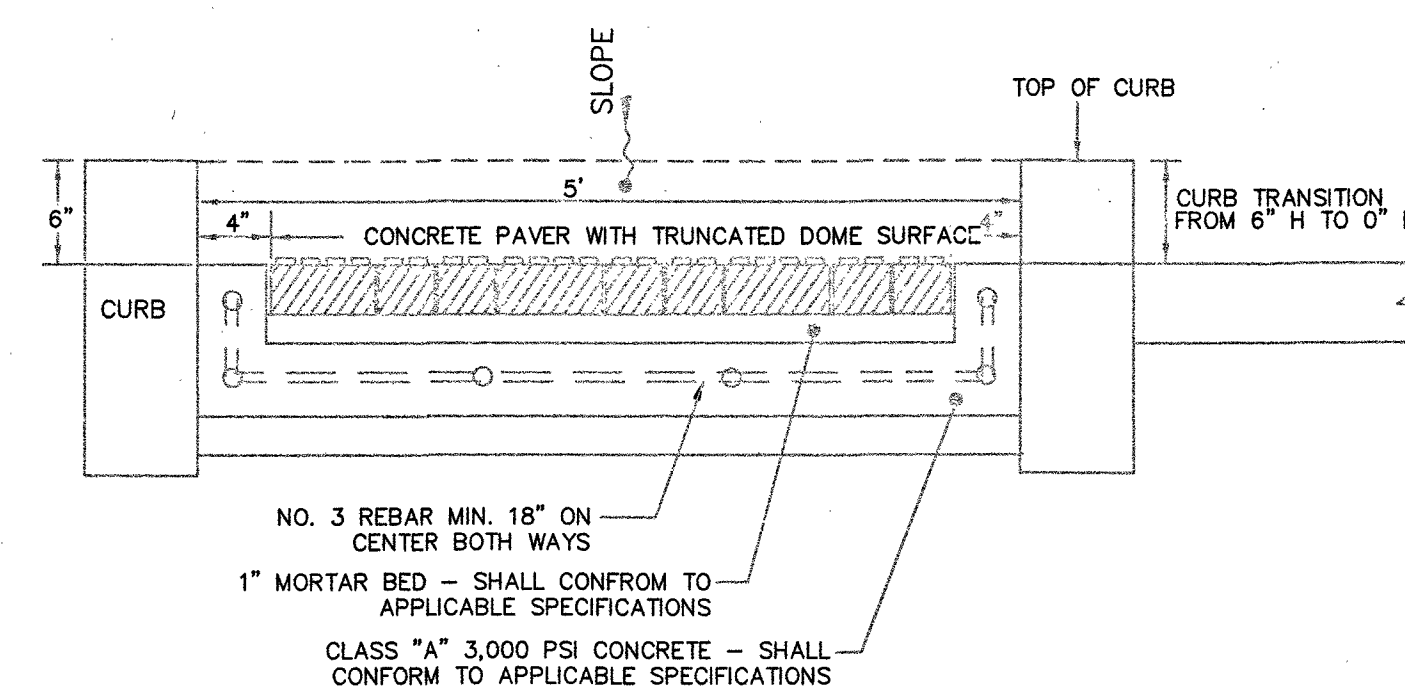
PRZ DETAIL
scale: NTS

PEDESTRIAN RAMPS GENERAL NOTES

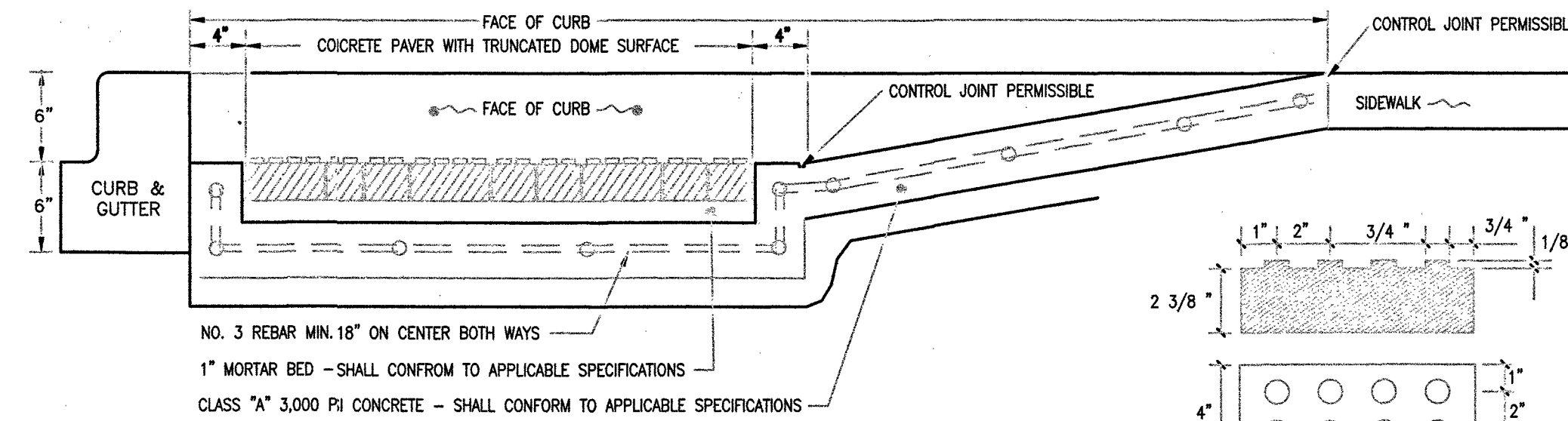
- ALL SIDEWALKS WILL BE DOWELED INTO EXISTING SIDEWALKS.
 - DRIVEWAYS, DRIVEWAYS, INLET BOXES, RETAINING WALLS, ETC. SHALL SLOPE ARE MAXIMUM ALLOWABLE. FLATTER SLOPES THAT WILL RECEIVE A LIGHT BROOM FINISH UNLESS
 - NOTED OTHERWISE IN THE PLANS. FOR PURPOSES OF WARNING, THE CURB RAMPS SHALL HAVE A LIGHT
 - REFLECTIVE VALUE AND TEXTURE THAT SIGNIFICANTLY CONTRASTS WITH THAT OF ADJOINING PEDESTRIAN ROUTES. TEXTURES MAY CONSIST OF PAVERS WITH TRUNCATED DOME SURFACES
 - OR GROOVES. TEXTURES ARE REQUIRED TO BE DETECTABLE UNDERFOOT, SURFACES THAT WOULD ALLOW WATER TO ACCUMULATE ARE PROHIBITED. COLOR CONTRAST, FOR EXAMPLE, CAN BE ACCOMPLISHED WITH COLORED
 - CONCRETE PAVERS THAT HAVE TRUNCATED DOMES OR BY COLORED STAINED CONCRETE WITH GROOVES, EITHER OF WHICH WOULD PROVIDE A CONTRAST WITH TYPICALLY LIGHT COLORED CONCRETE. ADDITIONAL INFORMATION ON CURB RAMP LOCATION, DESIGN, VISIBILITY
 - AND TEXTURE MAY BE FOUND IN THE CURRENT EDITION OF THE TEXAS ACCESSIBILITY STANDARDS (TAS) PREPARED AND ADMINISTERED BY THE TEXAS DEPARTMENT OF LICENSING AND REGULATION (TDLR). RAISED MEDIANS SEPARATE OPPOSING DIRECTIONS OF TRAFFIC AND
 - PROVIDE A REFUGE AREA FOR PEDESTRIANS IF THEY ARE UNABLE TO CROSS THE ENTIRE ROADWAY IN THE ALLOTTED SIGNAL PHASE. TO SERVE AS A REFUGE AREA, THE MEDIAN SHOULD BE A MINIMUM OF 4 FEET WIDE. MEDIANS SHOULD BE DESIGNED TO PROVIDE ACCESSIBLE PASSAGE OVER OR THROUGH THEM.
- ALL SIDEWALK PLANS AND DETAILS SHALL BE SUBMITTED AND APPROVED BY THE TEXAS DEPARTMENT OF LICENSING AND REGULATION (TDLR).
- ANY PART OF THE ACCESSIBLE ROUTE WITH A SLOPE GREATER THAN 1:20
 - (5%) SHALL BE CONSIDERED A RAMP. IF A RAMP HAS A RISE GREATER THAN 6 INCHES OR A HORIZONTAL PROJECTION GREATER THAN 72 INCHES, THEN IT SHALL HAVE HANDRAILS ON BOTH SIDES. THE ONLY EXCEPTION IS AT CURB RAMPS. HANDRAILS ARE NOT REQUIRED ON CURB RAMPS. CURB RAMPS SHALL BE PROVIDED WHERE EVER AN ACCESSIBLE ROUTE CROSSES (PENETRATES) A CURB. CURB RAMPS ARE GENERALLY INTERPRETED AS ONLY THE PORTION TYING DIRECTLY INTO THE ROADWAY. TRAFFIC SIGNAL OR ILLUMINATION POLES, GROUND BOXES, CONTROLLER
 - BOXES, SIGNS, DRAINAGE FACILITIES AND OTHER ITEMS SHALL BE PLACED SO NOT TO OBSTRUCT THE ACCESSIBLE ROUTE.
 - CONCRETE PAVER UNITS SHALL MEET ALL REQUIREMENTS OF ASTM C-936, C-33, AND SHALL BE LAID IN A TWO BY TWO UNIT BASKET WEAVE PATTERN, UNLESS SHOWN OTHERWISE IN THE PLANS.
 - CONCRETE PAVER UNIT SHALL HAVE A TRUNCATED DOME TOP SURFACE FOR DETECTABLE WARNING TO PEDESTRIANS.
 - CONCRETE PAVER UNIT COLOR FOR THE RAMP SHALL BE A CONTRASTING COLOR TO THE ADJACENT SURFACES. THE COLOR OF THE CONCRETE PAVER UNITS SHALL BE SHOWN ELSEWHERE IN THE PLANS. (ADJACENT SURFACES INCLUDE SIDE FLARES).
 - CONCRETE PAVER UNITS SHALL BE SAW CUT ONLY AND ANY CUT UNIT SHALL BE NOT LESS THAN 25 PERCENT OF A FULL UNIT.



DIRECTIONAL RAMP WITHIN RADIUS
NOT TO SCALE

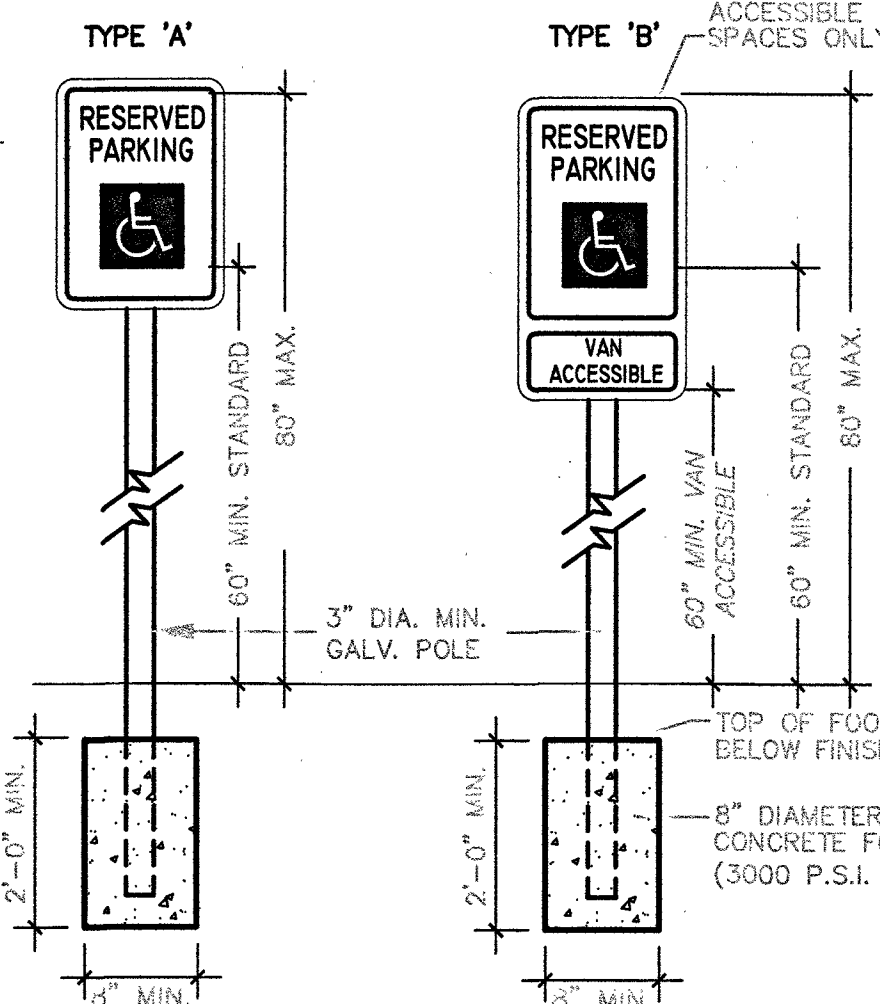


SECTION A-A
NOT TO SCALE

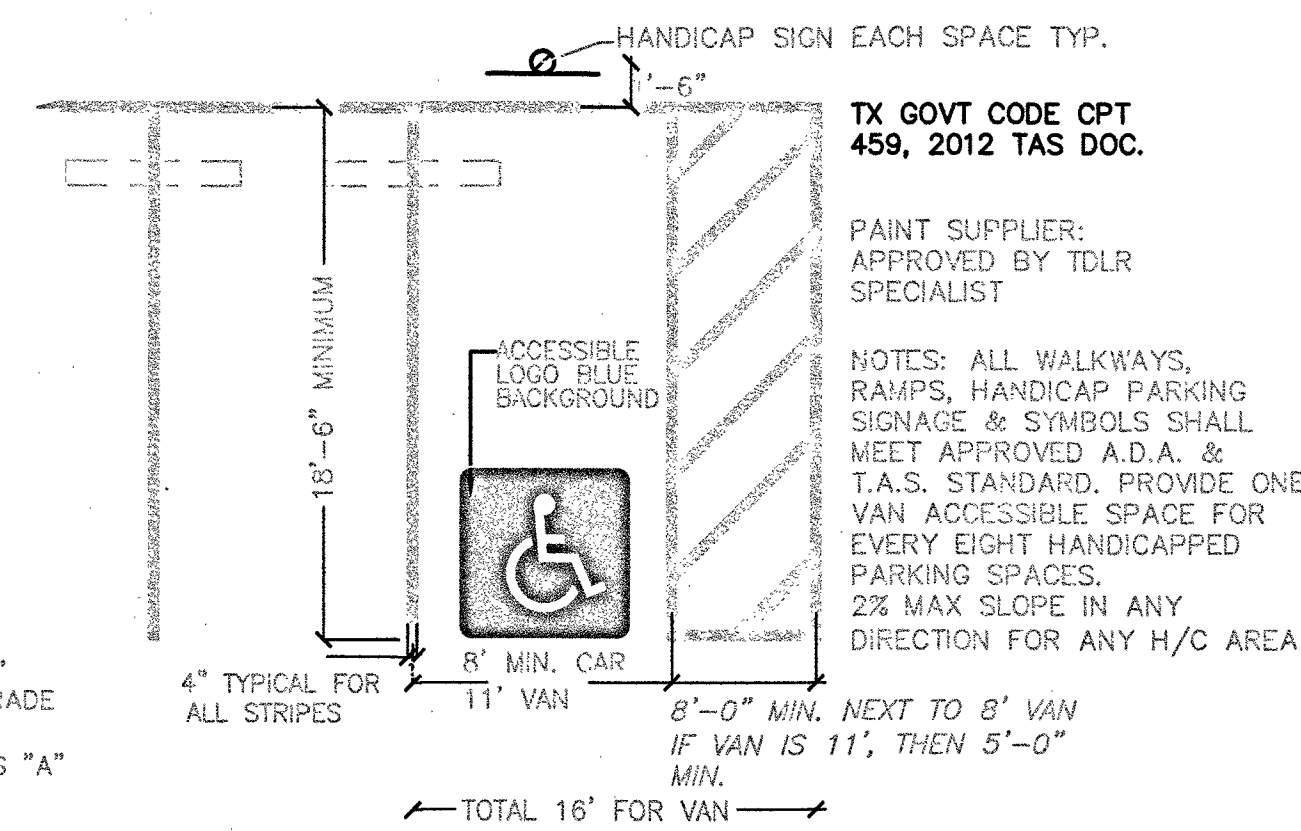


SECTION B-B
NOT TO SCALE

CONCRETE PAVER WITH TRUNCATED DOME SURFACE
NOT TO SCALE



ACCESSIBLE PARKING SIGN, TYPICAL
NOT TO SCALE



PARKING STRIPES, TYPICAL
NOT TO SCALE

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MAR 04 2020
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CITY OF CEDAR PARK

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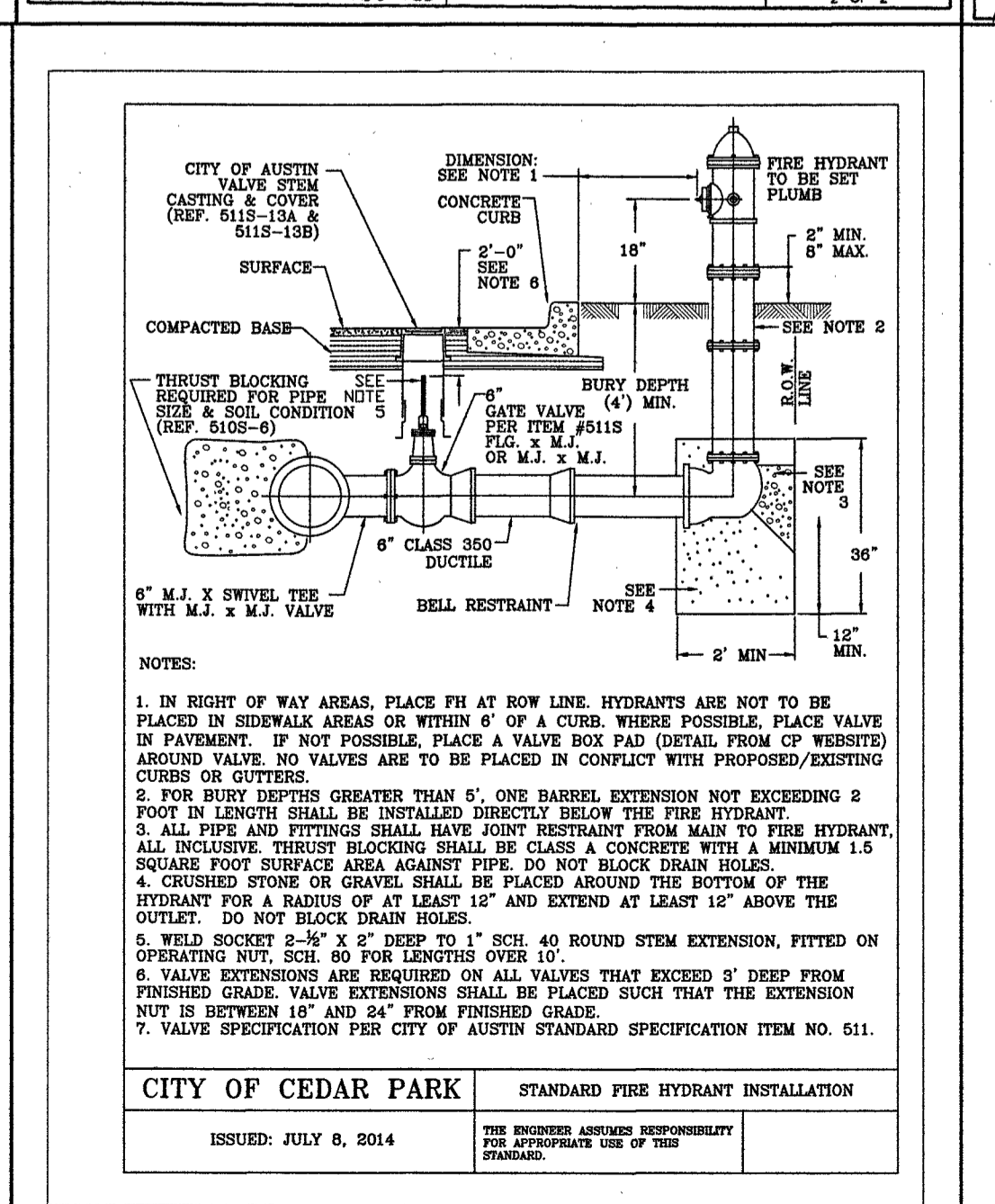
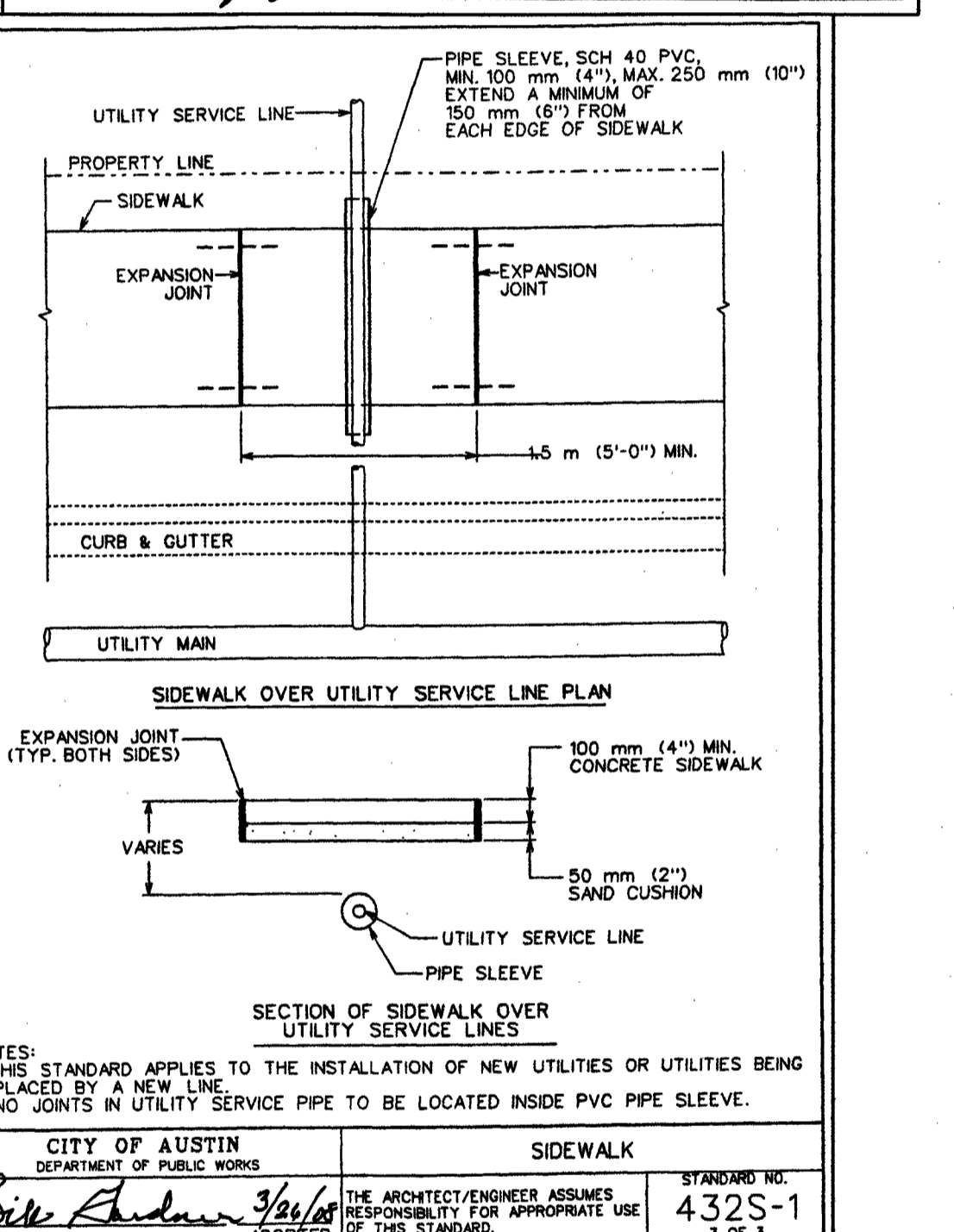
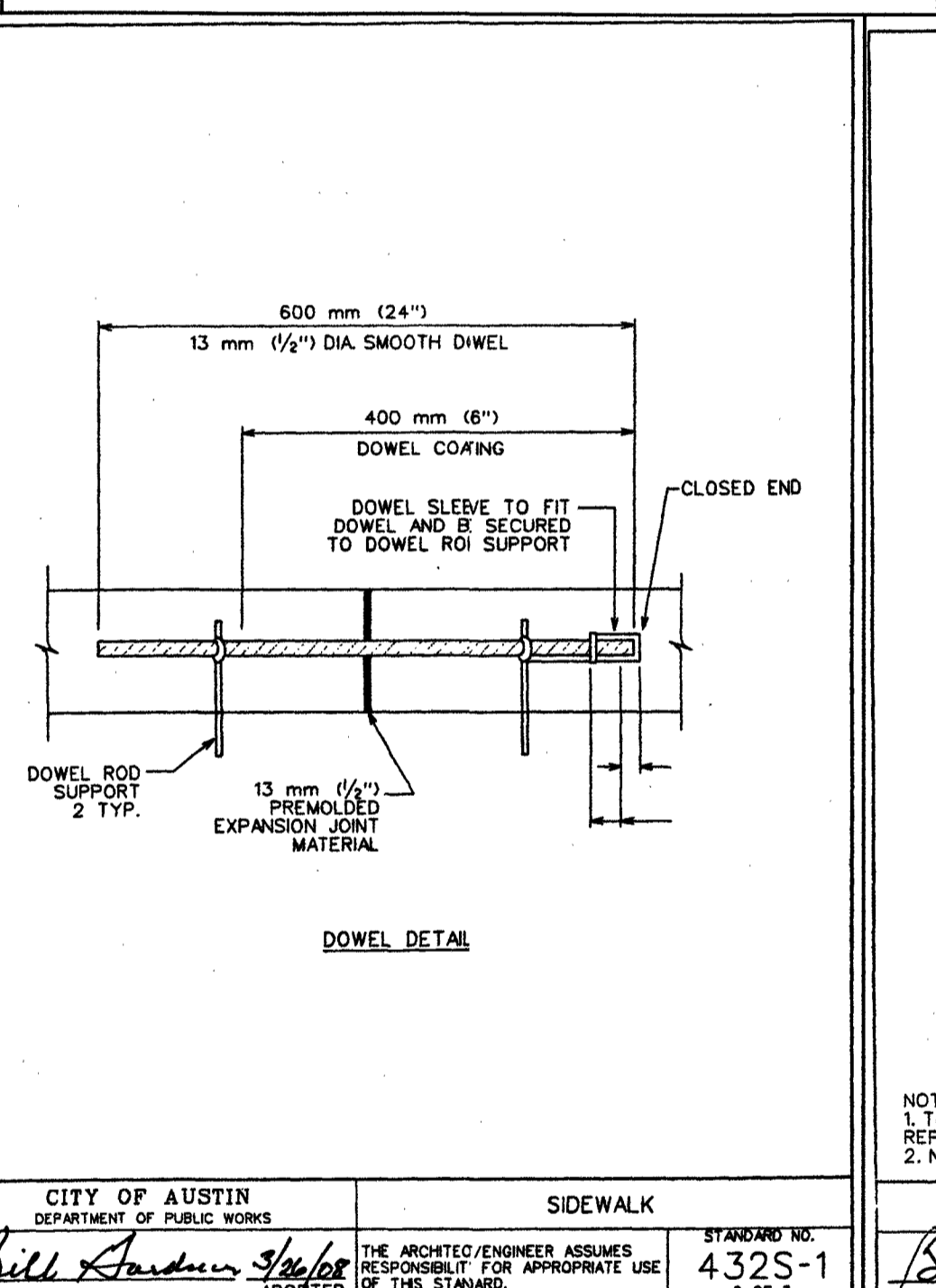
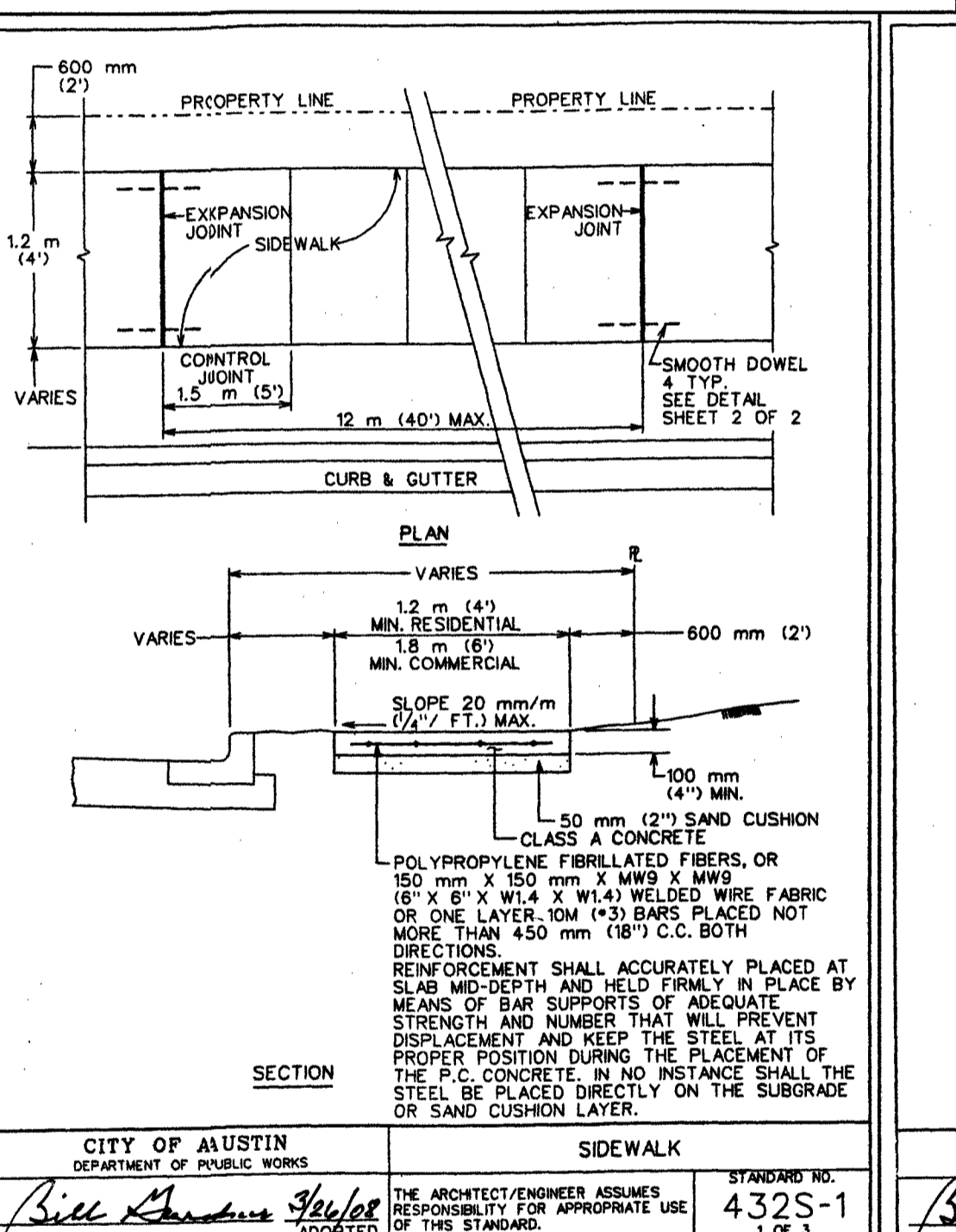
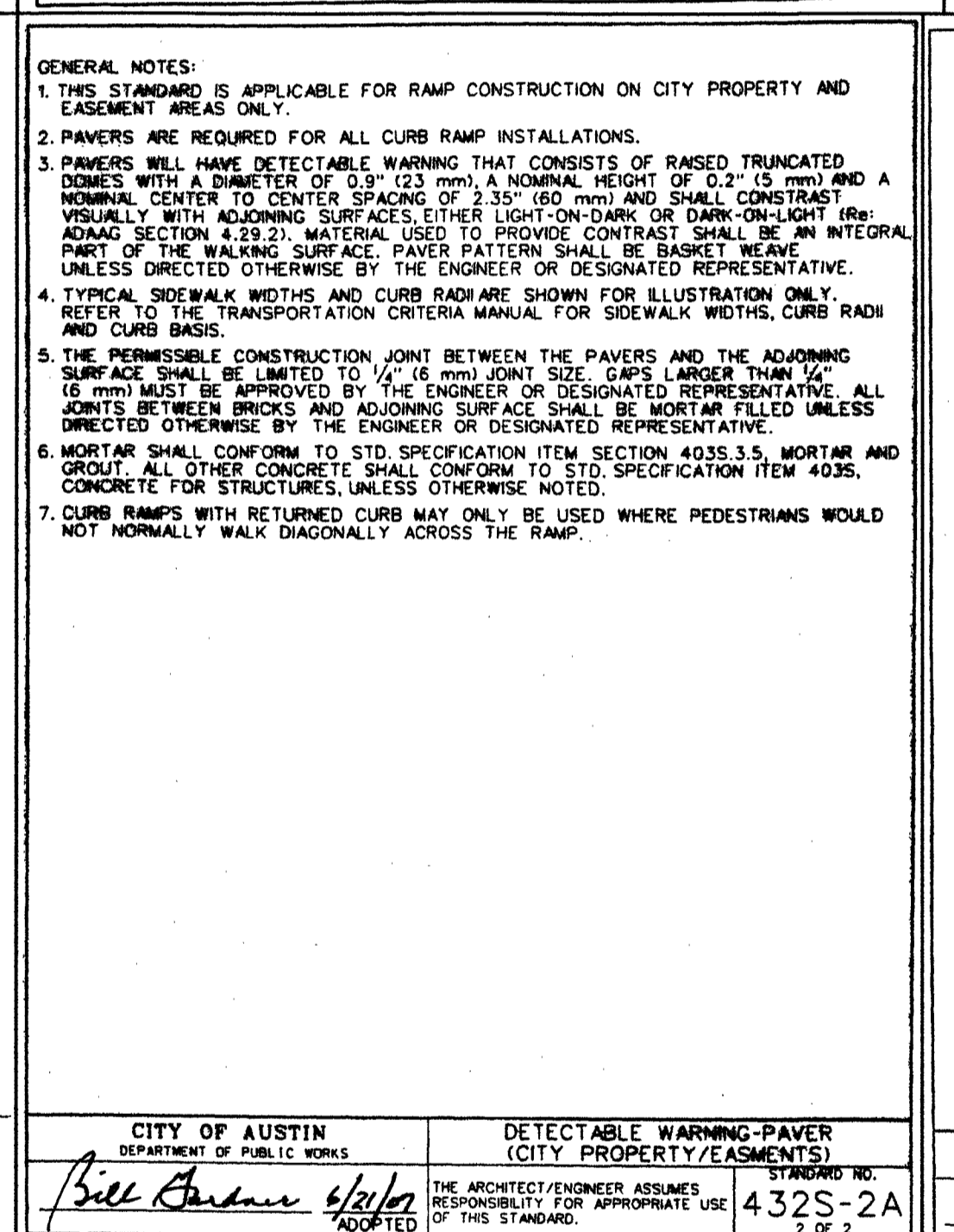
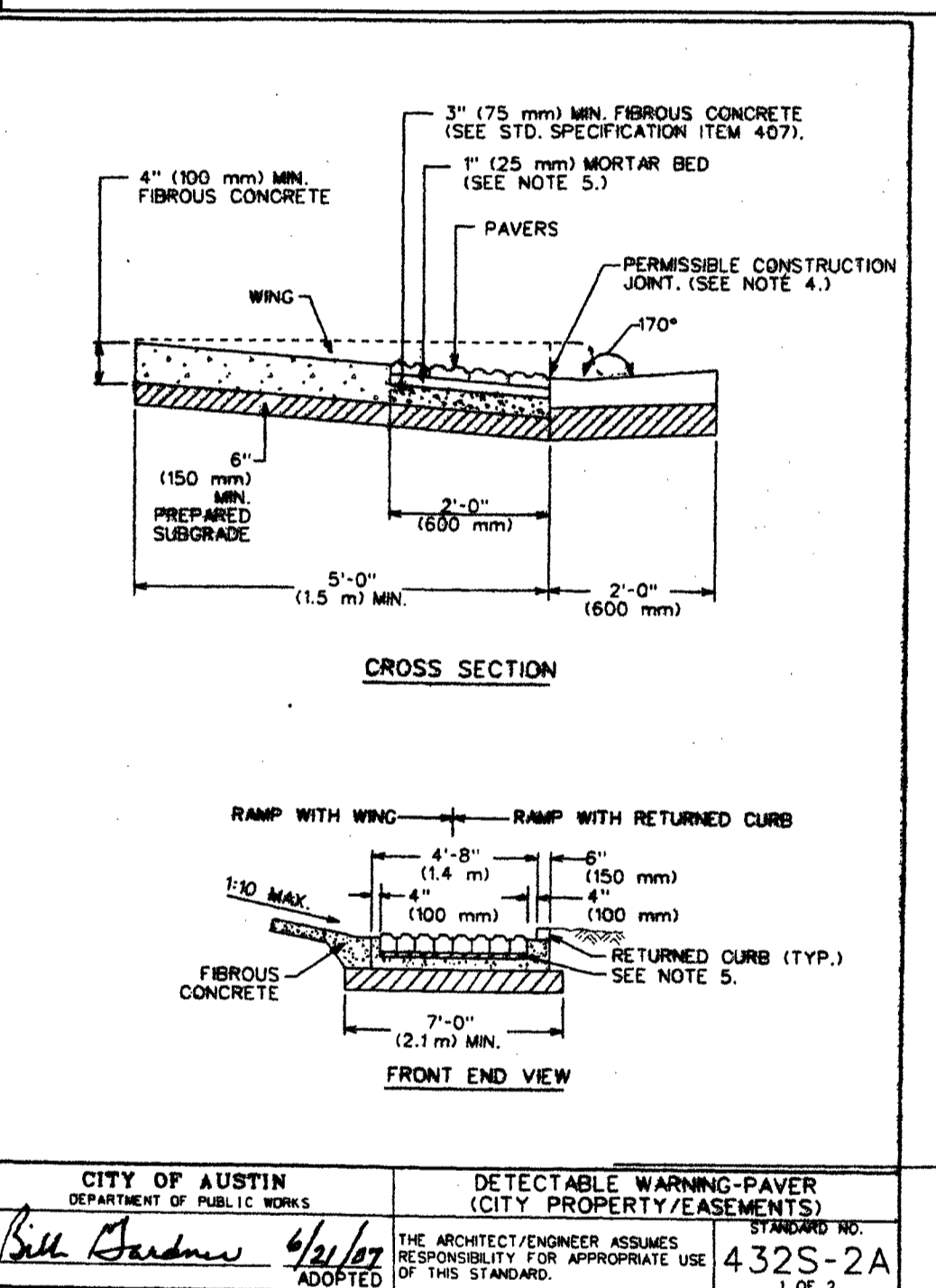
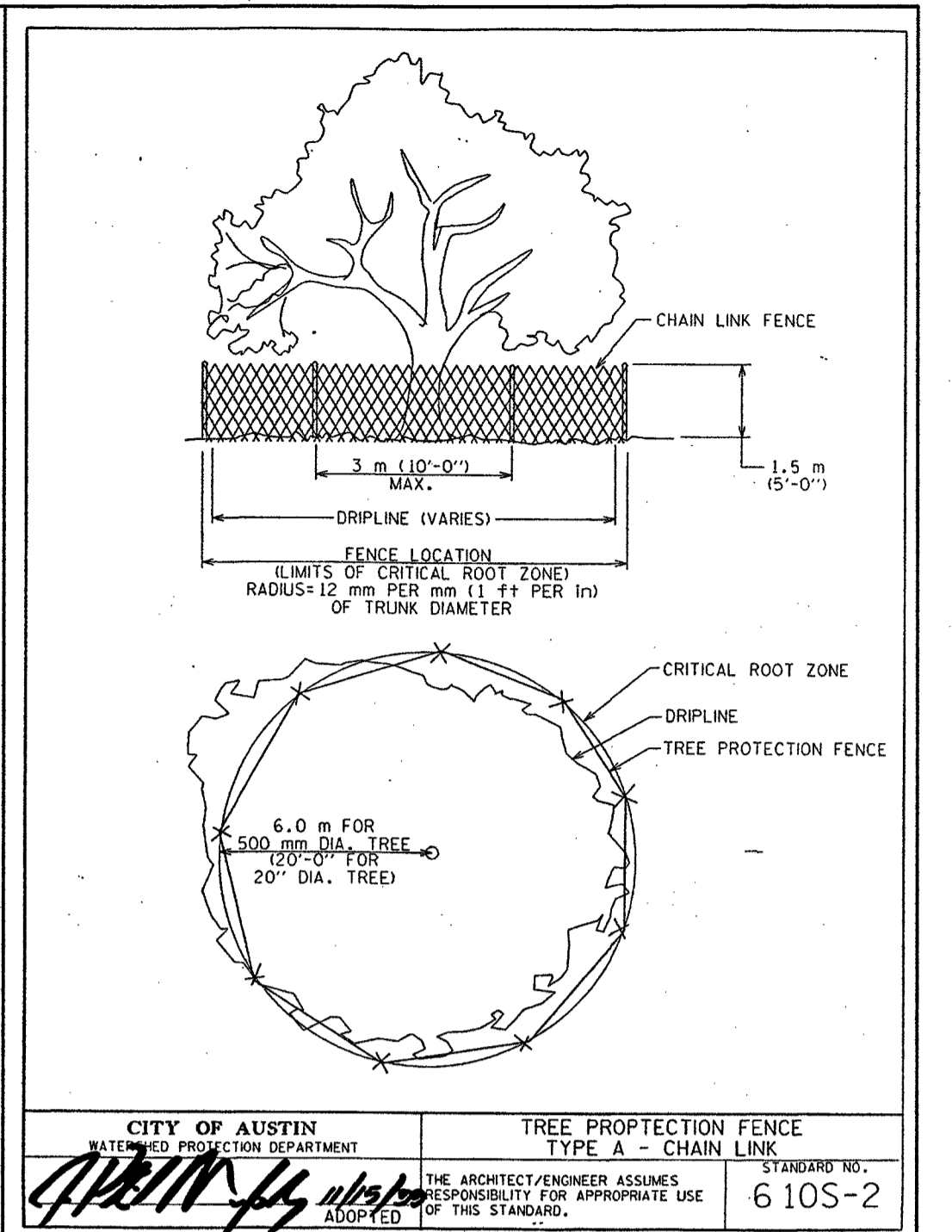
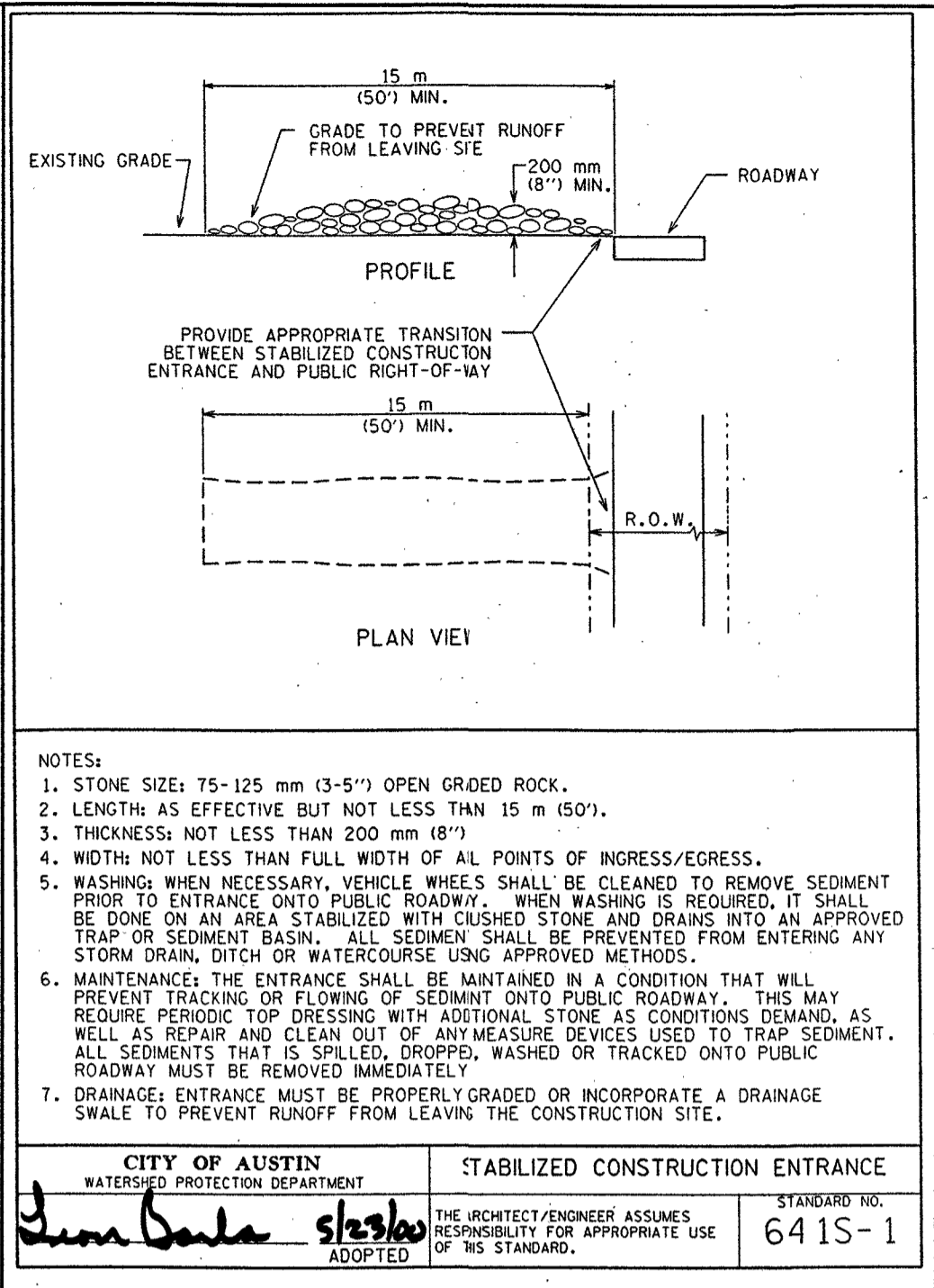
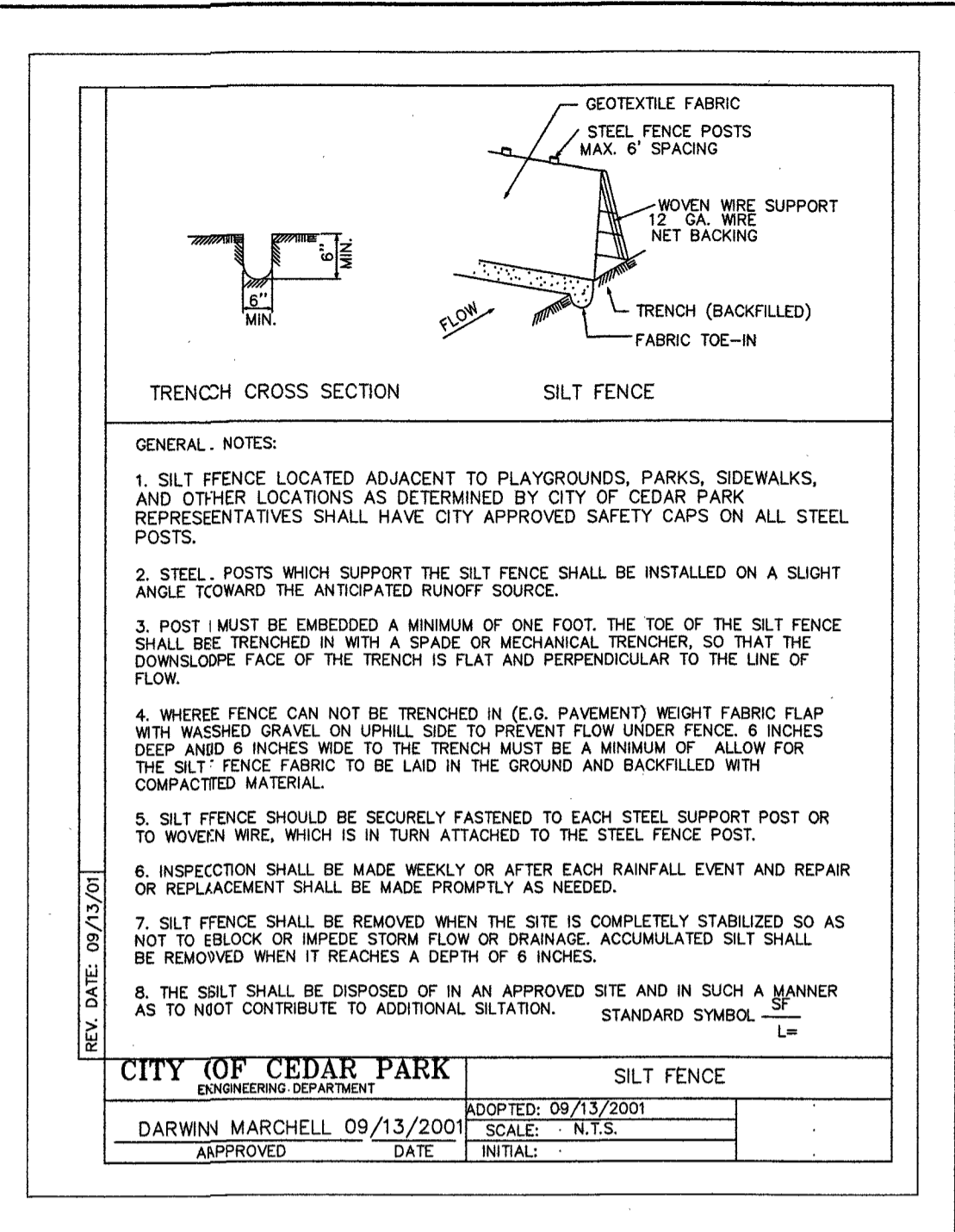
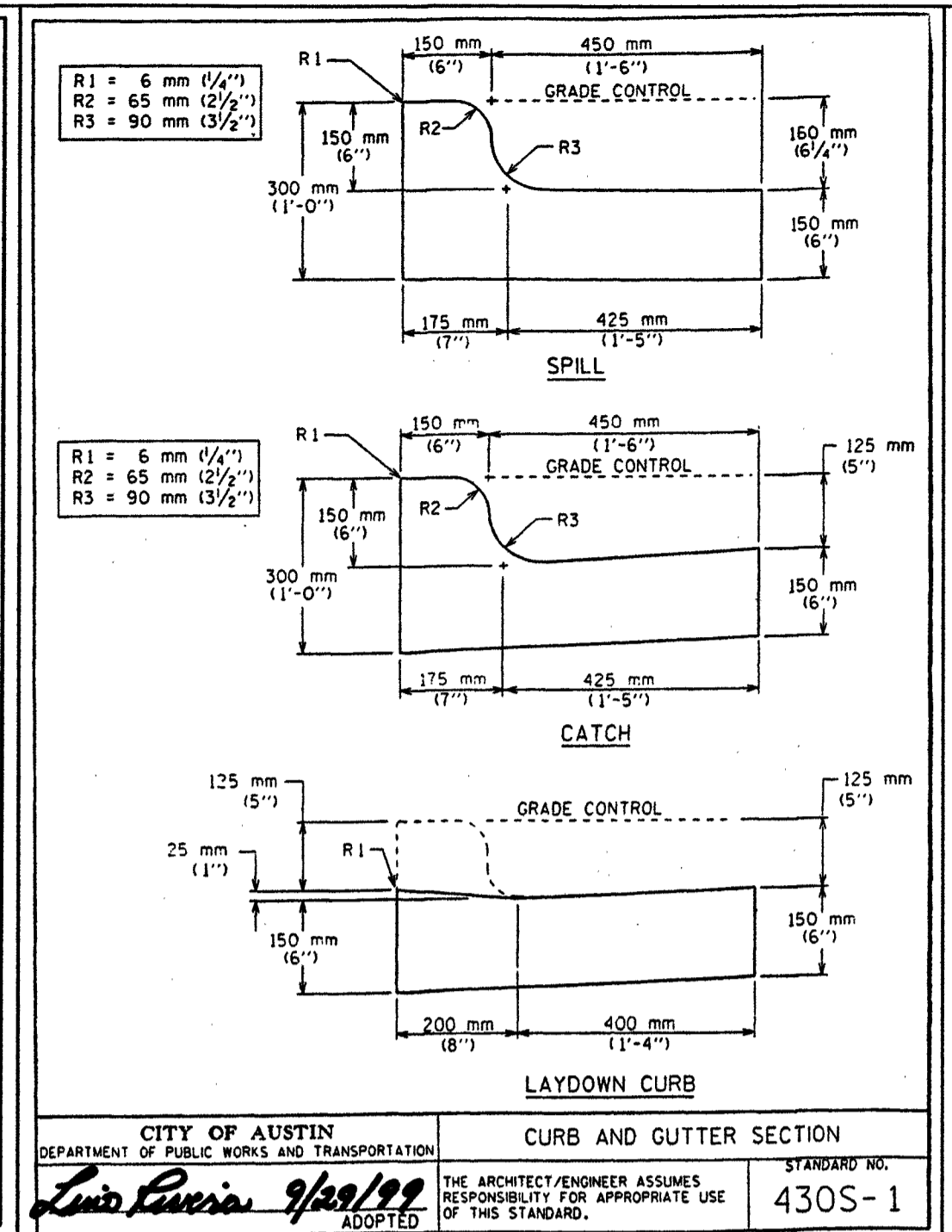
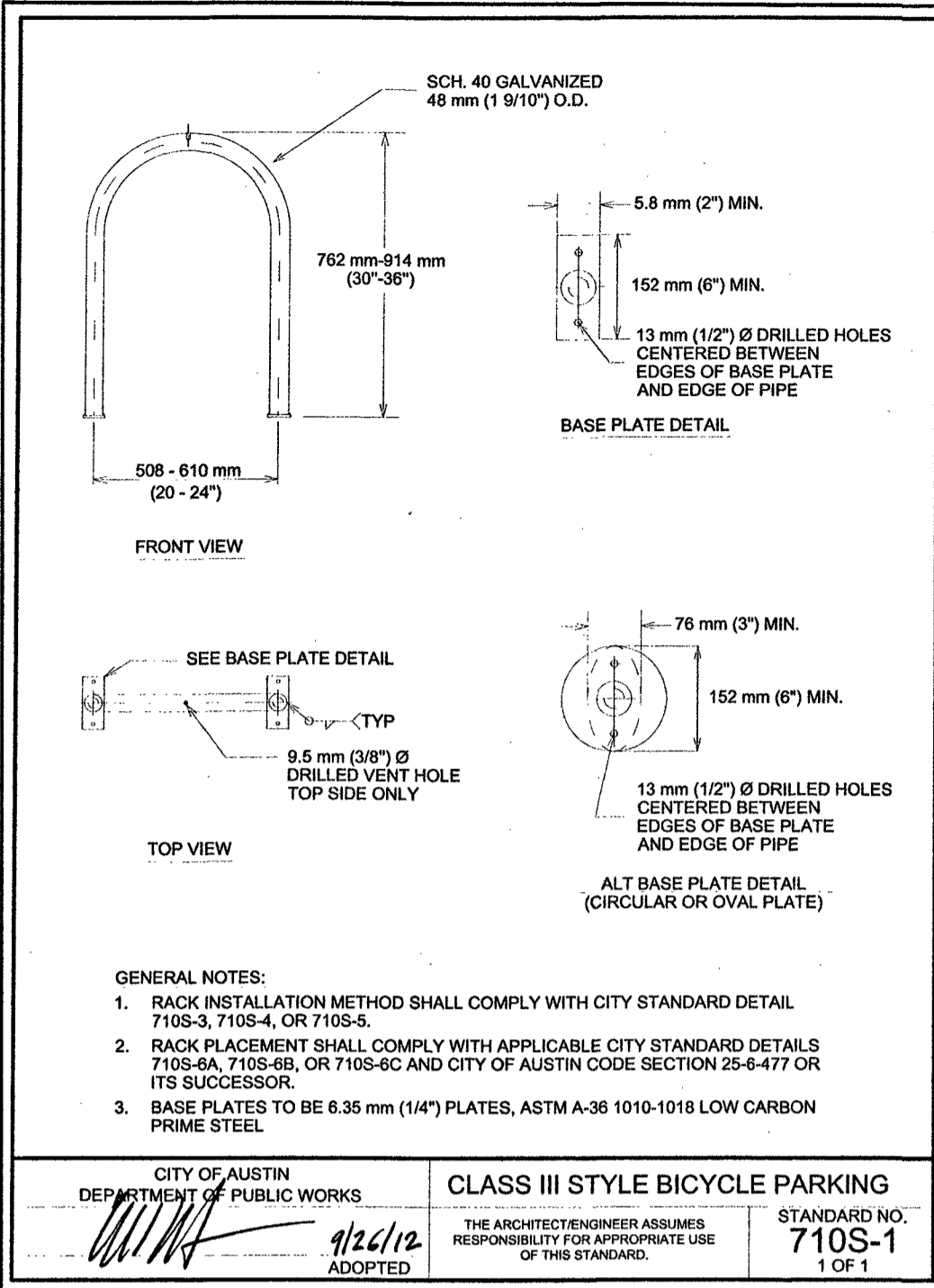
Binkley & Barfield, Inc.
consulting engineers
Texas Registration Number F-257
2401 DOUBLE CREEK DRIVE, SUITE 150, ROUND ROCK, TX 78664

GARY ELI JONES
REGISTERED PROFESSIONAL ENGINEER
79198
Sep 25, 2019

DETAILS SHEET

ACCUSHARP
DEVELOPMENT PLAT
(PROJECT IN CEDAR PARK ETJ)

CASE: DP-18-001	SHEET
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DESIGNED BY: GEJ	OF 25
REVIEWED BY: GEJ	



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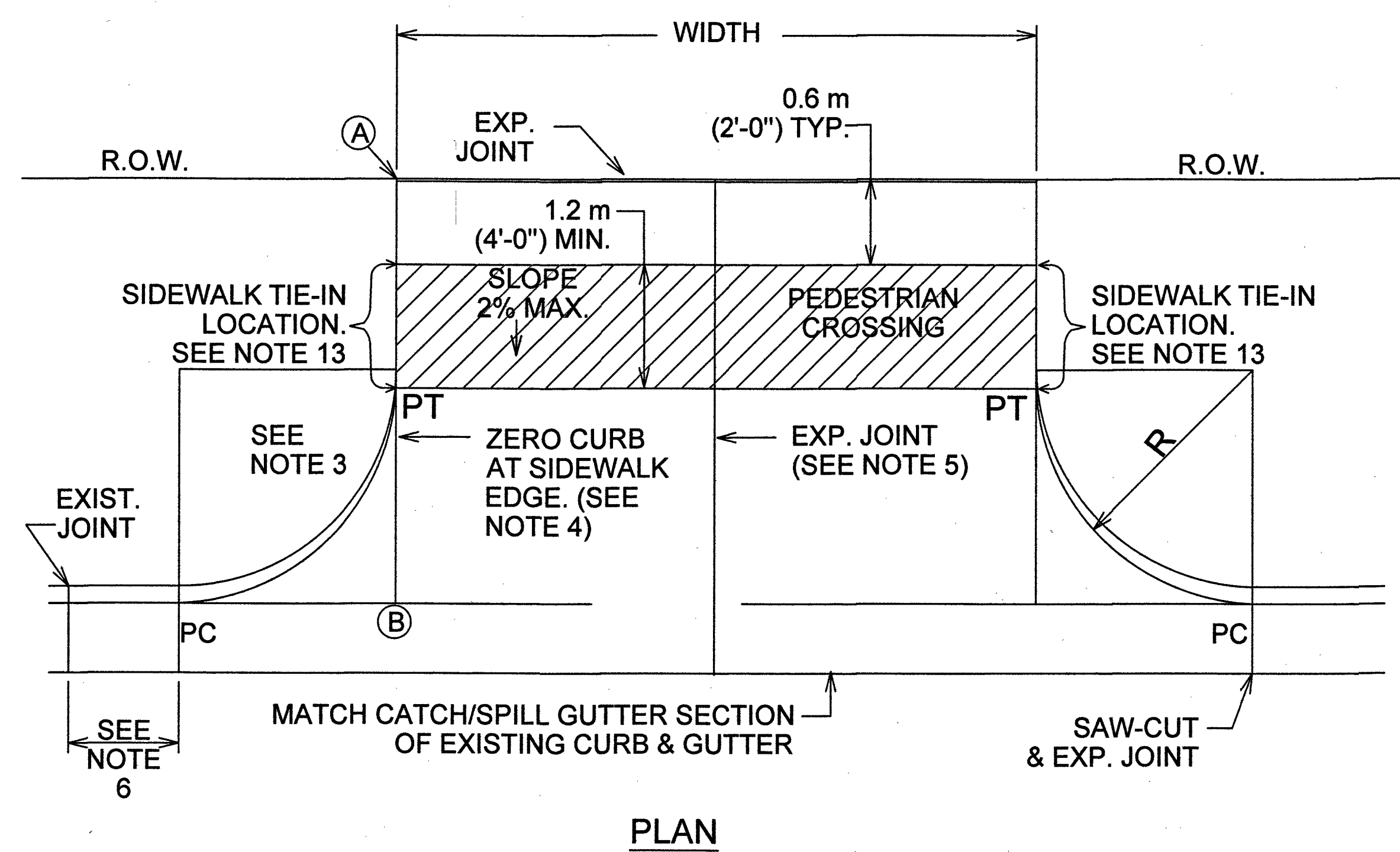
GARY ELI JONES
 79198
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 Sep 25, 2019

APPROVED
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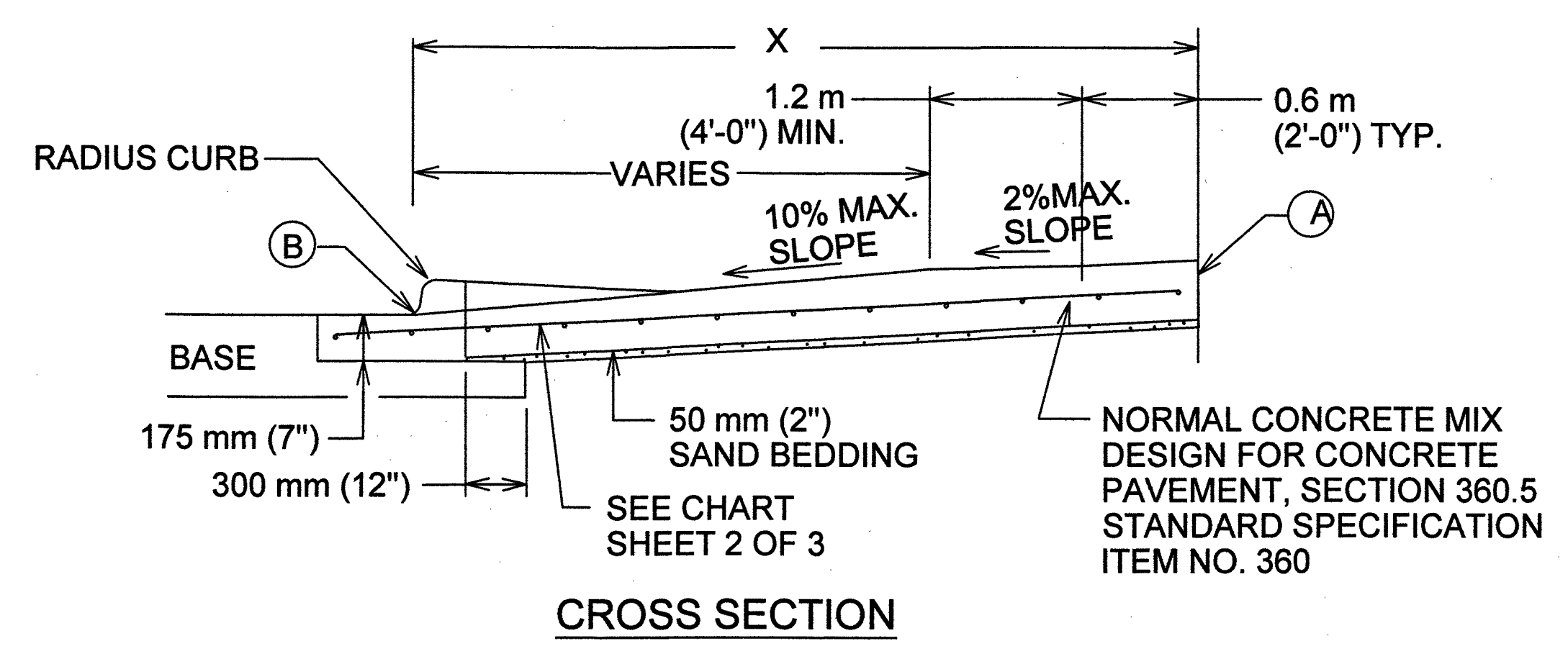
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ACCUSHARP DEVELOPMENT PLAT
 (PROJECT IN CEDAR PARK EJT)

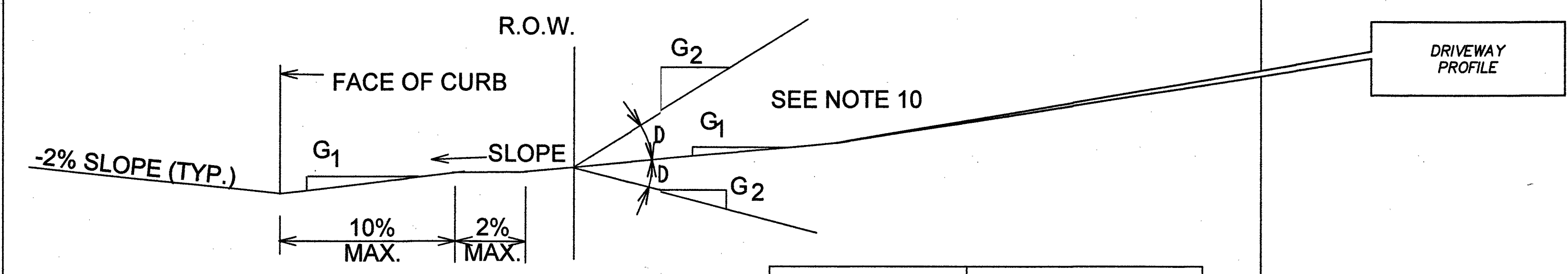
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DATE: Sep 25, 2019	19
DRAWN BY: GEJ	OF 25
DESIGNED BY: GEJ	
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NOTE: ALL DRIVEWAYS SHALL BE SLOPED TOWARDS THE STREET FROM THE R.O.W. LINE. ELEVATION OF POINT (A) ABOVE POINT (B) IS, TYPICALLY A MINIMUM OF 150 mm (6") PLUS 20 mm/m (4" RISE/FOOT) OVER DISTANCE "X" IN METERS (FEET).



USE	THICKNESS	REINFORCEMENT
DRIVEWAYS FOR PASSENGER VEHICLE PARKING LOTS	150 mm (6") MIN.	125 mm (5") MIN. CONCRETE WITH ONE LAYER OF 13M (#4) BARS PLACED ON CHAIRS AT MIDDEPTH OF SLAB AT NO MORE THAN 450 mm (18") O.C. BOTH DIRECTIONS
ALL OTHERS	175 mm (7") MIN.	125 mm (5") MIN. CONCRETE WITH ONE LAYER OF 13M (#4) BARS PLACED ON CHAIRS AT MIDDEPTH OF SLAB AT NO MORE THAN 450 mm (18") O.C. BOTH DIRECTIONS



ALLOWABLE GRADES

DRIVEWAY VOLUME (ADT)	D=GRADE CHANGE	
	STD.	MAX
>1500	0%	3%
500-1500	3%	6%
< 500	6%	15%

NOTES:

- ALL TYPE II DRIVEWAYS SHALL HAVE RADIUS ENDS.
- DRIVEWAY WIDTHS AND RADI DIMENSIONS, ONE/TWO WAY TRAVEL REQUIREMENTS, AND GEOMETRIC LAY-OUT ARE HIGHLY VARIABLE, SUBJECT TO SITE SPECIFIC CONDITIONS AND REQUIREMENTS. SEE TRANSPORTATION CRITERIA MANUAL, SECTION 5 "DRIVEWAYS".
- THE DRIVEWAY EDGE SHALL BE SMOOTHLY TRANSITIONED INTO THE SIDEWALK TIE-IN LOCATION BEGINNING AT THE RADIUS PC LINE.
- "ZERO" CURB AT PT OR SIDEWALK EDGE, WHICHEVER IS ENCOUNTERED FIRST.
- PLACE AN EXPANSION JOINT DOWN THE CENTER OF DRIVEWAY ALL DRIVEWAYS.
- IF DIMENSION IS LESS THAN 1.5 METERS (5 FEET), REMOVE CURB AND GUTTER TO EXISTING JOINT AND POUR MONOLITHICALLY WITH DRIVEWAY.
- IF THE BASE IS OVER-EXCAVATED WHERE THE CURB AND GUTTER WERE REMOVED, BACKFILL WITH CONCRETE MONOLITHICALLY WITH THE DRIVEWAY.
- TYPE II DRIVEWAYS ARE TO BE LOCATED NO CLOSER TO THE CORNER OF INTERSECTING RIGHT OF WAY THAN 60% OF PARCEL FRONTAGE AT 30 METERS (100 FEET); WHICHEVER IS LESS.
- DRIVEWAY SHALL NOT BE CONSTRUCTED WITHIN THE CURB RETURN OF A STREET INTERSECTION.
- WHILE THE PROPERTY OWNER REMAINS RESPONSIBLE FOR GRADE BREAKS WITHIN PRIVATE PROPERTY, THE FIRE DEPARTMENT SHALL BE CONSULTED WHERE THE DRIVEWAY IS ESSENTIAL TO EMERGENCY VEHICLE ACCESS AND "G2 IS GREATER THAN 15%".
- USE 12 MM (1/2") ASPHALT BOARD OR OTHER APPROVED MATERIAL FOR CURB AND GUTTER EXPANSION JOINTS. SIDEWALK, AT THE R.O.W. LINE AND AT MIDWIDTH, SEE NOTE 5.
- SEE TRANSPORTATION CRITERIA MANUAL, SECTION 5 FOR OTHER DRIVEWAY REQUIREMENTS.
- THE SIDEWALK, REGARDLESS OF ITS LOCATION WITH RESPECT TO THE CURB OR PROPERTY LINE, SHALL BE CONNECTED TO THE DRIVEWAY AT THESE LOCATIONS.
- WATER METER BOXES AND WASTEWATER CLEAN OUTS ARE PROHIBITED FROM BEING LOCATED IN DRIVEWAY AREAS.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		TYPE II DRIVEWAY		CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		TYPE II DRIVEWAY	
RECORD COPY SIGNED BY CUONG TRAN	02/24/10	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 433S-2 1 OF 2	RECORD COPY SIGNED BY CUONG TRAN	02/24/10	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 433S-2 2 OF 2
	ADOPTED				ADOPTED		

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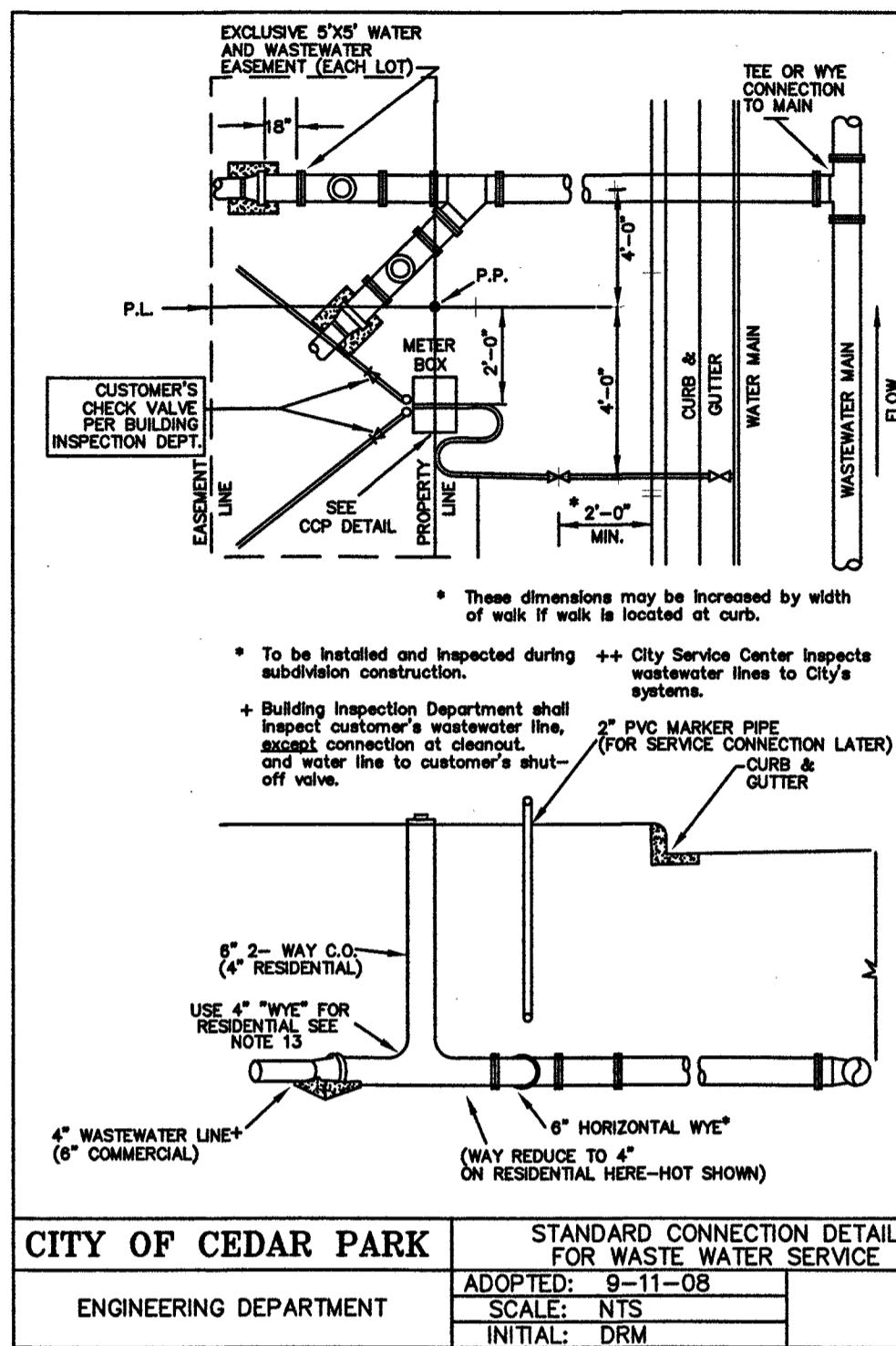
[Signature]
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DETAILS SHEET

**ACCUSHARP
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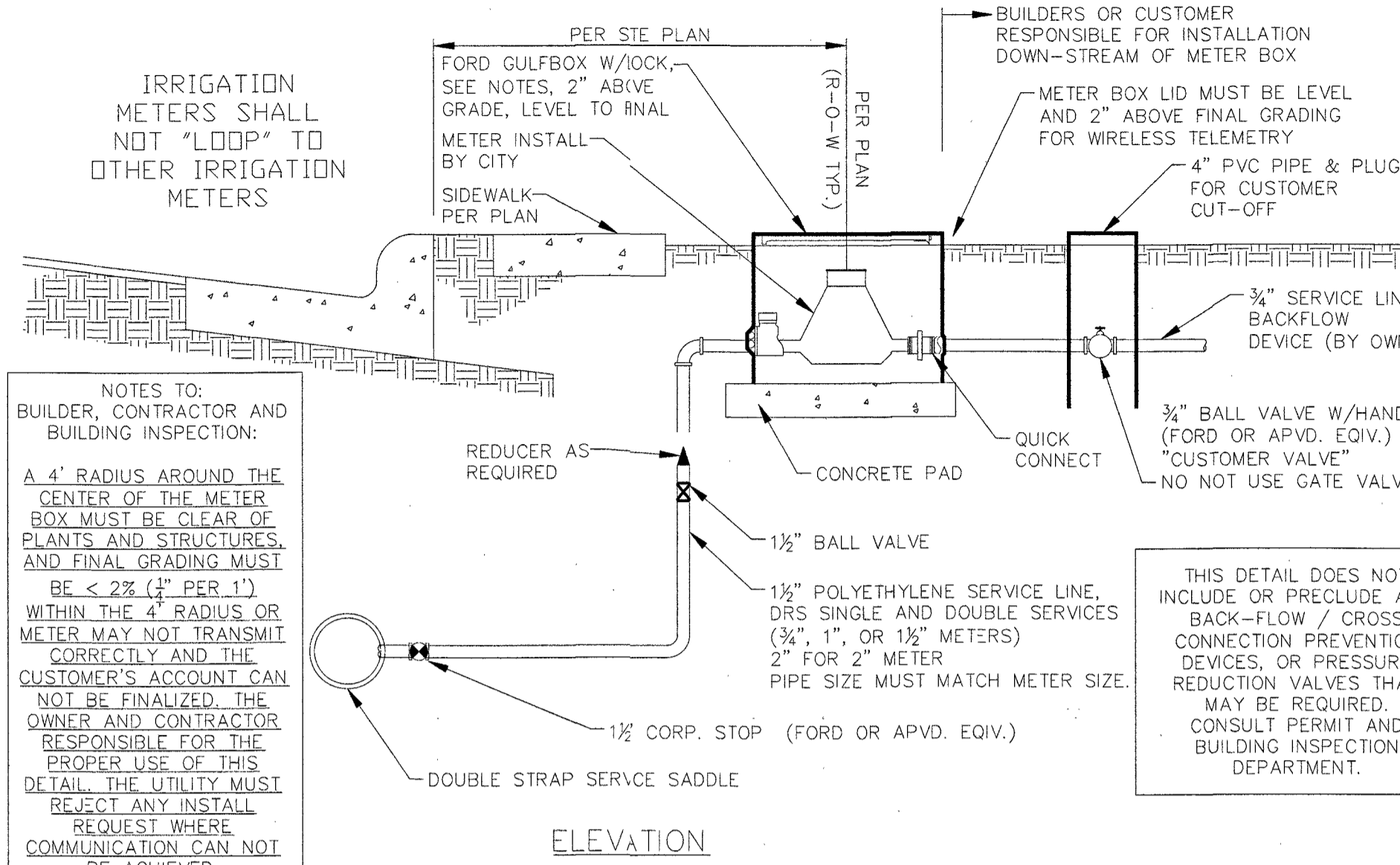
CASE DP-18-001	SHEET
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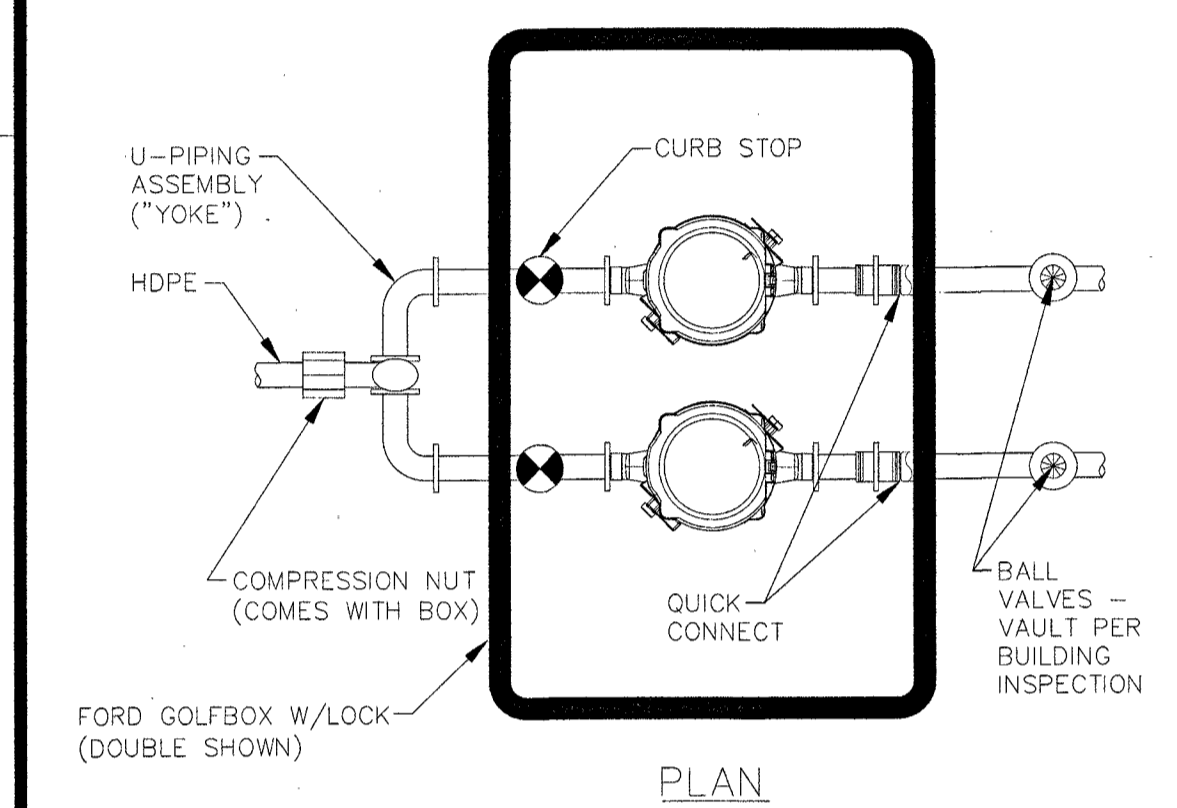
- UTILITY CONTRACTOR LEAVE ONE 6" HORIZONTAL WYE AS SHOWN FOR DOUBLE SERVICE CONNECTION—OPENINGS PLUGGED. FOR DOUBLE SERVICE AND NEW INSTALLS OF METER BOX, WATER PIPE, FITTINGS AND VALVE TO INLET SIDE OF METER(S) IN ACCORDANCE WITH INFORMATION SHOWN ON APPLICABLE STANDARD DETAIL SHEET. INSTALLATION TO BE COMPLETED DURING SUBDIVISION CONSTRUCTION—INSPECTION BY WATER AND WASTEWATER CONSTRUCTION INSPECTION PERSONNEL.
- CUSTOMER IS RESPONSIBLE FOR METER BOX AND PIPING SYSTEMS UNTIL METER IS INSTALLED AND WASTEWATER IS CONNECTED. ANY MISSING OR DAMAGED PARTS SHALL BE REINSTALLED BY CUSTOMER WHO SHALL GUARANTEE, FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE, THAT CONNECTIONS TO CITY SYSTEMS ARE FREE FROM DEFECTS IN WORKMANSHIP OR MATERIALS. CUSTOMER HAS THE RESPONSIBILITY TO ASSURE THAT ALL VALVES AND STOPS, METER BOX AND VERTICAL WYE REMAIN CLEAR OF SIDEWALKS AND OTHER OBSTRUCTIONS
- CITY OF CEDAR PARK ACTIVITY IS LIMITED TO INSTALLATION OF THE WATER METER AND INSPECTION OF CONNECTIONS TO THE CITY'S WATER AND WASTEWATER SYSTEMS FOR MAINTENANCE PURPOSES, THE CITY'S RESPONSIBILITY ENDS AT THE METER BOX AND AT THE WASTEWATER CONNECTION TO THE HORIZONTAL WYE.
- ALL WASTEWATER SERVICE LATERALS SHALL SLOPE 1 PERCENT (1/8 INCH PER FOOT) MINIMUM TO MAIN.
- PIPING IN STREET RIGHT-OF-WAY AND IN EASEMENT AREAS SHALL BE BEDDED WITH MATERIALS REQUIRED BY CITY OF AUSTIN SPECIFICATIONS; AND TO HAVE A MINIMUM COVER BELOW FINAL GRADE OF 42 INCHES. THE ENGINEERING DEPARTMENT MUST SPECIFICALLY APPROVE ANY EXCEPTION.
- CUSTOMER TO PROVIDE CLEANOUT WITHIN 5' P.U.E.
- CONTRACTOR SHALL PROVIDE ALL MATERIALS & LABOR UNLESS DIRECTED OTHERWISE BY THE CITY UTILITY INSPECTOR.
- FOR COMMERCIAL SITES, COORDINATE ALL W/W TAPS WITH UTILITY INSPECTOR. 512-401-5550.
- DO NOT USE DOUBLE WYE OR 4"x6"x4" WYE. SINGLE SERVICES SHALL NOT HAVE ANY WYE INSTALLED.
- ALL W/W FITTINGS UPSTREAM OF THE SERVICE LATERAL FROM THIS POINT TO BE SILENT WELD. DO NOT USE GASKET-TYPE OR PUSH ON FITTINGS FOR SERVICE LATERALS.
- GENERAL CONTRACTOR/HOME OR COMMERCIAL BUILDER/PLUMBER SHALL INSTALL AND MAINTAIN A PLUG ON THE CITY SIDE OF THE SERVICE LATERAL AT ALL TIMES UNTIL FINISHED DEVELOPMENT IS APPROVED AND CONNECTED TO THE WASTEWATER SYSTEM.
- FOR COMMERCIAL PROJECTS, THE 6" 2-WAY CLEAN OUT WILL BE CONSIDERED THE INSPECTION PORTAL AND CONTROL POINT FOR THE PROPERTY. HOWEVER, THE INDUSTRIAL PRE-TREATMENT PROGRAM HAS THE AUTHORITY TO REQUIRE ADDITIONAL CONTROL POINTS AND ADDITIONAL LOCATIONS AS REQUIRED BY ARTICLE 18.06.
- RESIDENTIAL TO USE 4"(MIN) VERTICAL WYE FITTING FACING THE MAIN IN PLACE OF THE 16" 2-WAY CO REQUIRED BY THE IPT PROGRAM AND COMMERCIAL CODE.

CITY OF CEDAR PARK
DEPARTMENT OF PUBLIC WORKS
VER: 170724

STANDARD DETAIL FOR 3/4" OR 1" WATER METER SERVICE



- PARTS LIST:**
- FOR 3/4", 1", OR 1 1/2" FORD CORPORATION STOP FB1000-6-G-NL, 1 1/2" POLY-HDPE DR9, 1 1/2" BALL VALVE WITH A C84-66-G COUPLING ON INLET SIDE. PROVIDE FORD FITTINGS AS NECESSARY.
 - FOR 3/4" SERVICES, ON TOP OF THE BALL VALVE USE A 1 1/2" x 3/4" REDUCING BUSHING & COUPLING: 3/4" MIP x 3/4" GRIP JOINT: C84-33-G
 - FOR 1" SERVICES, ON TOP OF THE BALL VALVE USE A 1 1/2" x 1" REDUCING BUSHING & COUPLING: 1" MIP x 1" GRIP JOINT: C84-44-G
 - ALL METER PARTS BY FORD METER BOX COMPANY OR PRE-APPROVED EQUIVALENT.
 - ALL BRASS VALVES & FITTINGS
 - USE STAINLESS INSERT STIFFENERS IN POLY TUBING.
 - "G" FOLLOWING THE PART NUMBER DENOTES GRIP JOINT.
 - FOR NEW WATER MAINS, CONTRACTOR RESPONSIBLE FOR PARTS & INSTALLATION TESTING.
 - CITY WILL DRILL HOLE IN LID FOR METER ANTENNA.
- NOTE: NO METERS WILL BE SET IN BOXES PLACED IN SIDEWALKS OR PAVED AREAS

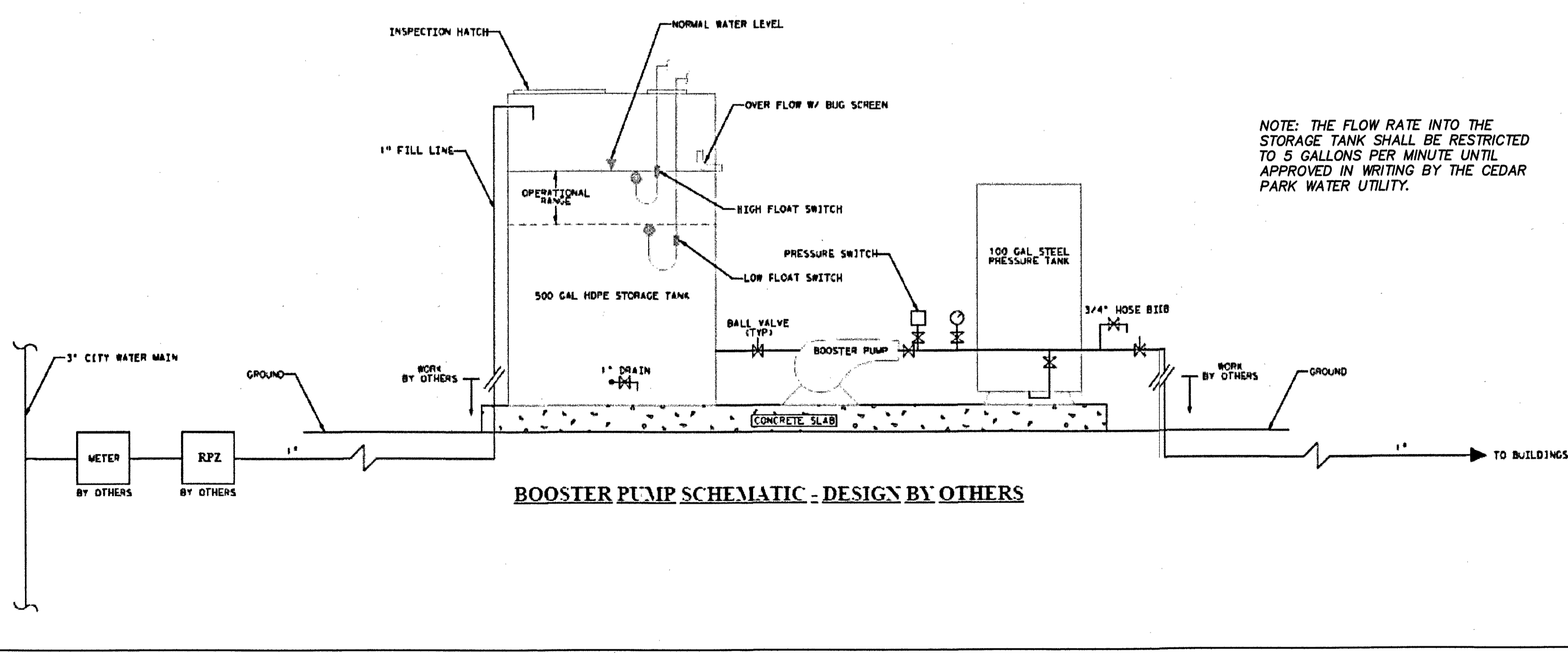


DOMESTIC WATER SUPPLY - SCOPE OF WORK

OVERVIEW: DOMESTIC WATER SERVICE WILL BE PROVIDED AND ENHANCED BY A STORAGE TANK AND BOOSTER PUMP SYSTEM TO SUPPLY POTABLE WATER AT THE REQUIRED PRESSURE, ABOVE AVAILABLE SYSTEM PRESSURE. THE BUSINESS TYPICALLY OPERATES 8 HOURS PER DAY, 5 DAYS A WEEK. THE FOLLOWING SPECIFICATIONS ARE PROVIDED AS GUIDELINES FOR DESIGN REQUIREMENTS PROVIDED BY OTHERS FOR THE BOOSTER PUMP. ALL COMPONENTS MUST BE NSF CERTIFIED FOR POTABLE WATER USAGE.

- BOOSTER SYSTEM:**
- MINIMUM 500 GALLON DARK BLUE SUNSHIELD XLPE WATER STORAGE TANK BY POLY-MART OR EQUAL.
 - TANK SHALL BE SECURELY ANCHORED TO GROUND TO PREVENT OVERTURNING DUE TO WIND.
 - ALL VALVES SHALL BE STAINLESS STEEL LOCKABLE BALL VALVES OF THE SIZE REQUIRED.
 - ALL TANK PENETRATIONS SHALL BE STAINLESS STEEL BULKHEAD FITTINGS.
 - ALL HARDWARE SHALL BE STAINLESS STEEL INCLUDING ANCHOR BOLTS, STRAPS, NUTS AND BOLTS, ETC.
 - 1 INCH TANK DRAIN MOUNTED AS LOW AS POSSIBLE ON STORAGE TANK.
 - MINIMUM 1 1/2 INCH FEED LINE TO PUMPS OR MATCHING PUMP INLET/OUTLETS. ALL PIPES SHALL BE FULLY SUPPORTED WITH CONCRETE BLOCK OR BRICKS TO PREVENT SAGGING OF LINES.
 - ALL CONNECTING PIPE SHALL BE NSF APPROVED SCHEDULE 80 PVC SOLVENT JOINED.
 - PRESSURE SWITCH FACTORY SET AT 40/60 PSI RANGE SHALL CONTROL BOOSTER PUMPS. SWITCH TO BE ADJUSTABLE IN THE FIELD.
 - 2 1/2 INCH STAINLESS STEEL LIQUID FILLED PRESSURE GAUGE WITH RANGE 0 - 100 PSI.
 - 3 INCH PVC POLY-MART TANK OVERFLOW WITH REMOVEABLE BUG SCREEN OR EQUAL SET 6 INCHES ABOVE NORMAL HIGH WATER LEVEL IN TANK.
 - 1 INCH SCH 80 PVC FILL LINE MAY NEED EITHER 1" x 3/4" OR 1" x 1/2" BUSHING AT END AS FLOW RESTRICTION, TBD. INLET TO BE SET 1 FOOT ABOVE NORMAL HIGH WATER LEVEL IN TANK.
 - STORAGE TANK WATER LEVEL CONTROL SYSTEM
 - FLOAT SWITCHES WITH SOLENOID (ELECTRIC)
 - FLOATING BALL VALVE (MECHANICAL)
 - DUPLEX (2) BOOSTER PUMPS WITH CONTROL PANEL AND ALTERNATOR. PROVIDE TWO (2) PUMPS EACH WITH A CAPACITY OF 30 GPM AT 60 PSI, 220 VOLTS. PANEL TO BE NEMA 3R STAINLESS STEEL OR ALUMINUM. INCLUDE SURGE/LIGHTNING ARRESTER WITH PANEL. PANEL TO BE MOUNTED ON STAINLESS STEEL UNISTRUT WITH ALL STAINLESS STEEL MOUNTING HARDWARE.
 - ALL WIRING INSTALLED IN NON-METALLIC FLEXIBLE CONDUIT THAT IS SUNLIGHT RESISTANT AND FLAME RETARDANT THERMOPLASTIC PVC THAT RESISTS HEAT, OIL AND CHEMICAL BREAKDOWN OR PER CITY CODE.
 - INSTALL TANK FLOATING LEVEL GAUGE BY POLY-MART OR EQUAL.
 - MINIMUM 100 GALLON STEEL VERTICAL PRESSURE TANK RATED FOR 100 PSI. SET AT 60 PSI OPERATING PRESSURE.
 - ALL ELECTRICAL AND PLUMBING CONNECTIONS TO BE PER CITY OF CEDAR PARK BUILDING CODES.
 - CITY OF CEDAR PARK TO APPROVE GENERAL BOOSTER PUMP SYSTEM AS PART OF SITE DEVELOPMENT REVIEW. OTHER SPECIFIC PERMITS AS REQUIRED ARE THE RESPONSIBILITY OF THE CONTRACTOR AT NO ADDITIONAL CHARGE TO OWNER.
 - BOOSTER SYSTEM TO MEET ALL STATE AND LOCAL PUBLIC WATER SUPPLY REGULATIONS.
 - CONTRACTOR FURNISH ALL SPECIFIED ITEMS AND OTHER APPURTENANCES AS REQUIRED FOR COMPLETE INSTALLATION AND START UP.
 - THE ENTIRE SYSTEM WILL BE CLEANED OF ALL DIRT AND DEBRIS. TANKS AND LINES WILL BE FILLED WITH CHLORINE BLEACH AT A CONCENTRATION OF AT LEAST 90 PPM TOTAL CHLORINE FOR AT LEAST 24 HOURS AND THEN DRAINED AND FLUSHED UNTIL AT NORMAL CHLORINE LEVELS. THE USE OF DE-CHLORINATION TABLETS SHALL BE REQUIRED TO REDUCE RESIDUAL CHLORINE LEVELS IN RUNOFF TO BELOW 1/4 PPM TOTAL CHLORINE.
 - PROVIDE 2 YEAR PARTS AND LABOR WARRANTY ON ALL COMPONENTS OF BOOSTER PUMP SYSTEM SUPPLIED AND INSTALLED BY THE CONTRACTOR.
 - PROVIDE 3 YEAR MANUFACTURER'S WARRANTY ON BOOSTER PUMPS.

NOTE: THE FLOW RATE INTO THE STORAGE TANK SHALL BE RESTRICTED TO 5 GALLONS PER MINUTE UNTIL APPROVED IN WRITING BY THE CEDAR PARK WATER UTILITY.



APPROVED
MAR 04 2020
PLANNING DEPT.
CITY OF CEDAR PARK

REV. NO.	BY	DATE	REVISION DESCRIPTION

Binkley & Barfield, Inc.
consulting engineers
Texas Registration Number F-257
2401 DOUBLE CREEK DRIVE, SUITE 150, ROUND ROCK, TX 78684

Gary Eli Jones
GARY ELI JONES
79198
REGISTERED PROFESSIONAL ENGINEER
Sep 25, 2019

DETAILS SHEET

ACCUSHARP DEVELOPMENT PLAT
(PROJECT IN CEDAR PARK ETJ)

CASE: DP-18-001

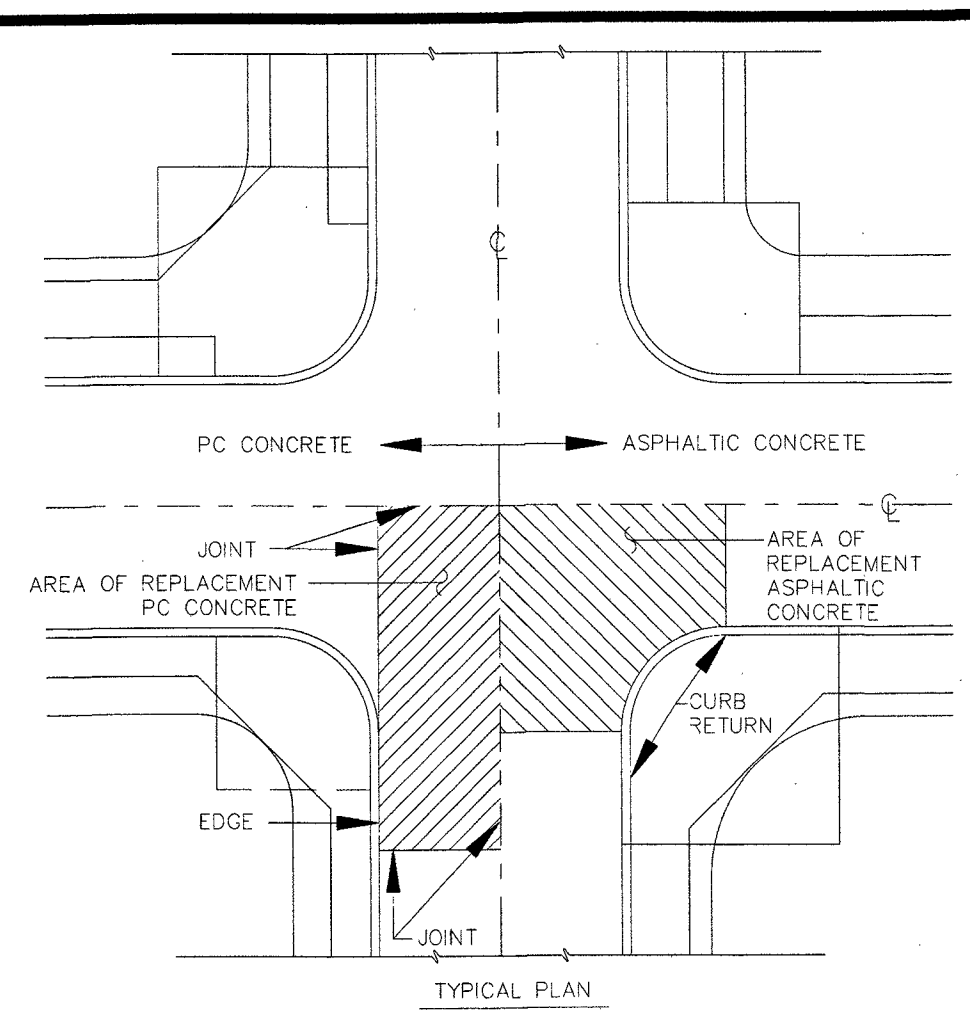
DATE: Sep 25, 2019

DRAWN BY: GEJ

DESIGNED BY: GEJ

REVIEWED BY: GEJ

SHEET 21 OF 25



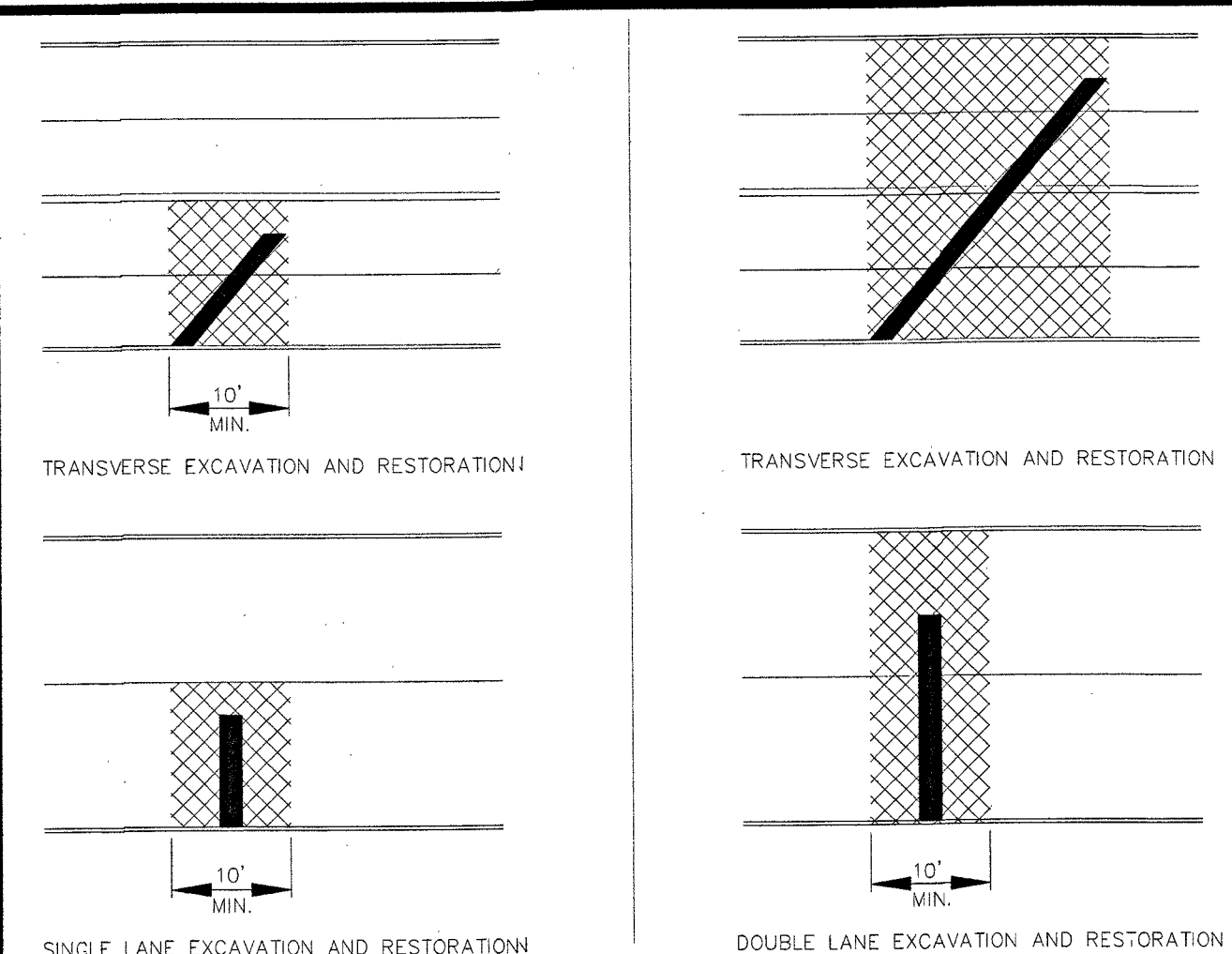
TRENCH REPAIRS WITHIN PORTLAND CEMENT CONCRETE PAVEMENTS NOTES:

- IF ANY PART OF THE TRENCH REPAIR FALLS WITHIN AN INTERSECTION, THEN THE ENTIRE CONCRETE SLAB FROM JOINT TO JOINT AND JOINT TO EDGE SHALL BE REPLACED, UNLESS OTHERWISE DIRECTED IN WRITING BY THE DIRECTOR.

TRENCH REPAIRS WITHIN ASPHALTIC CONCRETE PAVEMENTS NOTES:

- IF ANY PART OF THE TRENCH REPAIR FALLS WITHIN AN INTERSECTION, DEFINED FROM CURB RETURN TO CURB RETURN, THE ENTIRE QUADRANT OF THE EXISTING SURFACE SHALL BE REPLACED, UNLESS OTHERWISE DIRECTED IN WRITING BY THE ENGINEER OR DESIGNATED REPRESENTATIVE.
- A QUADRANT IS DEFINED AS THE CROSS-HATCHED AREA IN THE ABOVE DETAIL.

1 TYPICAL RESTORATION FOR EXCAVATION IN INTERSECTIONS
SCALE: NOT TO SCALE

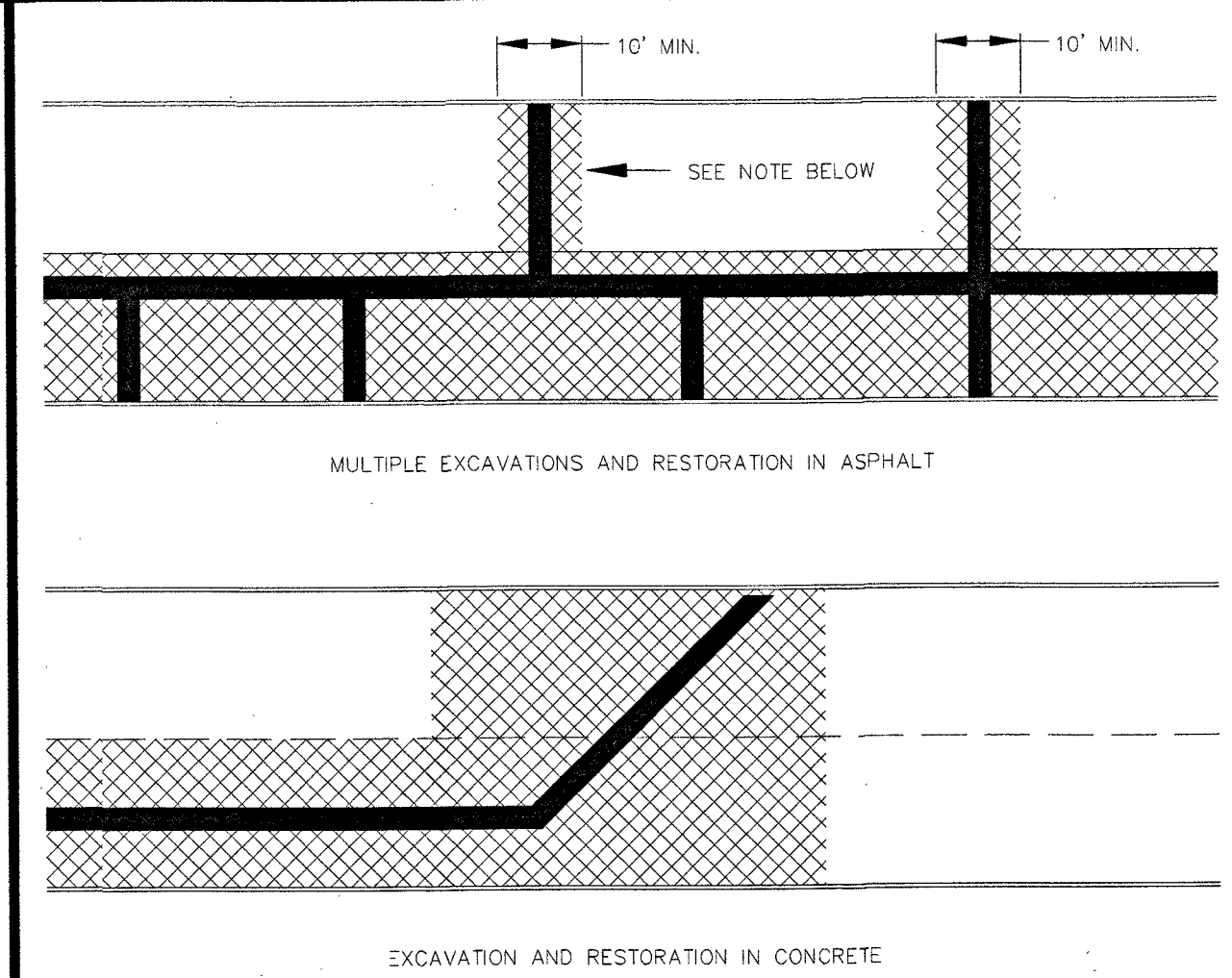


NOTES:

- PROJECTS THAT DO NOT HAVE AN ACCEPTABLE STREET REPAIR APPROVED BY PUBLIC WORKS, WILL NOT RECEIVE A WATER METER UNTIL CORRECTED. CONTACT CONSTRUCTION INSPECTOR / ENGINEERING CONTACT FOR DETAILS.
- IN ASPHALT, RESTORATION MUST BE A MINIMUM OF 10' CURB LENGTH BY THE WIDTH OF EACH LANE EXCAVATED.

— AREA OF EXCAVATION
XXXXX LIMITS OF RESTORATION

2 TYPICAL RESTORATION FOR EXCAVATION IN STREETS
SCALE: NOT TO SCALE



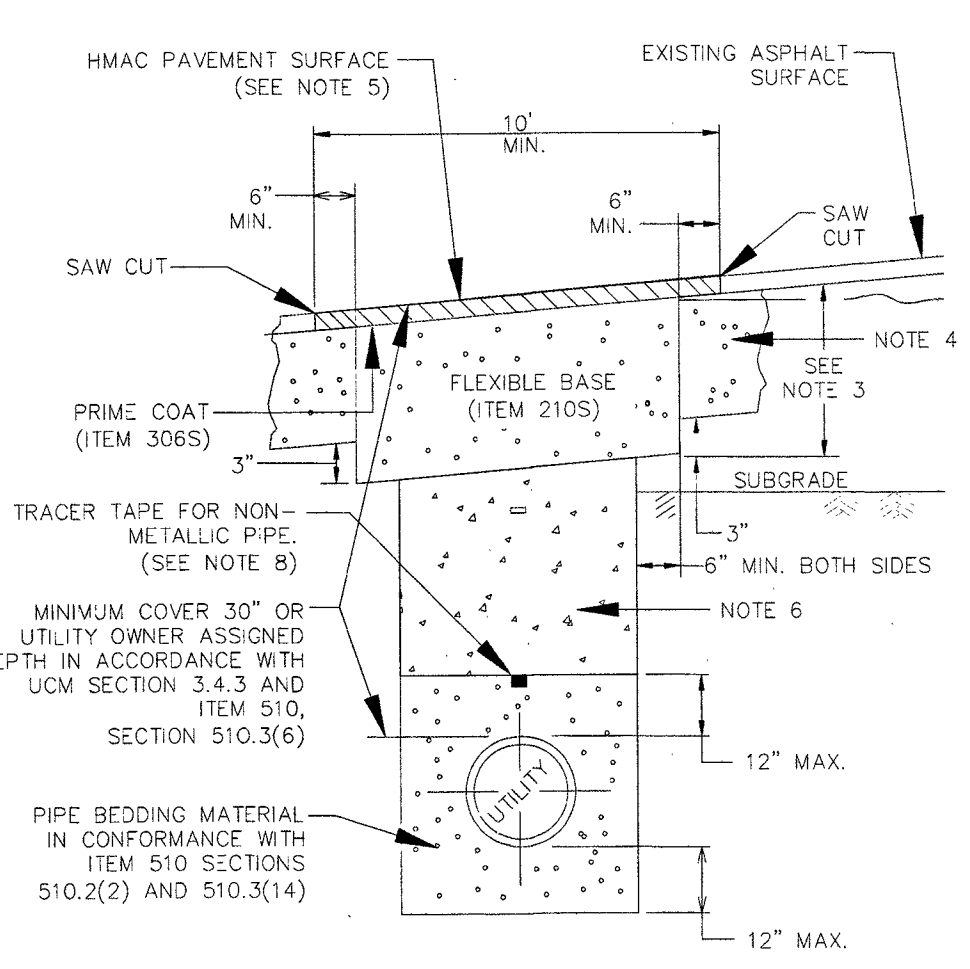
NOTES:

- ACTUAL RESTORATION LIMITS ARE DETERMINED BY JOINT LOCATIONS. IN ASPHALT, RESTORATION MUST BE A MINIMUM OF 10' CURB LENGTH BY THE WIDTH OF EACH LANE EXCAVATED.
- IN ASPHALT, RESTORATION MUST BE A MINIMUM OF 10' CURB LENGTH BY THE WIDTH OF EACH LANE EXCAVATED.

— AREA OF EXCAVATION
XXXXX LIMITS OF RESTORATION

3 TYPICAL RESTORATION FOR EXCAVATION IN STREETS
SCALE: NOT TO SCALE

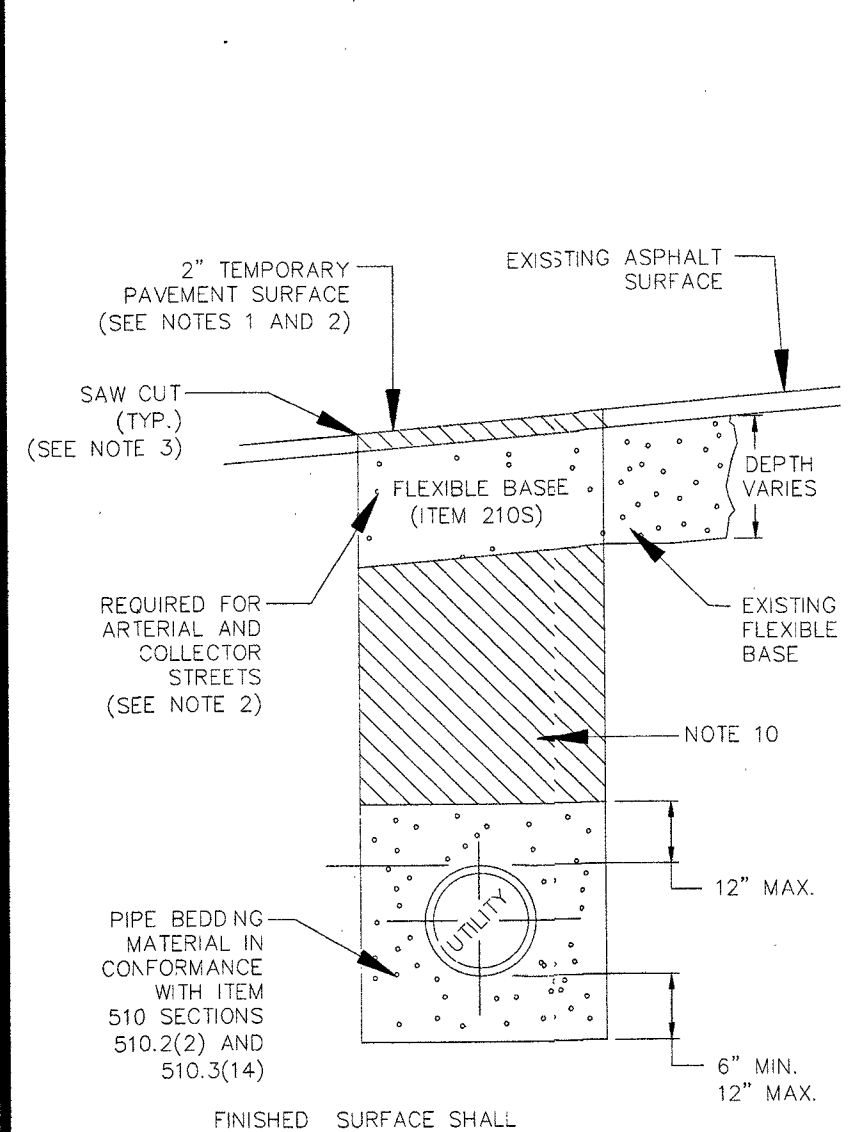
FOR PARKING LOTS AND PRIVATE PROPERTY ONLY



NOTES:

- THE EXISTING PAVING SURFACE SHALL BE SAW CUT IN A STRAIGHT LINE, A MINIMUM OF 12" WIDER THAN UNDISTURBED SIDES OF THE TRENCH AND SYMMETRICAL ABOUT THE CENTER LINE OF THE EXCAVATION.
- IF EXCAVATION AREA IS OPEN FOR TEMPORARY PUBLIC USE, THE SURFACE SHALL BE MAINTAINED LEVEL WITH ADJACENT RIDING SURFACE WITH COLD MIX AC OR TEMPORARY HMAC. TEMPORARY MIX SHALL BE PLACED OVER FLEXIBLE BASE.
- ROAD BASE SHALL BE REPLACED IN KIND WITH BASE THICKNESS EQUAL TO EXISTING BASE THICKNESS PLUS 3", BUT IN NO CASE LESS THAN 12".
- DAMAGED PAVEMENT OUTSIDE THE TRENCH CUT SHALL BE REMOVED AND REPLACED WITH A BASE THICKNESS OF 10" OR A THICKNESS MATCHING EXISTING, WHICHEVER IS GREATER.
- REPLACEMENT AC SURFACE LAYER SHALL MATCH EXISTING BUT NOT LESS THAN 2"
- CLASS "J" PC CONCRETE (ITEM 403S) OR CONTROLLED LOW STRENGTH MATERIAL (CLSM) PC CONCRETE GREATER THAN A 2 SACK MIX WILL NOT BE ALLOWED.
- TACK COAT ALL EXPOSED EDGES AND SURFACES (SPEC ITEM 307S). CRACK SEAL SAW-CUT LINES
- AS PER CITY OF AUSTIN STANDARD SPECIFICATION 510, SECTION 510.2(8)(K)5, FOR ALL NON-METALLIC PIPE, DIRECTLY ABOVE THE CENTERLINE OF THE PIPE AND A MINIMUM OF 12" BELOW THE SUBGRADE, OR A MINIMUM OF 18" BELOW FINISHED GRADE ON AREAS OUTSIDE THE LIMITS OF PAVEMENT, SHALL BE PLACED INDUCTIVE TRACER TAPE IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. THE TAPE SHALL BE ENCASED IN A PROTECTIVE, INERT, PLASTIC JACKET AND COLOR CODED IN ACCORDANCE WITH APWA UNIFORM COLOR CODE.

4 TRENCH REPAIR IN ASPHALTIC SURFACE OVER FLEXIBLE BASE (UCM SECTION 5.8.0)
SCALE: NOT TO SCALE



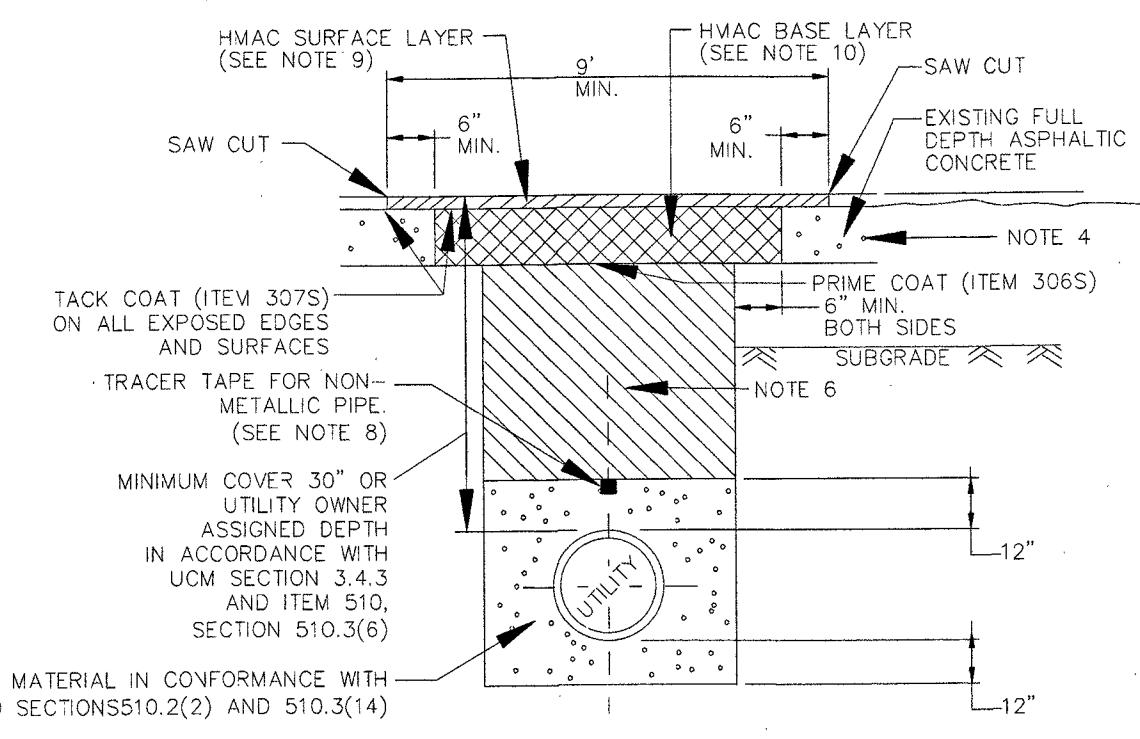
NOTES:

- TEMPORARY PAVEMENT REPAIRS SHALL BE ALLOWED NO LONGER THAN 90 DAYS AFTER PASSING THE WATER PRESSURE AND/OR WASTEWATER MANHOLE TESTS. IF TEMPORARY PAVEMENT REPAIRS ARE TO REMAIN IN PLACE FOR A PERIOD EXCEEDING 90 DAYS, ON ANY SINGLE TRENCH LINE OR INDIVIDUAL STREET, SUCH TEMPORARY PAVEMENT SHALL BE HMAC, PLACED AND COMPACTED SUFFICIENTLY TO WITHSTAND THE ANTICIPATED TRAFFIC LOADS OVER THE DURATION OF THE TEMPORARY REPAIR.
- IF EXCAVATION AREA IS OPEN FOR TEMPORARY PUBLIC USE, THE SURFACE SHALL BE MAINTAINED LEVEL WITH ADJACENT RIDING SURFACE USING COLD MIX AC IN ACCORDANCE WITH TxDOT "DMS-9203, RAPID CURING ASPHALT CONCRETE PATCHING MATERIAL" OR TEMPORARY HMAC PER COA ITEM "340S HOT MIX ASPHALTIC CONCRETE PAVEMENT". A MINIMUM OF TWO INCHES (2") OF TEMPORARY COLD MIX OR HMAC SHALL BE PLACED OVER COMPACTED BACKFILL. FLEXIBLE BASE SHALL ALSO BE REQUIRED, FOR ALL COLLECTOR OR ARTERIAL STREETS.
- THE EXISTING CONCRETE OR ASPHALT PAVING SURFACE SHALL BE SAW CUT. SAW CUTS SHALL BE IN A STRAIGHT LINE, ALONG THE SIDES OF THE TRENCH (OR MANHOLE EXCAVATION) AND SYMMETRICAL ABOUT THE CENTER LINE OF THE EXCAVATION. ANY DAMAGED EDGES SHALL BE RE-SAW CUT IF REQUIRED BY THE OWNER.
- HMAC OR COLD MIX SHALL BE FREE OF CONTAMINATION, AS DETERMINED BY A VISUAL INSPECTION BY THE OWNER'S REPRESENTATIVE, REFERENCE ITEM 340S SECTION 340S.10 A.
- TEMPORARY PAVING MATERIAL MUST BE COMPACTED WITH A SMOOTH DRUM VIBRATORY ROLLER.
- THE FINISHED SURFACE SHALL BE MAINTAINED DUST FREE AND PROVIDE A SMOOTH AND SAFE RIDING SURFACE FOR ALL VEHICLES ALONG THE ROUTE, INCLUDING, BUT NOT LIMITED TO SMALL CARS, MOTORCYCLES, MOPEDS AND BICYCLES. THE TEMPORARY SURFACE SHALL BE MAINTAINED BY THE CONTRACTOR THE ENTIRE TIME THE TEMPORARY SURFACE IS IN PLACE. DAILY MAINTENANCE SHALL BE PERFORMED BASED ON FIELD CONDITIONS AND AT THE DIRECTION OF THE OWNER'S REPRESENTATIVE, UNTIL THE FINAL PAVEMENT SURFACE IS PLACED.
- THE TEMPORARY PAVEMENT SURFACE SHALL HAVE A MAXIMUM ALLOWABLE DEVIATION OF 1/4" ABOVE OR BELOW THE EXISTING PAVEMENT SURFACE DIRECTLY ADJACENT TO THE PATCH.
- ANY PORTIONS OF THE TEMPORARY PAVEMENT SURFACE THAT HAVE SETTLED, BECOME DAMAGED, OR DETERIORATED MUST BE REPAIRED BY REMOVING THE EXISTING TEMPORARY SURFACE MATERIAL TO A MINIMUM DEPTH OF 2" BELOW THE SURFACE ELEVATION PRIOR TO REPLACING AND RECOMPACTING NEW COLD MIX/HOT MIX IN THE EXCAVATION AREA.
- IF IT IS DETERMINED DURING CORRECTIVE ACTION THAT SOFT, SATURATED AND/OR UNSTABLE SUBSURFACE SOILS ARE CONTRIBUTING TO THE FAILURE OF THE TEMPORARY PAVEMENT SECTION, THE UNSUITABLE MATERIALS MUST BE REMOVED AND REPLACED WITH BACKFILL SOILS FREE OF ORGANICS, STONES OR ROCKS OVER 8 INCHES, AND HAVING A PLASTICITY INDEX OF 20 OR LESS, AND SHALL HAVE A MC WITHIN 2% OF OPTIMUM, PRIOR TO REPLACING THE TEMPORARY PAVEMENT SURFACE.
- CLASS "J" PC CONCRETE (ITEM 403S) OR CONTROLLED LOW STRENGTH MATERIAL (CLSM) PC CONCRETE GREATER THAN A 2 SACK MIX WILL NOT BE ALLOWED.
- ALL EXISTING ROADWAY STRIPING AND PAVEMENT MARKINGS REMOVED OR DAMAGED BY THE CONTRACTOR'S WORK SHALL BE RESTORED PRIOR TO OPENING THE STREET TO TRAFFIC.
- TEMPORARY TRENCH REPAIR OPEN TO THE PUBLIC IS LIMITED TO 14 DAYS.

FINISHED SURFACE SHALL PROVIDE A SMOOTH AND SAFE RIDING SURFACE (SEE NOTE 6)

5 TEMPORARY TRENCH REPAIR IN ASPHALTIC SURFACE ITEM 510 SECTION 510.3 (25)(h)
SCALE: NOT TO SCALE

FOR PUBLIC ROADS



NOTES:

- THE EXISTING PAVING SURFACE SHALL BE SAW CUT IN A STRAIGHT LINE, A MINIMUM OF 12" WIDER THAN UNDISTURBED SIDES OF THE TRENCH AND SYMMETRICAL ABOUT THE CENTER LINE OF THE EXCAVATION.
- IF EXCAVATION AREA IS OPEN FOR TEMPORARY PUBLIC USE, THE SURFACE SHALL BE MAINTAINED LEVEL WITH ADJACENT RIDING SURFACE WITH COLD MIX AC OR TEMPORARY HMAC. TEMPORARY MIX SHALL BE PLACED OVER FLEXIBLE BASE.
- ROAD BASE SHALL BE REPLACED IN KIND WITH BASE THICKNESS EQUAL TO EXISTING BASE THICKNESS PLUS 3", BUT IN NO CASE LESS THAN 12".
- DAMAGED PAVEMENT OUTSIDE THE TRENCH CUT SHALL BE REMOVED AND REPLACED WITH A BASE THICKNESS OF 10" OR A THICKNESS MATCHING EXISTING, WHICHEVER IS GREATER.
- REPLACEMENT AC SURFACE LAYER SHALL MATCH EXISTING BUT NOT LESS THAN 2"
- CLASS "J" PC CONCRETE (ITEM 403S) OR CONTROLLED LOW STRENGTH MATERIAL (CLSM) PC CONCRETE GREATER THAN A 2 SACK MIX WILL NOT BE ALLOWED.
- TACK COAT ALL EXPOSED EDGES AND SURFACES (SPEC ITEM 307S).
- AS PER CITY OF AUSTIN STANDARD SPECIFICATION 510, SECTION 510.2(8)(K)5, FOR ALL NON-METALLIC PIPE, DIRECTLY ABOVE THE CENTERLINE OF THE PIPE AND A MINIMUM OF 12" BELOW THE SUBGRADE, OR A MINIMUM OF 18" BELOW FINISHED GRADE ON AREAS OUTSIDE THE LIMITS OF PAVEMENT, SHALL BE PLACED INDUCTIVE TRACER TAPE IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. THE TAPE SHALL BE ENCASED IN A PROTECTIVE, INERT, PLASTIC JACKET AND COLOR CODED IN ACCORDANCE WITH APWA UNIFORM COLOR CODE.
- REPLACEMENT AC SURFACE LAYER SHALL BE OF THE TYPE AND THICKNESS BASED ON FUNCTIONAL CLASSIFICATION.
 - MIN. 2" HMAC TYPE "D" FOR TRENCH REPAIR IN LOCAL/RESIDENTIAL STREETS.
 - MIN. 3" HMAC TYPE "C" FOR TRENCH REPAIR IN COLLECTOR/ARTERIAL STREETS.
- SEE ITEM 340S, SECTION 340S.4.
- THE COMBINED THICKNESS OF THE REPLACEMENT AC SURFACE AND BASE LAYERS SHALL MATCH THE THICKNESS OF EXISTING FULL DEPTH AC LAYER. HOWEVER, THE REPLACEMENT AC BASE LAYER SHALL BE A MINIMUM THICKNESS OF 6" OF TYPE A OR B HMA. A BASE LAYER TYPE THAT MATCHES THE NEW HMA SURFACE LAYER (SEE NOTE 1) MAY BE USED, IF THE TOTAL REPAIR AREA IS LESS THAN 300 SQUARE YARDS.
- SEE PAVEMENT RESTORATION DETAIL 2 FOR LIMITS OF RESTORATION. SEE DETAIL 1 IF IN INTERSECTION, CRACK SEAL SAW-CUT LINES.

6 REPAIR OF FULL DEPTH ASPHALTIC CONCRETE (UCM SECTION 5.5.13) FOR PUBLIC ROADS
SCALE: NOT TO SCALE

CITY OF CEDAR PARK
DEPARTMENT OF PUBLIC WORKS

TEMPORARY AND FINAL REPAIR OF STREETS AND PUBLIC TRAFFIC AREAS

SHEET 1 OF 1

APPROVED
MAR 04 2020
PLANNING DEPT.
CITY OF CEDAR PARK

REV. NO.	BY	DATE	REVISION DESCRIPTION

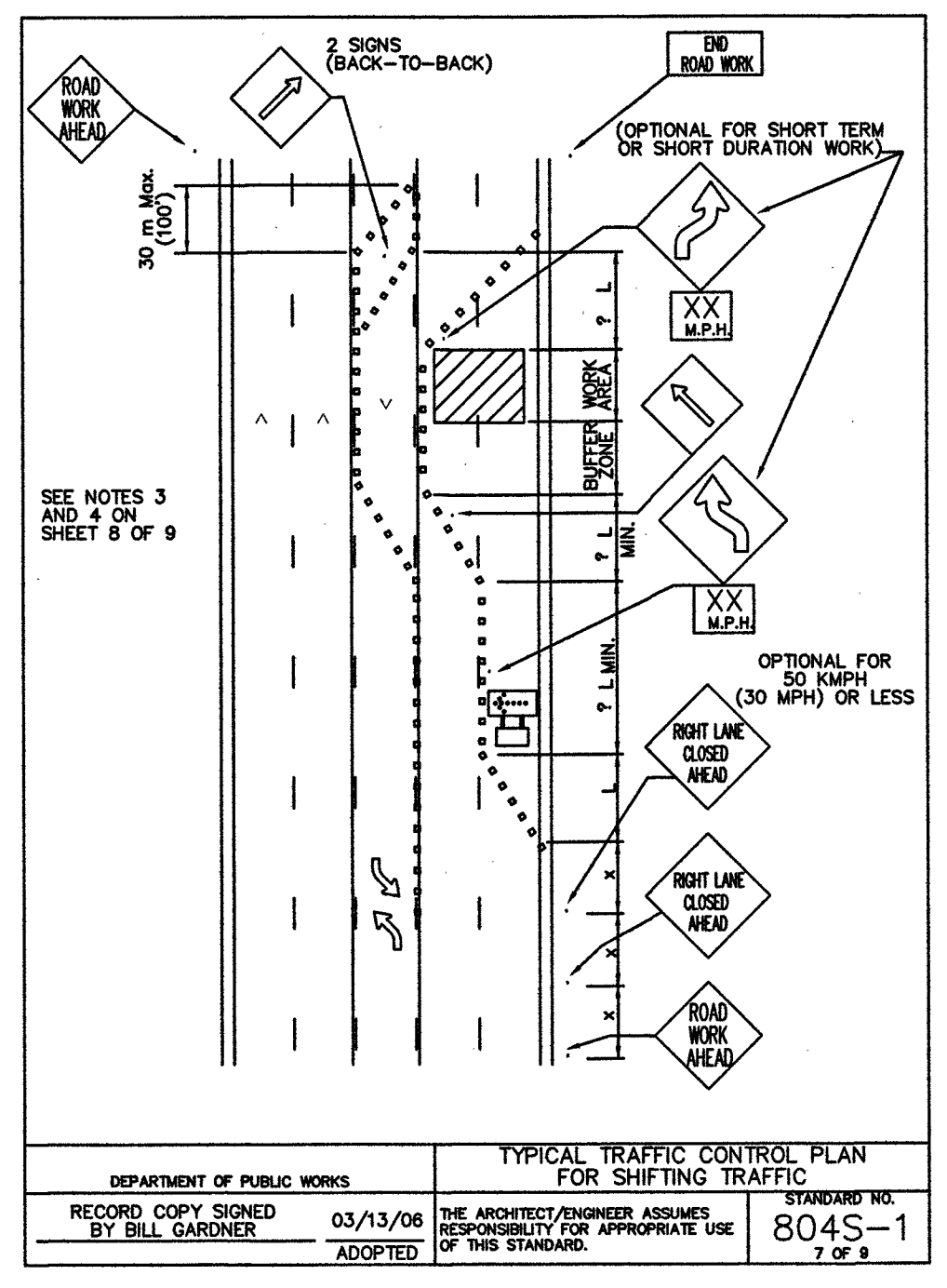
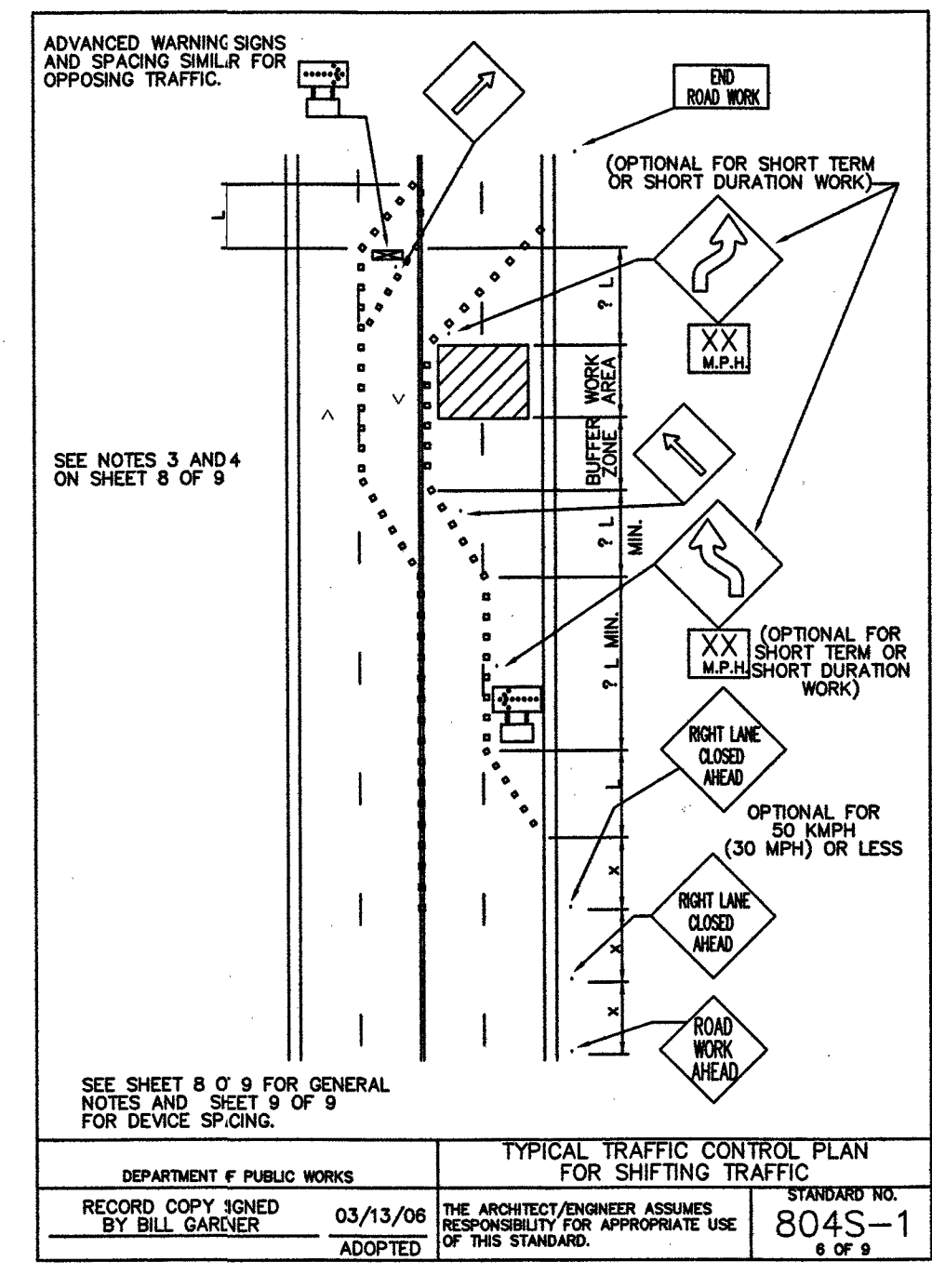
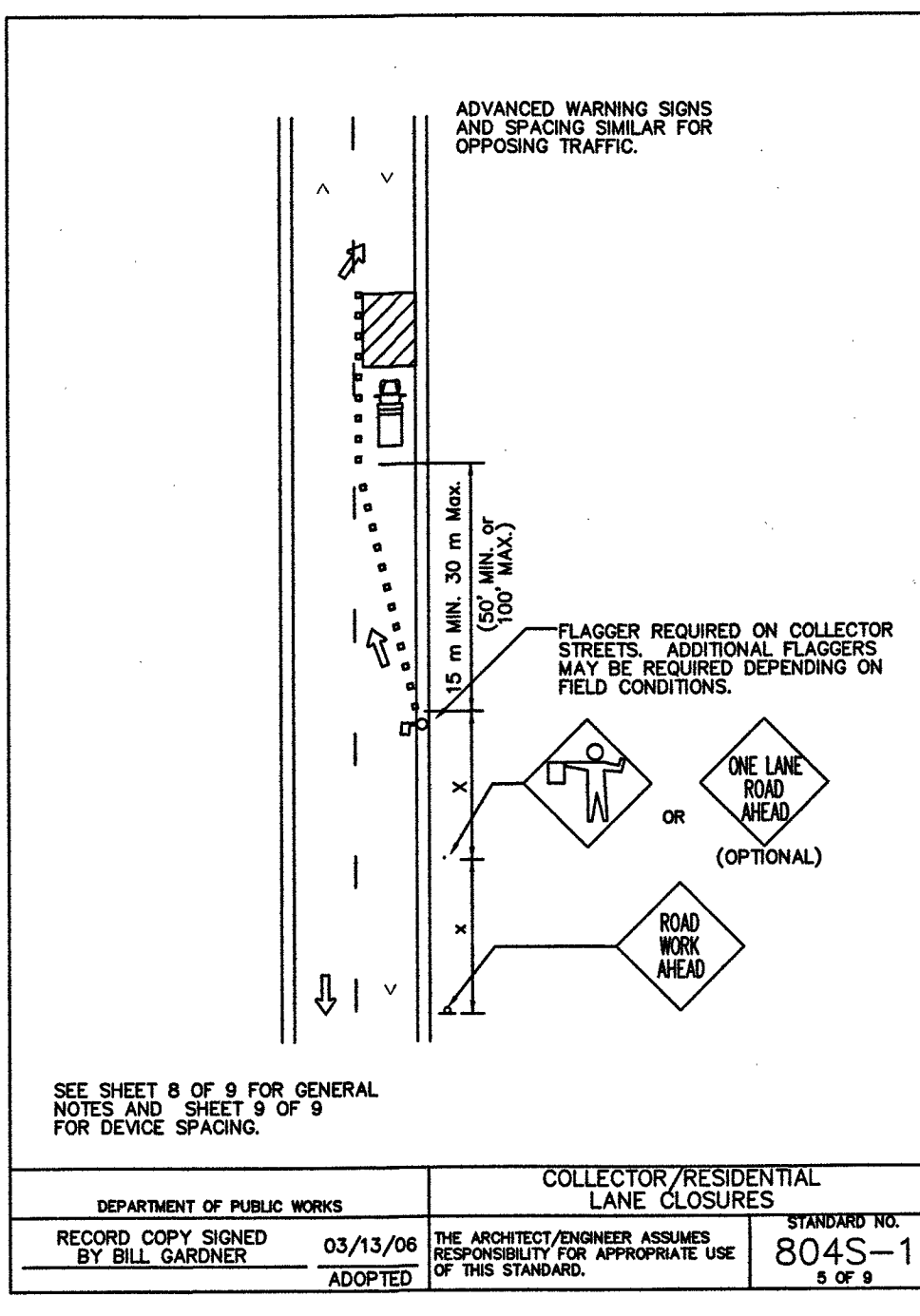
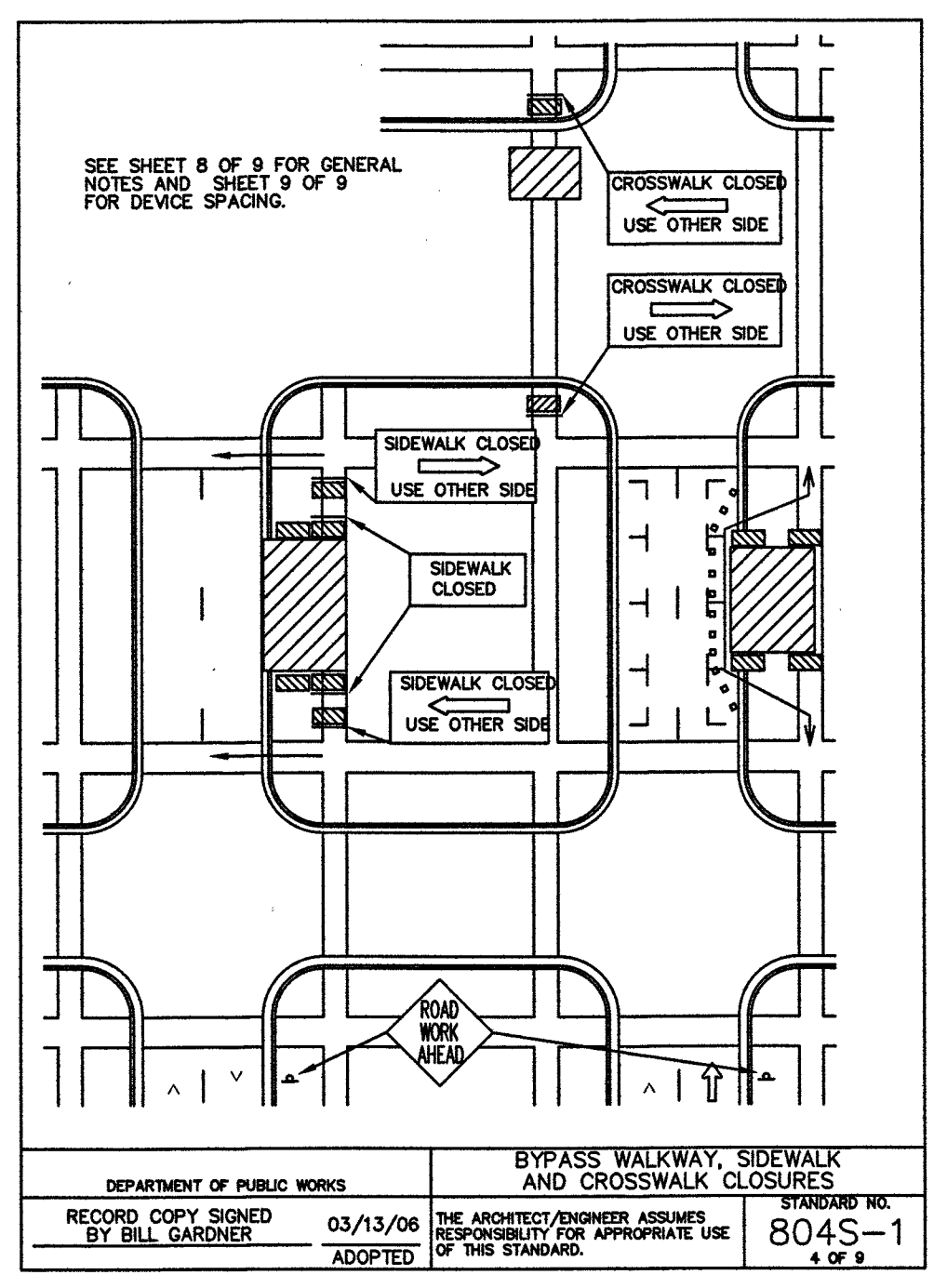
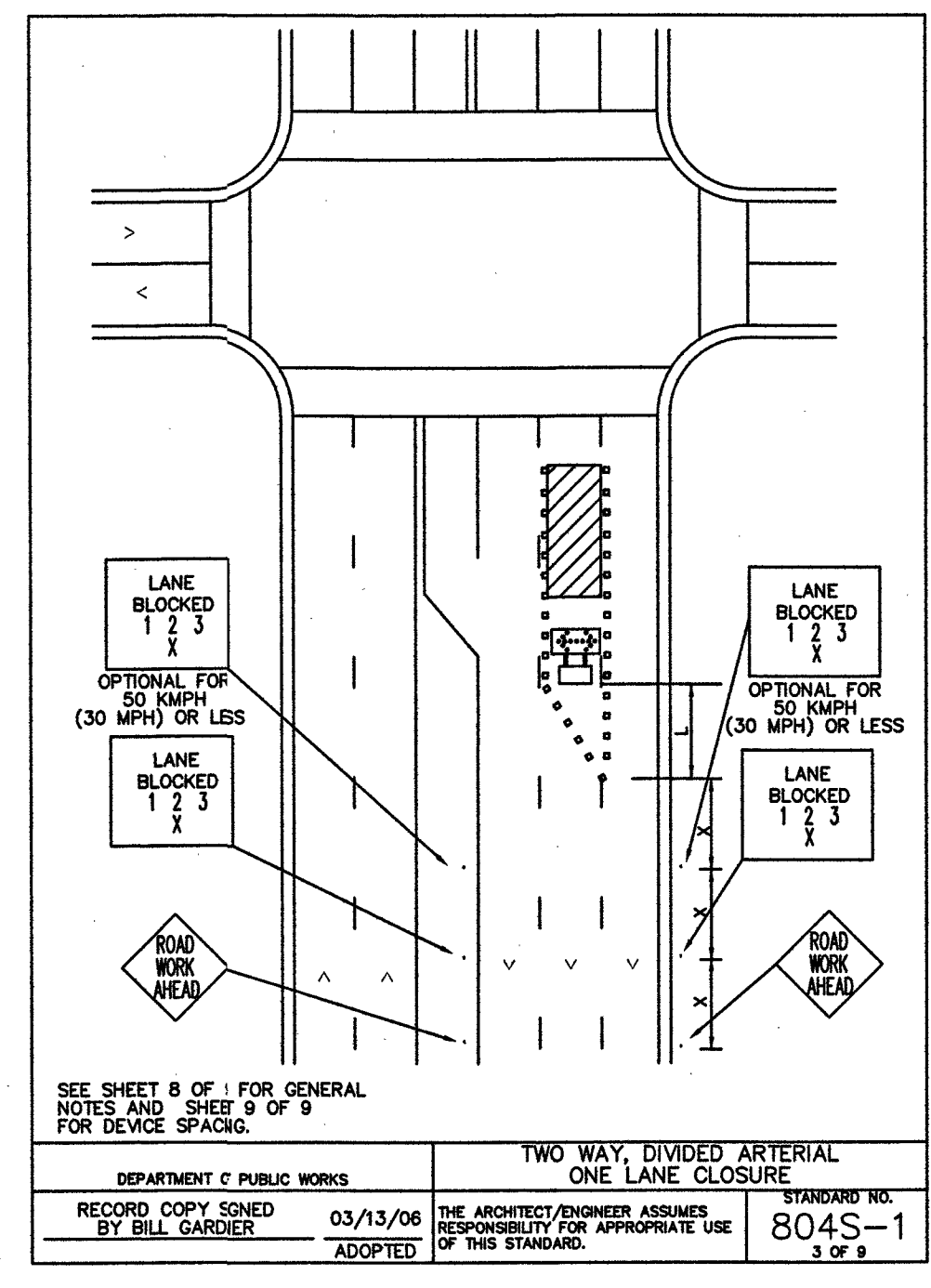
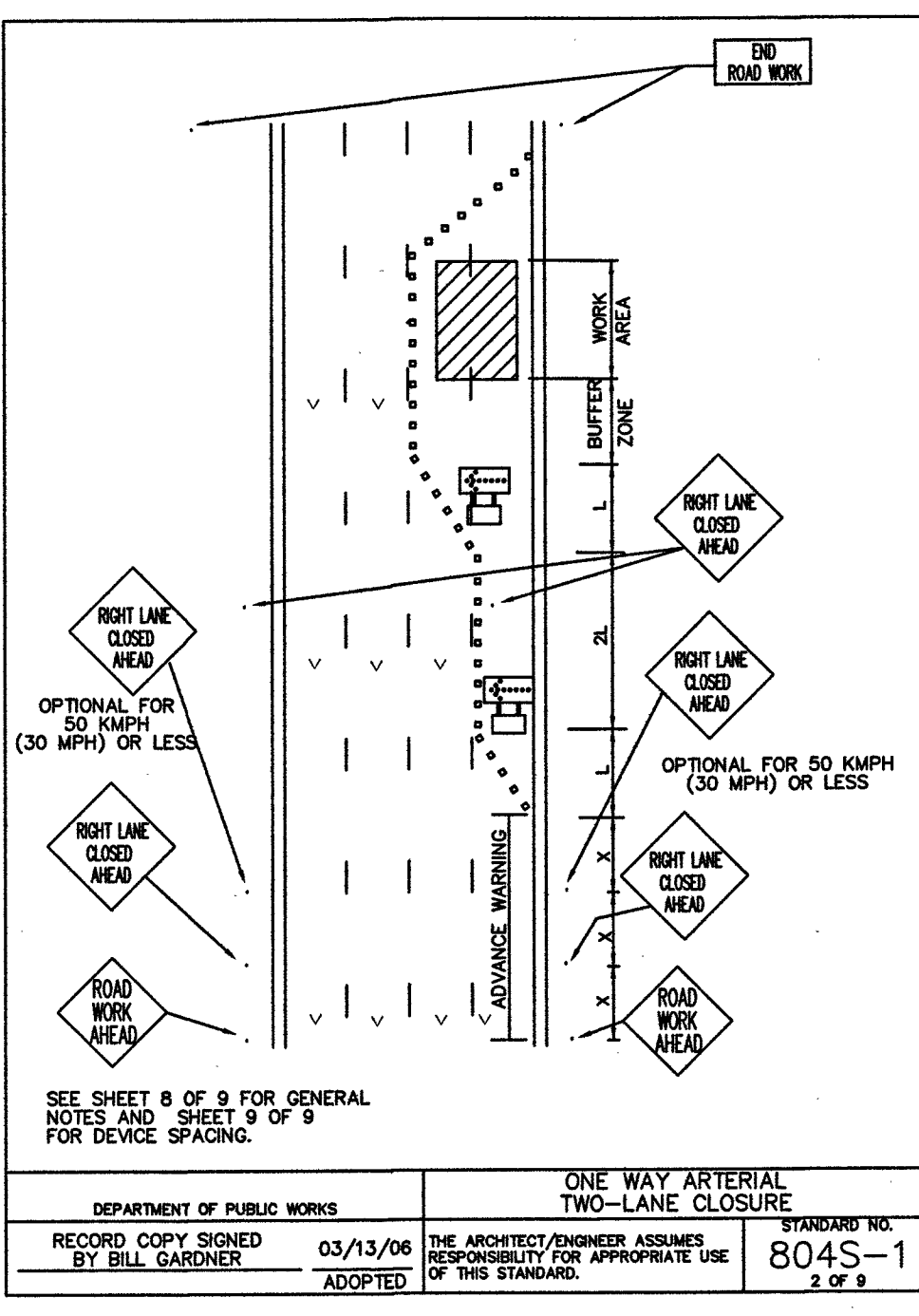
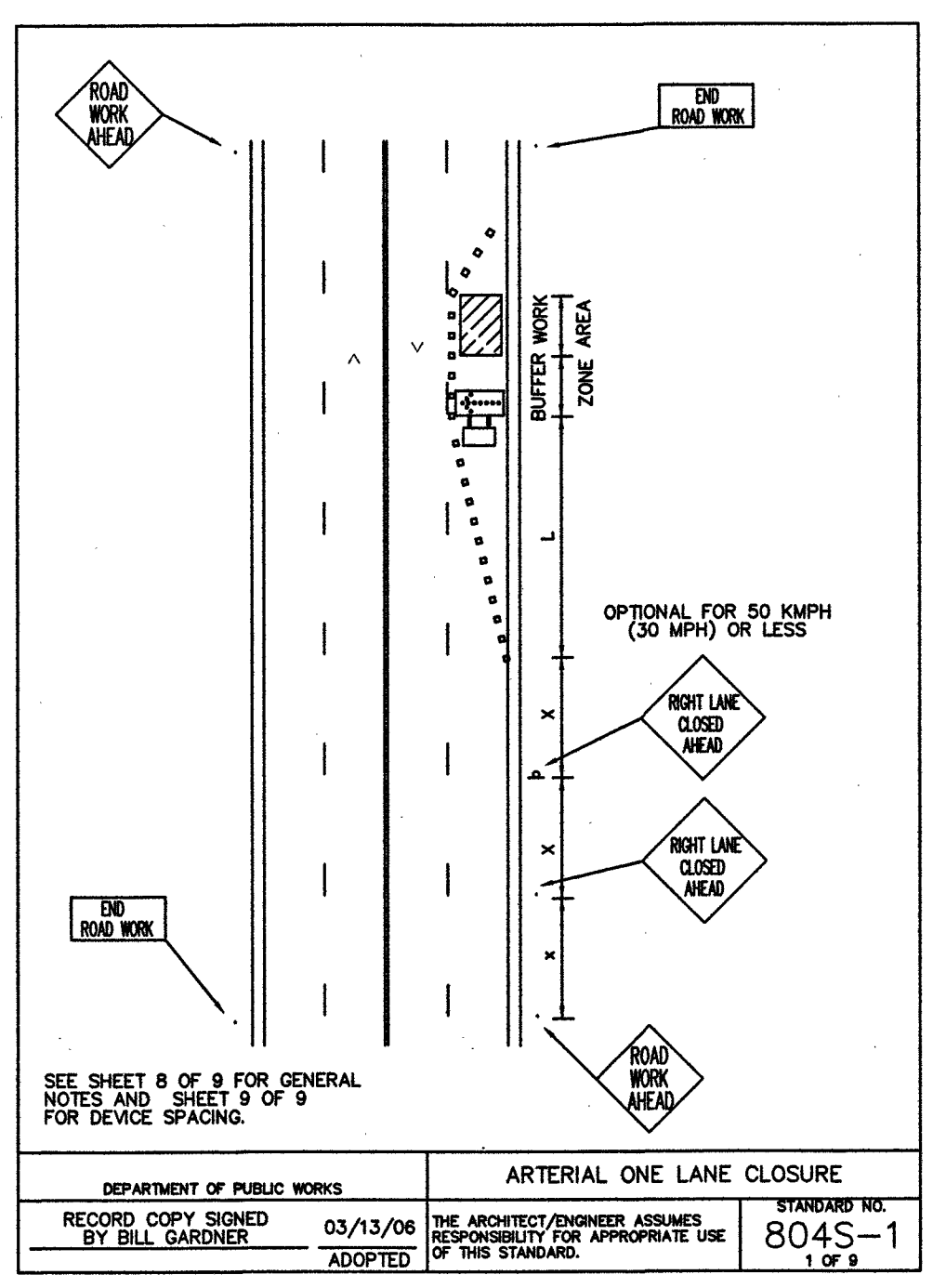
Binkley & Barfield, Inc.
consulting engineers
Texas Registration Number F-257
2401 DOUBLE CREEK DRIVE, SUITE 150, ROUND ROCK, TX 78664

Gary E. Jones
GARY E. JONES
79198
REGISTERED PROFESSIONAL ENGINEER
Sep 25, 2019

DETAILS SHEET

ACCUSHARP DEVELOPMENT PLAT
(PROJECT IN CEDAR PARK ETJ)

CASE: DP-18-001	SHEET
DATE: Sep 25, 2019	22
DRAWN BY: GEJ	OF 25
DESIGNED BY: GEJ	
REVIEWED BY: GEJ	



1. ALL SETUPS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND THE CITY OF AUSTIN TRANSPORTATION CRITERIA MANUAL.

2. TO DETERMINE APPROPRIATE DEVICES AND SIGN SIZES TO BE USED, REFER TO STANDARD 804S-5, SHEETS 5, 6 AND 7 OF 11.

3. FOR INTERMEDIATE-TERM SITUATIONS, WHEN IT IS NOT FEASIBLE TO REMOVE AND RESTORE PAVEMENT MARKINGS, THE CHANNELIZING MUST BE MORE DOMINANT BY USING A VERY CLOSE DEVICE SPACING. THIS IS ESPECIALLY IMPORTANT IN LOCATIONS OF CONFLICTING INFORMATION SUCH AS WHERE TRAFFIC IS DIRECTED OVER DOUBLE YELLOW CENTERLINE. IN SUCH LOCATIONS, A MAXIMUM CHANNELIZING DEVICE SPACING OF 3 m (10') IS REQUIRED.

4. FOR LONG TERM STATIONARY WORK, ALL CONFLICTING PAVEMENT MARKINGS MUST BE REMOVED AND CENTERLINE STRIPING PROVIDED WHERE TWO WAY TRAFFIC IS IN ADJACENT LANES.

5. FOR TEMPORARY PAVEMENT MARKING REQUIREMENTS SEE STANDARD 804S-3.

6. FOR ONE-WAY AND MULTI-LANE ROADWAYS THE "LANE BLOCKED" SIGN MAY BE USED IN LIEU OF THE "LANE CLOSED AHEAD" SIGN. THE NUMBER OF DIGITS ON THE SIGN SHALL NOT BE GREATER THAN THE NUMBER OF LANES PRESENT ON THE ROADWAY. THE "X" SHALL BE PLACED UNDER THE NUMBER OF LANE(S) BLOCKED.

7. FOR FLAGGING OPERATION REQUIREMENTS SEE STANDARD 804S-2.

8. CONTRACTOR SHALL PROVIDE SIDEWALK CLOSURES, CROSSWALK CLOSURES OR WALKWAY BYPASS. WHENEVER PEDESTRIAN MOVEMENTS ARE AFFECTED BY CONSTRUCTION ACTIVITIES, ALL SIDEWALKS AND CROSSWALKS SHALL BE ACCESSIBLE WHEN CONTRACTOR IS NOT WORKING UNLESS APPROVED BY THE TRANSPORTATION DIVISION.

9. FOR EXCAVATION PROTECTION AND SAFETY FENCE REQUIREMENTS SEE STANDARD 804S-4.

10. THE USE OF ARROW DISPLAYS ARE REQUIRED ON ALL LANE CLOSURES. THE CONTRACTOR SHALL PROVIDE ONE (1) STAND-BY UNIT IN GOOD WORKING CONDITION AT THE JOB SITE, READY FOR USE IF THE OPERATION REQUIRES 24-HOUR A DAY LANE CLOSURE SET-UPS.

DEPARTMENT OF PUBLIC WORKS
RECORD COPY SIGNED BY BILL GARDNER 03/13/06 ADOPTED
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
STANDARD NO. 804S-1
8 OF 9

Typical Transition Lengths and Suggested Maximum Spacing of Devices

Speed KMPH	Speed MPH	Formula	Minimum Desirable Taper Lengths (L) Meters (Feet)			Suggested Max. Device Spacing Meters (Feet)	Suggested Sign Spacing Meters (Feet)
			On a Taper Meters (Feet)	On a Taper Meters (Feet)	On a Taper Meters (Feet)		
50	30	L=WS ² /60	3.0(10)	3.3(11)	3.8(12)	30	40 (120)
55	35	L=WS ² /60	45	50	55	35	50 (150)
65	40	L=WS ² /60	80	90	100	40	75 (240)
70	45	L=WS ² /60	135	150	165	45	100 (320)
80	50	L=WS ² /60	150	165	180	50	120 (400)
90	55	L=WS ² /60	185	200	220	55	150 (500)
95	60	L=WS ² /60	180	200	220	60	180 (600)
105	65	L=WS ² /60	195	215	235	65	210 (700)
115	70	L=WS ² /60	215	235	255	70	240 (800)

LEGEND
 Channelizing devices
 Trailer mounted flashing arrow board
 Flagger

DEPARTMENT OF PUBLIC WORKS
RECORD COPY SIGNED BY BILL GARDNER 03/13/06 ADOPTED
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
STANDARD NO. 804S-1
9 OF 9

APPROVED
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 PLANNING DEPT.
 CITY OF CEDAR PARK

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Binkley & Barfield, Inc.
 consulting engineers
 Texas Registration Number F-257
 2401 DOUBLE CREEK DRIVE, SUITE 150, ROUND ROCK, TX 78664

Gary Eli Jones
 GARY ELI JONES
 79198
 REGISTERED PROFESSIONAL ENGINEER
 Sep 25, 2019

DETAILS SHEET
 (TRAFFIC CONTROL)

ACCUSHARP
 DEVELOPMENT PLAT
 (PROJECT IN CEDAR PARK ETJ)

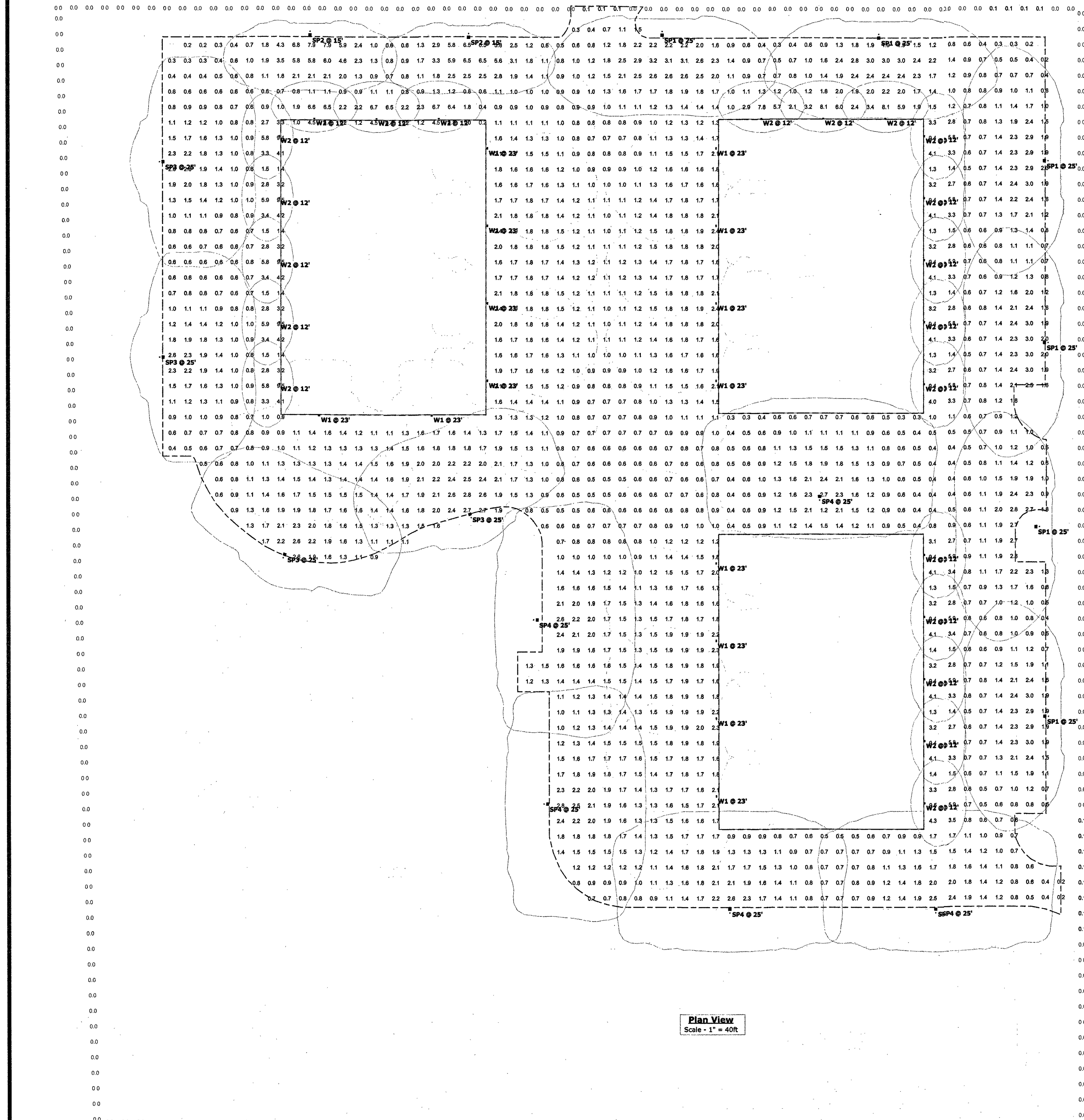
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 REVIEWED BY: GEJ

SHEET
 23
 OF 25

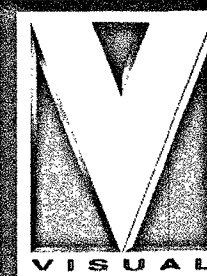
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Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Property Line	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
Site Parking/Roadway	+	1.6 fc	9.5 fc	0.2 fc	47.5:1	8.0:1

Schedule	Symbol	Quantity	Manufacturer	Model Number	Description	Height	Number of Fixtures	Mounting	Light Class	Wattage	Notes	
SP1	□	6	Lithonia Lighting	DSX1 LED P3 40K 8LC MVOLT	DSX1LED P3 40K 8LC MVOLT	LED	1	DSX1_LED_P3_40K_8LC_MVOLT.fes	10309	0.95	102	23' POLE MOUNTED ON A 2" CONCRETE BASE.
SP2	□	2	Lithonia Lighting	DSX1 LED P3 40K 8LC MVOLT	DSX1LED P3 40K 8LC MVOLT	LED	1	DSX1_LED_P3_40K_8LC_MVOLT.fes	10309	0.95	102	17' POLE MOUNTED ON A 2" CONCRETE BASE.
SP3	□	4	Lithonia Lighting	DSX1 LED P3 40K 14M T4M HS	DSX1LED P3 40K 14M T4M HS with house side shield	LED	1	DSX1_LED_P3_40K_14M_T4M_HS.fes	9552	0.95	102	23' POLE MOUNTED ON A 2" CONCRETE BASE.
SP4	□	5	Lithonia Lighting	DSX1 LED P7 40K TSW MVOLT HS	DSX1LED P7 40K TSW MVOLT with house side shield	LED	1	DSX1_LED_P7_40K_TSW_MVOLT_HS.fes	14131	0.95	183	23' POLE MOUNTED ON A 2" CONCRETE BASE.
W1	□	14	Lithonia Lighting	DSXW1 LED 30C 1000 40K TFFM MVOLT	DSXW1 LED WITH (2) 10 LED LIGHT ENGINES, TYPE TFFM OPTIC, 4000K, @ 100lmk.	LED	1	DSXW1_LED_30C_1000_40K_TFFM_MVOLT.fes	7711	0.95	73.2	MOUNTED AT 23' AFG
W2	□	21	Lithonia Lighting	WST LED P2 40K VW MVOLT	WST LED, Performance package 2, 4000K, visual comfort wide, MVOLT	LED	1	WST_LED_P2_40K_VW_MVOLT.fes	3511	0.95	25	MOUNTED AT 12' AFG



- NOTES:
1. THE LIGHT SOURCE SHALL BE COMPLETELY CONCEALED WITHIN AN OPAQUE HOUSING AND SHALL NOT BE VISIBLE FROM THE STREET OR ADJACENT PROPERTIES. IN ORDER TO DIRECT DOWNWARD AND MINIMIZE THE AMOUNT OF LIGHT SPILL INTO THE SKY AND ONTO ADJACENT PROPERTIES, ALL LIGHTING FIXTURES TO BE FULL CUTOFF FIXTURES.
 2. LIGHTING SHALL BE ORIENTED NOT TO DIRECT GLARE OR ILLUMINATION ONTO STREETS IN A MANNER THAT MAY DISTRACT OR INTERFERE WITH THE VISION OF THE DRIVERS ON SUCH STREETS.
 3. LIGHTING FIXTURES SHALL NOT BE MORE THAN TWENTY-FIVE FEET IN HEIGHT WITHIN AN ON-SITE PARKING AREA.
 4. LIGHTING FIXTURES LOCATED WITHIN FIFTY (50) FEET OF ANY RESIDENTIAL USE SHALL NOT EXCEED FIFTEEN (15) FEET IN HEIGHT.
 5. LIGHTING FIXTURES SHALL BE MOUNTED IN SUCH A MANNER THAT THE CONE OF LIGHT IS CONTAINED ON SITE AND DOES NOT CROSS ANY PROPERTY LINE OF THE SITE.
 6. WALL-MOUNTED FLOOD LAMPS/WALL PACKS INTERNAL TO SITE THAT ARE NOT VISIBLE FROM A PUBLIC ROAD OR ADJACENT TO RESIDENTIAL OR MULTI-FAMILY DISTRICT MAY BE OF ANY DESIGN. WALL MOUNTED FLOOD LAMPS/WALL PACKS VISIBLE FROM PUBLIC ROADS AND ADJACENT TO ANY RESIDENTIAL OR MULTI-FAMILY USE SHALL NOT BE ALLOWED.
 7. FIXTURES USED TO ACCENT ARCHITECTURAL FEATURES, LANDSCAPING OR ART SHALL BE LOCATED, AIMED OR SHIELDED TO MINIMIZE LIGHT SPILL INTO THE NIGHT SKY.
 8. ARCHITECTURAL AND LANDSCAPE LIGHTING, OUTDOOR LIGHTING USED TO ILLUMINATE FLAGS, STATUES, SIGNS OR OTHER OBJECTS MOUNTED ON A POLE, PEDESTAL OR PLATFORM, SPOTLIGHTING OR FLOODLIGHTING USED FOR ARCHITECTURAL OR LANDSCAPE PURPOSES MUST BE FULL CUTOFF OR DIRECTIONALLY SHIELDED FIXTURES AT ARE AIMED AND CONTROLLED SO THAT THE DIRECTED LIGHT IS SUBSTANTIALLY CONFINED TO THE OBJECT INTENDED TO BE ILLUMINATED.
 9. ALL EXTERIOR LIGHTING SHALL COMPLY WITH APPLICABLE TERMS OF THE INTERNATIONAL ENERGY CODE (IECC) AS ADOPTED BY THE CITY. IN CASES WHERE THE TERMS OF CHAPTER CONFLICT WITH THE IECC, THE MORE RESTRICTIVE SHALL APPLY.
 10. LIGHTING PHOTOMETRIC CALCULATIONS ARE AN ESTIMATE OF LIGHT LEVELS. SITE CONDITIONS MAY ALTER THE ACTUAL LIGHT LEVELS.



BBI ACCUSHARP
SITE LIGHTING
PARKING/ROADWAY PHOTOMETRICS

Designer _____
Date 7/31/2018
Scale Not to Scale
Drawing No. _____
Summary _____
1 of 1

REV. NO.	BY	DATE	REVISION DESCRIPTION

Binkley & Barfield, Inc.
consulting engineers
Texas Registration Number F-257
2401 DOUBLE CREEK DRIVE, SUITE 150, ROUND ROCK, TX 78664

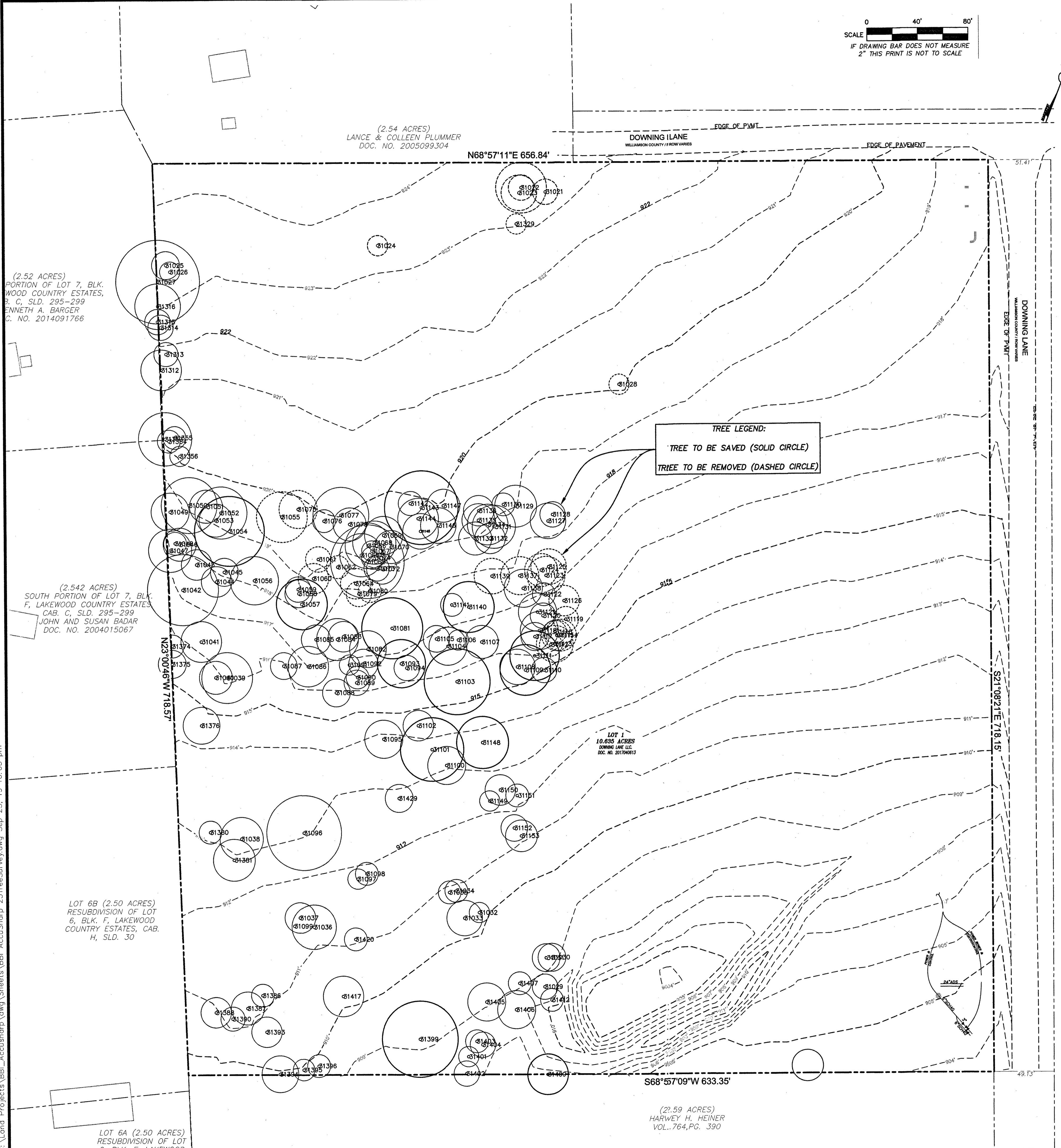
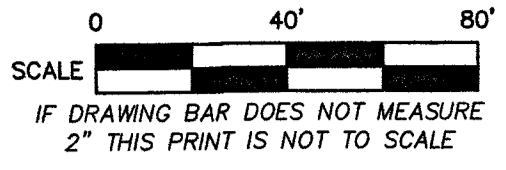
Designer: *Gary Eli Jones*
Date: Sep 25, 2019
Scale: Not to Scale
Drawing No.: 79198
Summary: _____
Sep 25, 2019

APPROVED
MAR 04 2020
PLANNING DEPT.
CITY OF CEDAR PARK

PHOTOMETRIC PLAN
ACCUSHARP
DEVELOPMENT PLAT
(PROJECT IN CEDAR PARK ETC.)

CASE: DP-18-001	SHEET
DATE: Sep 25, 2019	24
DRAWN BY: GEJ	OF 25
DESIGNED BY: GEJ	
REVIEWED BY: GEJ	

LIGHT SOURCES SHALL BE COMPLETELY CONCEALED WITHIN OPAQUE HOUSINGS AND SHALL NOT BE VISIBLE FROM ADJACENT STREETS OR PROPERTIES. ALL EXTERIOR LIGHTING FIXTURES SHALL BE FULL CUTOFF TYPE FIXTURES. LIGHTING FIXTURES SHALL BE NO MORE THAN TWENTY FIVE (25) FEET IN HEIGHT AS MEASURED FROM ADJACENT, FINISHED GRADE.



TREE LEGEND:
 TREE TO BE SAVED (SOLID CIRCLE)
 TREE TO BE REMOVED (DASHED CIRCLE)

Point #	Row Description
31021	TREE-10IN SPANISH-OAK
31022	TREE-10IN-15IN LIVE-OAK
31023	TREE-14IN LIVE-OAK
31024	TREE-8IN SPANISH-OAK
31025	TREE 11IN LIVE OAK
31026	TREE 8IN LIVE OAK
31027	14IN 16IN 18IN LIVE OAK
31028	TREE-8IN SPANISH-OAK
31029	TREE-10IN LIVE-OAK
31030	TREE 11IN LIVE OAK
31031	TREE 11IN LIVE OAK
31032	TREE 8IN LIVE OAK
31033	TREE 14IN LIVE OAK
31034	TREE 9IN LIVE OAK
31035	TREE 9IN LIVE OAK
31036	TREE 15IN 5IN LIVE OAK
31037	TREE 12IN LIVE OAK
31038	TREE 17IN LIVE OAK
31039	TREE 20IN LIVE OAK
31040	TREE 13IN LIVE OAK

Point #	Row Description
31041	TREE 16IN LIVE OAK
31042	TREE 28IN LIVE OAK
31043	TREE 12IN LIVE OAK
31044	TREE 12IN LIVE OAK
31045	TREE 11IN LIVE OAK
31046	TREE 13IN LIVE OAK
31047	TREE 17IN LIVE OAK
31048	TREE 9IN LIVE OAK
31049	TREE 15IN LIVE OAK
31050	TREE 22IN LIVE OAK
31051	TREE 13IN LIVE OAK
31052	TREE 15IN 11IN LIVE OAK
31053	TREE 10IN 13IN LIVE OAK
31054	12IN 10IN 10IN 11IN LIVE OAK
31055	TREE-20IN LIVE-OAK
31056	TREE 19IN LIVE OAK
31057	TREE 20IN ELM
31058	TREE 11IN LIVE OAK
31059	TREE 10IN LIVE OAK
31060	TREE-12IN LIVE-OAK

Point #	Row Description
31061	TREE-16IN LIVE-OAK
31062	TREE-9IN LIVE-OAK
31063	TREE 23IN LIVE OAK
31064	TREE-12IN LIVE-OAK
31065	TREE 17IN LIVE OAK
31066	TREE 18IN LIVE OAK
31067	TREE 8IN LIVE OAK
31068	TREE 17IN LIVE OAK
31069	TREE 9IN LIVE OAK
31070	TREE 13IN LIVE OAK
31072	12IN 11IN LIVE OAK
31073	TREE 10IN 13IN LIVE OAK
31074	TREE 9IN ELM
31075	TREE-15IN-ELM
31076	TREE 9IN LIVE OAK
31077	TREE 22IN LIVE OAK
31078	TREE 13IN 11IN LIVE OAK
31079	TREE 6IN 5IN LIVE OAK
31080	TREE-9IN LIVE-OAK
31081	TREE 18IN 12IN LIVE OAK

Point #	Row Description
31082	TREE 10IN 9IN LIVE OAK
31083	TREE 12IN LIVE OAK
31084	TREE 23IN LIVE OAK
31085	TREE 8IN 7IN LIVE OAK
31086	TREE 16IN LIVE OAK
31087	TREE 8IN LIVE OAK
31088	TREE 11IN LIVE OAK
31089	TREE 10IN LIVE OAK
31090	TREE 9IN LIVE OAK
31091	TREE 8IN LIVE OAK
31092	TREE 9IN 5IN LIVE OAK
31093	TREE 12IN 13IN LIVE OAK
31094	TREE 8IN 4IN LIVE OAK
31095	TREE 15IN LIVE OAK
31096	11IN 14IN 17IN LIVE OAK
31097	TREE 8IN LIVE OAK
31098	TREE 9IN LIVE OAK
31099	TREE 6IN 5IN LIVE OAK
31100	TREE 15IN LIVE OAK
31101	TREE 18IN 14IN LIVE OAK

Point #	Row Description
31102	TREE 12IN LIVE OAK
31103	TREE 18IN 16IN LIVE OAK
31104	TREE 15IN LIVE OAK
31105	TREE 8IN 5IN LIVE OAK
31106	TREE 8IN LIVE OAK
31107	TREE 13IN LIVE OAK
31108	TREE 14IN LIVE OAK
31109	TREE 20IN LIVE OAK
31110	TREE 10IN LIVE OAK
31111	11IN 11IN 6IN LIVE OAK
31112	TREE-9IN LIVE-OAK
31113	TREE-10IN-9IN LIVE-OAK
31114	TREE 9IN 7IN LIVE OAK
31115	TREE-9IN-6IN LIVE-OAK
31116	TREE-9IN LIVE-OAK
31117	TREE 11IN LIVE OAK
31118	TREE 15IN LIVE OAK
31119	TREE-10IN LIVE-OAK
31120	TREE 10IN LIVE OAK
31121	TREE 15IN LIVE OAK

Point #	Row Description
31122	TREE 9IN LIVE OAK
31123	TREE-13IN LIVE-OAK
31124	TREE-13IN LIVE-OAK
31125	TREE-14IN LIVE-OAK
31126	TREE-12IN LIVE-OAK
31127	14IN SPANISH OAK
31128	TREE 10IN LIVE OAK
31129	TREE 11IN 11IN ELM
31130	TREE 9IN LIVE OAK
31131	TREE 17IN LIVE OAK
31132	TREE 12IN LIVE OAK
31133	TREE 13IN LIVE OAK
31134	TREE 16IN LIVE OAK
31135	TREE 13IN LIVE OAK
31136	TREE 12IN LIVE OAK
31137	TREE-15IN LIVE-OAK
31138	TREE 15IN LIVE OAK
31139	TREE-14IN LIVE-OAK
31140	TREE 20IN LIVE OAK
31141	TREE 9IN LIVE OAK

Point #	Row Description
31142	TREE 7IN 5IN ELM
31143	14IN 14IN 15IN LIVE OAK
31144	TREE 12IN 8IN LIVE OAK
31145	TREE 11IN 6IN LIVE OAK
31146	TREE 14IN LIVE OAK
31147	TREE 13IN LIVE OAK
31148	TREE 13IN 14IN LIVE OAK
31149	TREE 8IN LIVE OAK
31150	TREE 12IN LIVE OAK
31151	TREE 9IN LIVE OAK
31152	TREE 8IN 5IN LIVE OAK
31153	TREE 8IN 5IN LIVE OAK
31154	16IN LIVE OAK @ FNCWR
31155	TREE 7IN 5IN LIVE OAK
31156	TREE 7IN 6IN LIVE OAK
31157	10IN LIVE OAK @ FNCWR
31158	18IN LIVE OAK @ FNCWR
31159	TREE 8IN SPANISH OAK
31160	6IN 7IN 10IN 9IN LIVE OAK
31161	TREE 9IN LIVE OAK

Point #	Row Description
31355	TREE 9IN LIVE OAK
31356	TREE 8IN ELM
31374	TREE 9IN LIVE OAK
31375	TREE 11IN LIVE OAK @ FNCWR
31376	TREE 4IN 6IN 8IN 3IN LIVE OAK
31380	TREE 7IN 4IN LIVE OAK
31381	TREE 7IN 8IN 5IN 5IN LIVE OAK
31386	TREE 9IN LIVE OAK
31387	TREE 13IN LIVE OAK
31388	TREE 12IN LIVE OAK
31390	TREE 5IN 7IN LIVE OAK
31393	TREE 8IN 6IN LIVE OAK
31394	10IN 9IN LIVE OAK @ FNCWR
31395	TREE 7IN 3IN LIVE OAK
31396	TREE 6IN 6IN LIVE OAK
31399	TREE 11IN 11IN 19IN LIVE OAK
31401	TREE 8IN LIVE OAK
31402	TREE 10IN LIVE OAK @ FNCWR
31403	TREE 9IN LIVE OAK
31404	TREE 10IN LIVE OAK

Point #	Row Description
31405	TREE 15IN LIVE OAK
31406	TREE 15IN LIVE OAK
31407	TREE 9IN LIVE OAK
31409	16IN LIVE OAK @ FNCWR
31412	TREE 9IN ELM
31417	TREE 9IN 9IN 5IN LIVE OAK
31420	TREE 9IN LIVE OAK
31429	TREE 11IN LIVE OAK

TREE COVER RETAINED:
 (168 TOTAL TREES - 25 REMOVED TREES) = 85% TREES RETAINED
 168 TOTAL TREES

MITIGATION FOR HERITAGE TREES (<16")
 TREE 31022 = 20"
 TREE 31055 = 20"
 TOTAL = 40" OF MITIGATION REQUIRED
 REPLACEMENT OF TREES SHALL COMPLY WITH THE CITY OF CEDAR PARK PREFERRED PLANT LIST.

APPROVED
 MAR 04 2020
 PLANNING DEPT.
 CITY OF CEDAR PARK

REV. NO.	BY	DATE	REVISION DESCRIPTION

Binkley & Barfield, Inc.
 consulting engineers
 Texas Registration Number F-257
 2401 DOUBLE CREEK DRIVE, SUITE 150, ROUND ROCK, TX 78664

Ray Elford
 GARY ELLI JONES
 79198
 REGISTERED PROFESSIONAL ENGINEER
 Sep 25, 2019

TREE SURVEY
ACCUSHARP DEVELOPMENT PLAT
 (PROJECT IN CEDAR PARK ETJ)
 CASE: DP-18-001
 DATE: Sep 25, 2019
 DRAWN BY: GEJ
 DESIGNED BY: GEJ
 REVIEWED BY: GEJ
 SHEET 25 OF 25

C:\Land Projects\BBI_Accusharp\dwg\Sheets\BBI_Accusharp_25TreeSurvey.dwg Sep 25, 19 10:03 pm