

DEMOLITION NOTES

- EXISTING CONCRETE DRIVEWAY TO BE REMOVED.
- EXISTING ASPHALT PAVING TO BE REMOVED. REMOVE ONLY THAT REQUIRED TO INSTALL CONSTRUCTION ENTRANCE. THE REMAINING PAVEMENT WILL REMAIN IN PLACE UNTIL THE INSTALLTION OF ALL UNDERGROUND UTILITIES IS COMPLETE.
- ALL EXISTING TREES ON SITE TO BE REMOVED.
- EXISTING CONCRETE CURB TO BE REMOVED. COORDINATE WITH TURN LANE CONSTRUCTION. SEE SHEET C2.0
- EXISTING CURB INLETS TO BE REMOVED. COORDINATE WITH TURN LANE CONSTRUCTION. SEE SHEET C2.0 & SHEET C3.0 . EXISTING DRAINAGE PIPES FROM THESE INLETS WILL BE ABANDONED IN PLACE.
- EXISTING CONCRETE HEADWALL TO BE REMOVED.
- EXISTING POWER POLE TO BE RELOCATED, (3) TOTAL. COORDINATE WITH POWER COMPANY.
- EXISTING CONCRETE APRON TO BE REMOVED.
- EXISTING 72" RCP TO BE REMOVED. REMOVE ONLY AMOUNT NECESSARY TO PROVIDE A CLEAN, WATER-TIGHT CONNECTION.
- EXISTING CONCRETE PAVING TO BE REMOVED. REMOVE ONLY AMOUNT NECESSARY TO PERFORM THE WORK.
- EXISTING TELEPHONE MANHOLES AND VAULTS TO BE LOWERED. COORDINATE ALL ACTIVITY WITH GOVERNING UTILITY COMPANY.

GENERAL NOTES

- DUMPSTERS AND WASTE CONTAINERS WILL BE LOCATED ON SITE TO PROVIDE EASY ACCESS FOR PICK-UPS. TRASH REMOVAL WILL BE SCHEDULE FREQUENTLY, SO AS TO NOT ALLOW WASTE TO ACCUMULATE ON SITE.
- 2. PLACE PORTABLE SEWAGE FACILITIES WITHIN THE CONTRACTOR STORAGE AREA. SEE KEYED NOTE 5.
- 3. AREA DESIGNATED AS LANDSCAPE, WILL REMAIN UNDISTRUBED UNTIL FINAL PAVING IS IN PLACE. AREAS DESIGNATED TO BE PAVED, WILL ONLY BE DISTRUBED PRIOR TO WORK IN THAT AREA.
- 4. THIS SITE WILL BE OPERATING UNDER A NPDES STORM WATER DISCHARGE PERMIT. CONTRACTOR TO ENSURE THE NOI HAS BEEN SUBMITTED TWO (2) DAYS PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHOULD BE FAMILIAR WITH THEIR RESPONSIBILITIES IN REGARDS TO MAINTAING THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) BINDER. A COPY OF THE SWPPP BINDER SHOULD BE ON SITE OR AVAILABLE AT ALL TIMES.
- 5. EVERY EFFORT WILL BE MADE TO KEEP ALL PUBLIC RIGHT-OF-WAYS FREE OF DIRT. ANY DIRT WINTHIN THE RAODWAY WILL BE CLEANED UP
- 6. ALL UTILITY WORK WITHIN THE RIGHT OF WAY OF THE TOLLWAY WILL BE GOVERNED BY THE CITY OF DALLAS, CONTRACTOR WILL KEEP A COPY OF THE UTILITY PERMIT ISSUED BYT HE CITY OF DALLAS ON SITE AT ALL TIMES.
- 48 HOURS PRIOR TO BEGINNING WORK WITHIN THE RIGHT OF WAY OF THE TOLLWAY, CONTRACTOR MUST INFORM THE CITY OF DALLAS TRANSPORTATION DEPARMENT, CONTRACTOR WILL CONTACT: RUSSELL FINELY

214.957.1036 (MOBIL PHONE) 214.670.5896 (OFFICE) ALL TRAFFIC CONTROL WILL BE SUBJECT TO THE INSPECTION AND

APPROVAL OF THE CITY OF DALLAS.

ALL PUBLIC INFRASTRUCTURE CONSTRUCTED UNDER THIS CONTRACT MUST BE INSTALLED AND INSPECTED ACCORDING TO THE TOWN OF ADDISON REQUIREMENTS. CONTRACTOR IS DIRECTED TO THE SUPPLEMENTAL SPECIFICATION BOOKLET WHICH OUTLINES THE TOWN REQUIREMENTS. THE BOOKLET HAS BEEN ISSUED WITH THE DRAWINGS AND ARE HEREBY A PART OF THE CONTRACT DOCUMENTS.

ALL UTILITY WORK WITHIN THE RIGHT OF WAY OF ADDISON ROAD WILL BE GOVERNED BY THE TOWN OF ADDISON. CONTRACTOR WILL KEEP A COPY OF THE ROW/EXCAVATION PERMIT ISSUED BY THE TOWN OF ADDISON ON SITE AT ALL TIMES.

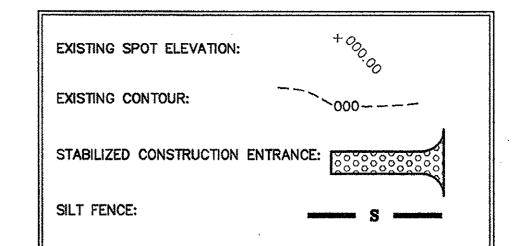
PIPE SCHEDULE

- (A) 32 LINEAR FEET OF 60" RCP AT 8.00% SLOPE
- (B) 14 LINEAR FEET OF 66" RCP AT 8.00% SLOPE
- C 284 LINEAR FEET OF 72" RCP AT 1.00% SLOPE
- (D) 68 LINEAR FEET OF 72" RCP AT 2.42% SLOPE
- (E) 20 LINEAR FEET OF 24" HDPE AT 7.28% SLOPE (OVERFLOW PIPE)
- (F) 11 LINEAR FEET OF 36" HDPE AT 0.50% SLOPE
- (G) 100 LINEAR FEET OF 36" HDPE AT 0.50% SLOPE
- (H) 100 LINEAR FEET OF 36" HDPE AT 0.50% SLOPE
- 1) 100 LINEAR FEET OF 36" HDPE AT 0.50% SLOPE
- (J) 12 LINEAR FEET OF 12" HDPE AT 0.27% SLOPE (K) 10 LINEAR FEET OF 24" HDPE AT 0.70% SLOPE (OVERFLOW PIPE)
- (L) 170 LINEAR FEET OF 24" HDPE AT 1.00% SLOPE
- M 170 LINEAR FEET OF 24" HDPE AT 1.00% SLOPE (N) 170 LINEAR FEET OF 24" HDPE AT 1.00% SLOPE
- 9 LINEAR FEET OF 12" HDPE AT 0.27% SLOPE
- (P) 36" HDPE PIPE MANIFOLD (SIZED FOR 3 36" PIPES)
- Q) 36" HDPE PIPE MANIFOLD (SIZED FOR 4 36" PIPES & 1 12" PIPE)
- (R) 24" HDPE PIPE MANIFOLD (SIZED FOR 3 24" PIPES & 1 12" PIPE)
- (S) 63 LINEAR FEET OF 18" RCP AT 1.92% SLOPE
- (T) 20 LINEAR FEET OF 24" RCP AT 1.00% SLOPE
- (U) 100 LINEAR FEET OF 36" HDPE AT 0.50% SLOPE
- ALL TRENCHING SHALL COMPLY WITH DETAIL C4.1-01.

KEYED NOTES

- DOWNSPOUT. DRAIN TO SURFACE AND FLOW TO STORM DRAIN. LOCATE AS SHOWN. COORDINATE WITH SHEETS MEP1 & A2.2.
- (2) STABILIZED CONSTRUCTION ENTRANCE, SEE DETAIL C1.1-01.
- SILT FENCE SHALL BE PLACED AROUND PERIMETER OF PROPERTY AS SHOWN ON PLANS. SEE DETAIL C1.1-02.
- CURB INLET PROTECTION. ENSURE DEVICES DO NOT INTERFERE WITH TRAFFIC. SEE DETAILS C1.1-03. ALTERNATE DEVICES WILL BE ALLOWED UPON PRE-APPROVAL. FOR PROPOSED CURB INLETS, INSTALL PROTECTION IMMEDIATELY UPON
- COMPLETION. CHANGE DEVICE ONCE ADJACENT PAVEMENT HAS BEEN POURED. CONTRACTOR LAY DOWN AND STORAGE AREA. PROVIDE SECONDARY CONTROL MEASURES AROUND STORAGE AREA TO HELP REDUCE THE POTENTIAL FOR DISCHARGE. ENSURE PROPER CONTROL MEASURES ARE USED ONCE SURFACE
- FUEL AND HAZARDOUS MATERIAL STORAGE ON NORTH SIDE OF STORAGE AREA. FUELS AND HAZARDOUS MATERIAL SHOULD BE KEPT LOCKED UP DURING
- EQUIPMENT AND NON-HAZARDOUS MATERIAL STORAGE WITHIN THE STORAGE AREA.
- CONCRETE WASH OUT AREA. EXCAVATE 10'x10'x1' DEEP. MOUND DIRT TO FORM A 1 FOOT HIGH BERM AROUNG EXCAVATION. SLOPE SIDES 3:1. ONCE CONCRETE HAS HARDENED, REMOVE AND DISPOSE OF PROPERLY.
- SILT FENCE. ADD ADDITIONAL SECTIONS AS REQUIRED TO KEEP SEDIMENT FROM LEAVING THE SITE. ROCK BERM OR CHECK DAM MAY BE USED IN ADDITION TO SILT FENCE AS REQUIRED.
- SILT FENCE. PORTION INDICATED BY THIS NOTE TO BE INSTALLED ONLY IF INSTALLATION OF STORM DRAIN SYSTEM IS NOT COMPLETE PRIOR TO THE START OF THE TURNLANE CONSTRUCTION. IF NEEDED, INSTALL PRIOR TO START OF CONSTRUCTION AND KEEP IN PLACE UNTIL FINAL PAVING IS COMPLETE.
- AREA TO REMAIN UNDISTURBED UNTIL FINAL PAVING IS IN PLACE, SEE GENERAL
- STORM DRAIN GRATE INLET PROTECTION, SEE DETAIL C1.1-05.
- ROCK BERM OR CHECK DAM OR SIMILAR DEVICE PLACED IN CHANNEL DURING INSTALLTION OF 72" STORM DRAIN.

EROSION LEGEND

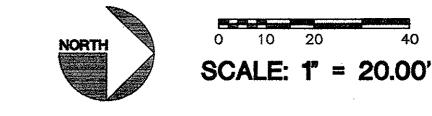


STORM STRUCTURE SCHEDULE

- PRECAST JUNCTION BOX RIM = 637.25 60" INVERT IN (SW) = 627.70 60" INVERT IN (W) = 628.54
- PRECAST BEND MANHOLE ASSEMBLY RIM = 631.55 72" INVERT IN (N) = 623.75

72" INVERT OUT (S) = 626.59

- 72" INVERT IN (S) = 623.65PROPOSED CURB INLET TOP = 631.74
- THROAT = 631.2436" INVERT OUT (W) = 625.97 24" INVERT OUT (NW) = 626.97 (OVERFLOW) 24" INVERT IN (E) = 626.07
- PROPOSED CURB INLET TOP = 633.68 THROAT = 633.1824" INVERT OUT (E) = 628.68 24" INVERT OUT (S) = 629.68 (OVERFLOW)
- PROPOSED CURB INLET TOP = 631.48THROAT = 630.8818" INVERT OUT (N) = 627.48
- PROPOSED CURB INLET TOP = 631.10 THROAT = 630.6018" INVERT IN (S) = 626.32 24" INVERT OUT (SW) = 626.22

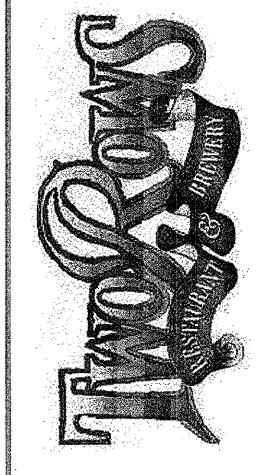




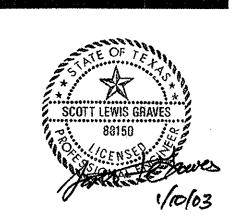
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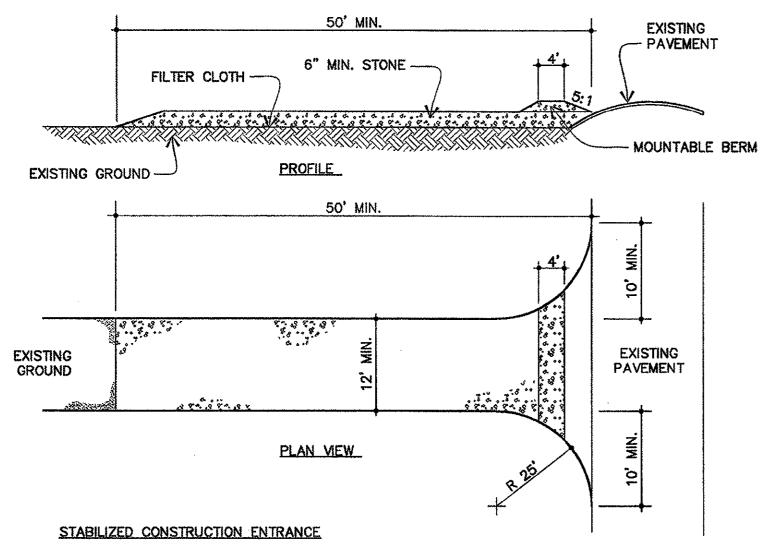


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- A. STONE SIZE USE #2 STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- B. LENGTH AS REQUIRED, BUT NOT LESS THAN 50 FEET
- C. DEPTH NOT LESS THAN SIX (6) INCHES.

STABILIZED CONSTRUCTION ENTRANCE

- WIDTH TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
- E. FILTER CLOTH WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
- SURFACE WATER ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- MAINTENANCE THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED. DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.
- WASHING WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- I. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

GENERAL NOTES

- A. ALL EROSION/SEDIMENT CONTROL MEASURES SHALL COMPLY WITH STATE AND LOCAL SOIL EROSION CONTROL AND CONSERVATION STANDARDS. ADDITIONAL MEASURES TO PREVENT / CONTROL SOIL SEDIMENTATION OR EROSION MAY BE REQUIRED DUE TO SITE CONSIDERATIONS WITHIN THE BOUNDARY LIMITS AND DOWNSTREAM.
- B. PRIOR TO DEVELOPMENT, PERIMETER SHALL BE CLEARLY MARKED AND ALL SOIL DISTURBANCE TO BE CONTAINED WITHIN. OFF SITE WORK MAY BE NECESSARY DUE TO ACTUAL SITE SLOPE OR DRAINAGE REQUIREMENTS ALL CONTROL MEASURES MUST CONFORM TO SITE STANDARDS.
- C. ALL POINTS OF SITE INGRESS AND EGRESS TO BE CONSTRUCTED PRIOR TO ANY OTHER DEVELOPMENT. THEY MUST BE STABILIZED AND INCLUDE SOIL EROSION / SEDIMENTATION CONTROL MEASURES IN ORDER TO PREVENT TRACKING AND SILTING OF MUD INTO PUBLIC RIGHT OF WAY. ANY MATERIALS DEPOSITED FROM SITE ONTO PUBLIC ROADWAYS OR DRAINAGE AREAS TO BE IMMEDIATELY REMOVED.
- D. ALL STORM DRAIN AND SANITARY SEWER TRENCHES NOT IN PAVED AREAS ARE TO BE MULCHED AND/OR SEEDED WITHIN 14 DAYS AFTER INITIAL BACKFILL.
- E. DURING CONSTRUCTION, ALL SEDIMENT CONTROL STRUCTURES WILL BE INSPECTED AFTER EACH RAINFALL AND REPAIRED IF NECESSARY. SEDIMENT TO BE REMOVED TO A SUITABLE DISPOSAL AREA AND STABILIZED WITH PERMANENT VEGETATIVE COVER.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL SEDIMENT AND EROSION CONTROL MEASURES UNTIL DISTURBED AREAS ARE STABILIZED.
- G. AFTER FINE GRADING, ALL DISTURBED AREAS ARE TO BE PERMANENTLY SEEDED AND/OR SODDED.
- H. NO SLOPE SHALL BE GREATER THAN 2:1.
- FOLLOWING INITIAL SOIL DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN SEVEN CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND FOURTEEN DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. THIS DOES NOT APPLY TO THOSE AREAS WHICH ARE SHOWN ON THE PLAN AND ARE CURRENTLY BEING USED FOR MATERIAL STORAGE OR FOR THOSE AREAS ON WHICH ACTUAL CONSTRUCTION ACTIVITIES ARE CURRENTLY BEING PERFORMED. MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE THAT STABILIZED AREAS CONTINUOUSLY MEET THE APPROPRIATE REQUIREMENTS OF GOVERNING AUTHORITIES.
- MULCH FILTER BERM MAY BE USED IN LIEU OF SILT FENCE. VERIFY WITH SEDIMENT CONTROL INSPECTOR PRIOR TO INSTALLATION.

TEMPORARY SEEDING NOTES

WHERE TEMPORARY SEEDING IS REQUIRED OR NECESSARY THE FOLLOWING NOTES SHALL GOVERN:

- A. SCOPE: PLANTING SHORT TERM VEGETATION TO STABILIZE CLEARED OR GRADED AREAS SUBJECT TO EROSION WITHIN A PERIOD OF 14 DAYS.
- STANDARDS: TEMPORARY SEEDING SHALL CONFORM TO ALL REQUIREMENTS OF GOVERNING STATE AND LOCAL SOIL AND FROSION CONTROL AND CONSERVATION AUTHORITIES.
- SEDIMENT AND EROSION CONTROL: ALL PERIMETER CONTROLS MUST BE STABILIZED IN 7 DAYS. ALL INTERIOR CONTROLS MUST BE STABILIZED IN 14 DAYS.

SPECIFICATIONS

- D. SITE PREPARATION
 - PRIOR TO SEEDING, INSTALL ALL REQUIRED SEDIMENT AND EROSION CONTROL MEASURES.
 - 2. FINAL GRADING NOT REQUIRED FOR TEMPORARY SEEDING.

E. SOIL AMENDMENTS

- FERTILIZERS SHALL BE APPLIED AT A RATE OF 600 LBS./ACRE USING 10-10-10 OR EQUIVALENT.
- PROVIDE SOIL PH TESTING. ADJUST THE PH RANGE OF SOILS THAT ARE UNACCEPTABLE PER LOCAL COOPERATIVE EXTENSION SERVICE TURF STANDARDS. INCORPORATE RAW GROUND AGRICULTURAL LIMESTONE OR ALUMINUM SULFATE UNIFORMLY AT THE RATE SPECIFIED BY THE MANUFACTURER.

F. SEEDBED PREPARATION

SOIL SHALL BE LOOSENED TO A DEPTH OF 4 INCHES BY RAKING. DISCING, OR OTHER ACCEPTABLE MEANS PRIOR TO SEEDING.

G. SEEDING

- SEED TO BE ANNUAL RYE GRASS (LOLIUM MUTIFLORUM) APPLIED
- AT A RATE OF 2.0 LBS./1000 SQ. FT. APPLY SEED UNIFORMLY WITH CYCLONE SEEDER DRILL, CULTIPACKER, OR HYDROSEEDER.
 - NOTE: IF HYDROSEEDING IS USED AND THE SEED, FERTILIZER AND MULCH ARE MIXED, THEY WILL BE MIXED ON SITE AND SEEDING SHALL BE IMMEDIATE WITHOUT INTERRUPTION. NOTE: DO NOT APPLY SEED IF GROUND IS FROZEN OR MUDDY.

H. MULCHING

- STRAW MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING (NON HYDROSEEDING) AT A RATE OF 140 LBS.± (2 BALES) PER 1000 SF. MULCH MAY BE APPLIED BY HAND OR WITH A BLOWER. MULCH SHALL BE CLEAN, WELL SEASONED STRAW FREE OF SEEDS OR ROOTS OF NOXIOUS WEEDS.
- MULCH FOR HYDROSEEDING SHALL BE WOOD CELLULOSE FIBER MULCH APPLIED AT A RATE OF 2,000 LBS. / ACRE. 1000 SF. MULCH MAY BE APPLIED BY HAND OR WITH A BLOWER.
- STRAW MULCH SHALL BE KEPT IN PLACE WITH ASPHALT EMULSION APPLIED AT A MIN. RATE OF 60 GAL. / TON OF MULCH.

CONSTRUCTION SEQUENCE

- A. FLAG ALL WORK LIMITS.
- B. NOTIFY SEDIMENT CONTROL INSPECTOR (24) HOURS PRIOR TO START OF CONSTRUCTION.
- C. IDENTIFY AND PROTECT ALL EXISTING VEGETATION TO BE SAVED
- PERFORM CLEARING AND GRADING REQUIRED FOR INSTALLATION OF PERIMETER CONTROLS.
- E. INSTALL PERIMETER RUNOFF CONTROLS; NOTIFY SEDIMENT CONTROL INSPECTOR AND OBTAIN APPROVAL BEFORE PROCEEDING FURTHER.
- COMPLETE ALL REQUIRED STOCKPILING, SITE CLEARING AND GRADING.
- CONSTRUCT PARKING LOT BASE, BUILDING FOUNDATION AND INSTALL SITE UTILITIES.
- H. INSTALL STORM DRAINAGE PROTECTION.
- WEATHER IN BUILDING.
- J. COMPLETE PARKING LOT CONSTRUCTION.
- K. COMPLETE FINAL GRADING, STABILIZATION, AND LANDSCAPING.
- NOTIFY SEDIMENT CONTROL INSPECTOR AND OBTAIN APPROVAL TO REMOVE SEDIMENT AND EROSION CONTROL.



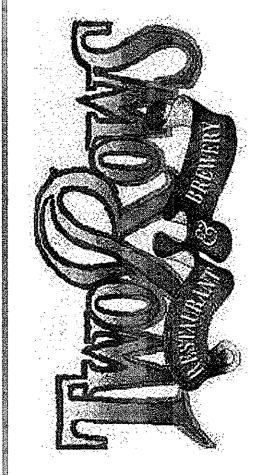
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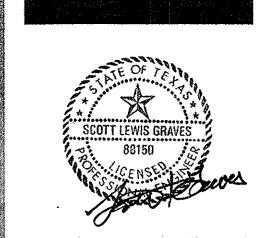
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REVISIONS

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PROTOTYPE

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STAKED AND ENTRENCHED STRAW BALE BINDING WIRE -COMPACTED SOIL TO OR TWINE -PREVENT PIPING -SEDIMENT LADEN FILTERED RUNOFF-SHALL BE INSTALLED SO THAT BINDING ARE. RATHER THAN ALONG THE TOPS AND BO PREVENT DETERIORATION OF THE ÆINDING EXCAVATED THE WIDTH OS-TO A MINIMUM DEPTH OF 4 INC THE EXCAVATED SOIL/SHALL SOIL SHALL CONFORT IHILL SIDE AND SHALL DRIVEN THROUGH BE DRIVEN JOWA STAKES (

LEAST TWO STAKES OR RE-BARS VLEACH BALE SHALL TO FORCE THE BALES TOGETHER. ENOUGH INTO THE CROUND TO E CHINKED (FILLED BY WEDGING) WITH ESCAPING BETWEEN THE BALES. (LOOSE STRAW

NSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE ROMPTLY AS NEEDED.

IMMEDIATELY UPHILL FROM A STRAW BALE BARRIER

TOP STRAW BALL BARRIER AT DRAINAGE STRUCTURES

- A. AS SOON AS ROUGH GRADES HAVE BEEN ESTABLISHED AND CATCH BASINS, CURB INLETS, LAWN DRAINS, ETC. SET STRAW BALES WILL BE PLACED AND STAKED AS SHOWN ON THE SOIL EROSION CONTROL PLAN.
- B. BALES WILL REMAIN AND BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. BALES WILL BE REPLACED AS REQUIRED DURING CONSTRUCTION.
- C. PLACEMENT OF BALES AT DRAINAGE STRUCTURES SHALL BE AS PER NOTES A. B. C. AND D ABOVE.

WOVEN WIRE FENCE (MIN. 14 1/2 GAUGE, MAX. 6" MESH SPACING) - 8' MAX. C. TO C COMPACTED FILL OVER -TOE OF FABRIC BURIED MIN. 8" DEEP & 4" WIDE 48" MIN. FENCE POSTS. DRIVEN - MIN. 24" INTO GROUND; ANGLED TOWARD FLOW. COMPACTED FILL OVER TOE OF FABRIC BURIED MIN. 8" DEEP & 8" WIDE -8" MIN. 24" MIN.

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

- A. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES.
- B. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID-SECTION.
- C. WHEN TWO SECTIONS OR FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY (6) INCHES AND FOLDED.
- D. LOCATE POSTS DOWN SLOPE OF FABRIC FOR FENCE SUPPORT.
- E. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

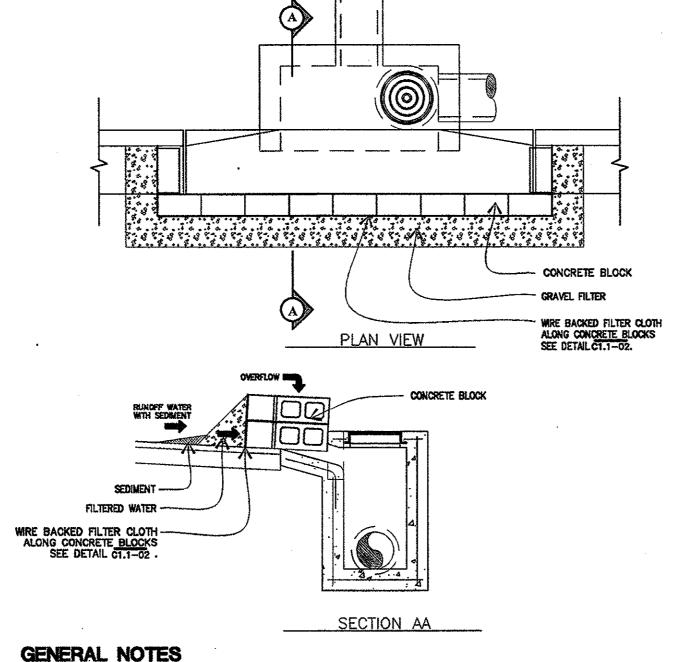
LOCATED MAXIMUM 8' C. C. WOVEN WIRE: WOVEN WIRE: 14 1/2 GA. 6" MAX. MESH OPENING FILTER CLOTH: FILTER X, MIRAFI 100X, STABI-LINKA T140N OR

APPROVED EQUAL.

STEEL EITHER "T" OR "U" TYPE

PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL. . MULCH FILTER BERM OR TUBULAR EROSION CONTROL LOGS MAY BE A AN ACCEPTABLE ALTERNATE. VERIFY WITH SEDIMENT CONTROL INSPECTOR PRIOR TO INSTALLATION.

SILT FENCE



- A. PLACE CONCRETE BLOCKS LENGTHWISE ON THEIR SIDES IN A SINGLE ROW AROUND THE PERIMETER OF THE INLET. WITH THE ENDS OF ADJACENT BLOCKS ABUTTING. THE HEIGHT OF THE BARRIER CAN BE VARIED, DEPENDING ON DESIGN NEEDS, BY STACKING COMBINATIONS OF 4-INCH. 8-INCH AND 12-INCH WIDE BLOCKS. THE BARRIER OF BLOCKS SHALL BE AT LEAST 12 INCHES HIGH AND NO GREATER THAN 24 INCHES HIGH.
- B. WIRE MESH SHALL BE PLACED OVER THE OUTSIDE VERCAL FACE (WEBBING) OF THE CONCRETE BLOCKS TO PREVENT STONE FROM BEING WASHED THROUGH THE HOLES IN THE BLOCKS. TO PREVENT STONE FROM BEING WASHED THROUGH THE HOLES IN THE BLOCKS. HARDWARE CLOTH OF COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS SHALL BE USED.
- C. STONE SHALL BE PILED AGAINST THE THE TOP OF THE BLOCK BARRIER, AS SHOWN. AASHTO-57 COURSE AGGREGATE SHALL BE USED.
- D. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS IT FUNCTION, THE STONE MUST BE PULLED AWAY FROM THE BLOCKS, CLEANED AND REPLACED

CURB INLET PROTECTION
SCALE: NONE

- FILTERED WATER

DROP INLET WITH GRATE

INLET PROTECTION

SEDIMENT LADEN RUNOFF

CONTRACTOR TO PROVIDE FILTER FABRIC OVER THE GRATE WITH A TWO INCH (2") MINIMUM LAP AS SHOWN. MAINTENANCE:

CONTRACTOR TO CLEAN FILTER AFTER EVERY STORM. IF THE FABRIC BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PASSES FILTERED WATER, THE SEDIMENT SHALL BE REMOVED AND THE FABRIC SHALL BE REPLACED. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE. THE FABRIC SHALL BE REMOVED WHEN THE DRAINAGE AREA HAS BEEN ADEQUATELY STABILIZED.

GRATE INLET PROTECTION

BACKFILL

I. INTRODUCTION.

Excavating is recognized as one of the most hazardous construction operations. OSHA recently revised Subpart P, Excavations, of 29 CFR 1926.650, .651, and .652 to make the standard easier to understand, permit the use of performance criteria where possible, and provide construction employers with options when classifying soil and selecting employee protection methods.

This chapter is intended to assist OSHA Technical Manual users, safety and health consultants, OSHA field staff, and others in the recognition of trenching and shoring hazards and their prevention.

II. DEFINITIONS.

- A. ACCEPTED ENGINEERING PRACTICES are procedures compatible with the standards of practice required of a registered professional engineer.
- B. ADJACENT STRUCTURE STABILITY refers to the stability of the foundation(s) of adjacent structures whose location may create surcharges, changes in soil conditions, or other disruptions that have the potential to extend into the failure zone of the excavation or trench.
- C. COMPETENT PERSON is an individual who is capable of identifying existing and predictable hazards or working conditions that are hazardous, unsanitary, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate or control these hazards and conditions.
- D. CONFINED SPACE is a space that, by design and/or configuration, has limited openings for entry and exit, unfavorable natural ventilation, may contain or produce nazardous substances, and is not intended for continuous employee occupancy.
- E. EXCAVATION. An Excavation is any man-made cut, cavity, trench, or depression in an earth surface that is formed by earth removal. A Trench is a narrow excavation (in relation to its length) made below the surface of the ground. In general, the depth of a trench is greater than its width, and the width (measured at the bottom) is not greater than 15 ft (4.6 m). If a form or other structure installed or constructed in an excavation reduces the distance between the form and the side of the excavation to 15 ft (4.6 m) or less (measured at the bottom of the excavation), the excavation is also considered to be a trench.
- F. HAZARDOUS ATMOSPHERE is an atmosphere that by reason of being explosive, flammable, poisonous, comosive, oxidizing, imitating, oxygen-deficient, toxic, or otherwise harmful may cause death, illness, or injury to persons exposed to it.
- G. <u>INGRESS AND EGRESS</u> mean "entry" and "exit," respectively. In trenching and excavation operations, they refer to the provision of safe means for employees to enter or exit an excavation or trench
- H. PROTECTIVE SYSTEM refers to a method of protecting employees from cave-ins, from material that could fall or roll from an excavation face or into an excavation, and from the collapse of adjacent structures. Protective systems include support systems, sloping and benching systems, shield systems, and other systems that provide the necessary protection.
- REGISTERED PROFESSIONAL ENGINEER is a person who is registered as a professional engineer in the state where the work is to be performed. However, a professional engineer who is registered in any state is deemed to be a "registered professional engineer" within the meaning of Subpart P when approving designs for "manufactured protective systems" or "tabulated data" to be used in interstate commerce.
- J. SUPPORT SYSTEM refers to structures such as underpinning, bracing, and shoring that provide support to an adjacent structure or underground installation or to the sides of an excavation or trench
- K. <u>SUBSURFACE ENCUMBRANCES</u> include underground utilities, foundations, streams, water tables, transformer vaults, and geological anomalies
- L. SURCHARGE means an excessive vertical load or weight caused by spoil, overburden, vehicles, equipment, or activities that may affect trench stability.
- M. TABULATED DATA are tables and charts approved by a registered professional engineer and used to design and construct a protective system.
- N. UNDERGROUND INSTALLATIONS include, but are not limited to, utilities (sewer, telephone, fuel, electric, water, and other product lines), tunnels, shafts, vaults, foundations, and other underground fixtures or equipment that may be encountered during excavation or trenching work.
- O. <u>UNCONFINED COMPRESSIVE STRENGTH</u> is the load per unit area at which soil will fail in compression. This measure can be determined by laboratory testing, or it can be estimated in the field using a pocket penetrometer, by thumb penetration tests, or by other methods.
- DEFINITIONS THAT ARE NO LONGER APPLICABLE. For a variety of reasons, several terms commonly used in the past are no longer used in revised Subpart P.

These include the following:

Angle of Repose Conflicting and inconsistent definitions have led to confusion as to the meaning of this phrase. This term has been replaced by Maximum Allowable

Bank, Sheet Pile, and Walls: Previous definitions were unclear or were used inconsistently in the former standard.

Hard Compact Soil and Unstable Soil The new soil classification system in revised Subpart P uses different terms for these soil types.

III. OVERVIEW: SOIL MECHANICS.

A number of stresses and deformations can occur in an open cut or trench. For example, increases or decreases in moisture content can adversely affect the stability of a trench or excavation. The following diagrams show some of the more frequently identified causes of trench failure.

A. TENSION CRACKS. Tension cracks usually form at a horizontal distance of 0.5 to 0.75 times the depth of the trench, measured from the top of the vertical face of the trench. See Fig. 5:2-1 for additional details.

B. SLIDING or sluffing may occur as a

C. TOPPLING. In addition to sliding,

crack line and topples into the

D. SUBSIDENCE AND BULGING. An

tension cracks can cause toppling.

Toppling occurs when the trench's

vertical face shears along the tension

unsupported excavation can create an

unbalanced stress in the soil, which, in

turn, causes subsidence at the surface

trench. If uncorrected, this condition can

cause face failure and entrapment of

and bulging of the vertical face of the

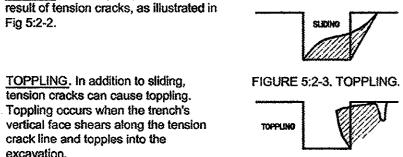
Fig 5:2-2.

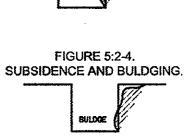
excavation

FIGURE 5:2-2. SLIDING. SLEDING

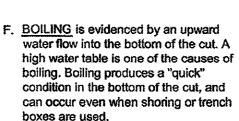
FIGURE 5:2-1.

TENSION CRACK.





E. HEAVING OR SQUEEZING, Bottom neaving or squeezing is caused by the downward pressure created by the weight of adjoining soil. This pressure causes a bulge in the bottom of the cut, as illustrated in the drawing above. Heaving and squeezing can occur even when shoring or shielding has been properly installed.



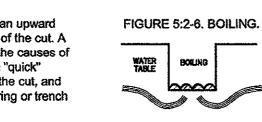


FIGURE 5:2-5.

HEAVING OR SQUEEZING

G. UNIT WEIGHT OF SOILS refers to the weight of one unit of a particular soil. The weight of soil varies with type and moisture content. One cubic foot of soil can weigh from 110 pounds to 140 pounds or more, and one cubic meter (35.3 cubic feet) of soil can weigh more than 3,000 pounds.

IV. DETERMINATION OF SOIL TYPE.

workers in the trench.

OSHA categorizes soil and rock deposits into four types, A through D, as follows:

- A. STABLE ROCK is natural solid mineral matter that can be excavated with vertical sides and remain intact while exposed. It is usually identified by a rock name such as granite or sandstone. Determining whether a deposit is of this type may be difficult unless it is known whether cracks exist and whether or not the cracks run into or away
- B. TYPE A SOILS are cohesive soils with an unconfined compressive strength of 1.5 tons per square foot (tsf) (144 kPa) or greater. Examples of Type A cohesive soils are often: clay, silty clay, sandy clay, clay loam and, in some cases, silty clay loam and sandy clay loam. (No soil is Type A if it is fissured, is subject to vibration of any type, has previously been disturbed, is part of a sloped, layered system where the layers dip into the excavation on a slope of 4 horizontal to 1 vertical (4H:1V) or greater, or has seeping water.
- C. TYPE B SOILS are cohesive soils with an unconfined compressive strength greater than 0.5 tsf (48 kPa) but less than 1.5 sf (144 kPa). Examples of other Type B soils are: angular gravel; silt; silt loam; previously disturbed soils unless otherwise classified as Type C; soils that meet the unconfined compressive strength or cementation requirements of Type A soils but are fissured or subject to vibration; dry unstable rock; and layered systems sloping into the trench at a slope less than 4H:1V (only if the material would be classified as a Type B soil).
- D. TYPE C SOILS are cohesive soils with an unconfined compressive strength of 0.5 tsf (48 kPa) or less. Other Type C soils include granular soils such as gravel, sand and loamy sand, submerged soil, soil from which water is freely seeping, and submerged rock that is not stable. Also included in this classification is material in a sloped, layered system where the layers dip into the excavation or have a slope of four horizontal to one vertical (4H:1V) or greater.
- E. LAYERED GEOLOGICAL STRATA. Where soils are configured in layers, i.e., where a layered geologic structure exists, the soil must be classified on the basis of the soil classification of the weakest soil layer. Each layer may be classified individually if a more stable layer lies below a less stable layer, i.e., where a Type C soil rests on top

V. TEST EQUIPMENT AND METHODS FOR EVALUATING SOIL TYPE.

Many kinds of equipment and methods are used to determine the type of soil prevailing in an area, as described below.

A. POCKET PENETROMETER. Penetrometers are direct-reading, spring-operated instruments used to determine the unconfined compressive strength of saturated cohesive soils. Once pushed into the soil, an indicator sleeve displays the reading. The instrument is calibrated in either tons per square foot (tsf) or kilograms per square centimeter (kPa). However, Penetrometers have error rates in the range of ± 20-40 %.

- . Shearvane (Torvane). To determine the unconfined compressive strength of the soil with a shearvane, the blades of the vane are pressed into a level section of disturbed soil, and the torsional knob is slowly turned until soil failure occurs. The direct instrument reading must be multiplied by 2 to provide results in tons per square foot (tsf) or kilograms per square centimeter (kPa).
- 2. Thumb Penetration Test. The thumb penetration procedure involves an attempt to press the thumb firmly into the soil in question. If the thumb makes an ndentation in the soil only with great difficulty, the soil is probably Type A. If the thumb penetrates no further than the length of the thumb nail, it is probably Type B soil, and if the thumb penetrates the full length of the thumb, it is Type C soil. The thumb test is subjective and is therefore the least accurate of the three
- 3. Dry Strength Test. Dry soil that crumbles freely or with moderate pressure into individual grains is granular. Dry soil that falls into clumps that subsequently break into smaller clumps (and the smaller clumps can be broken only with difficulty) is probably clay in combination with gravel, sand, or silt. If the soil breaks into clumps that do not break into smaller clumps (and the soil can be broken only with difficulty), the soil is considered unless there is visual indication of
- B. PLASTICITY OR WET THREAD TEST. This test is conducted by molding a moist sample of the soil into a ball and attempting to roll it into a thin thread approximately 1/8 inch (3 mm) in diameter (thick) by 2 inches (50 mm) in length. The soil sample is held by one end. If the sample does not break or tear, the soil
- C. VISUAL TEST. A visual test is a qualitative evaluation of conditions around the site. In a visual test, the entire excavation site is observed, including the soil adjacent to the site and the soil being excavated. If the soil remains in clumps, it is cohesive; if it appears to be coarse-grained sand or gravel, it is considered granular. The evaluator also checks for any signs of vibration.

During a visual test, the evaluator should check for crack-line openings along the failure zone that would indicate tension cracks, look for existing utilities that indicate that the soil has previously been disturbed, and observe the open side of the excavation for indications of layered geologic structuring.

The evaluator should also look for signs of bulging, boiling, or sluffing, as well as for signs of surface water seeping from the sides of the excavation or from the water table. If there is standing water in the cut, the evaluator should check for "quick" conditions (see Paragraph III. F. in this chapter). In addition, the area adjacent to the excavation should be checked for signs of foundations or other intrusions into the failure zone, and the evaluator should check for surcharging and the spoil distance from the edge of the excavation.

VI. SHORING TYPES.

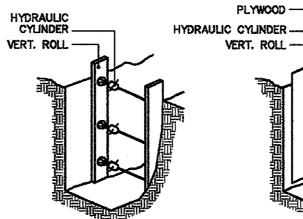
Shoring is the provision of a support system for trench faces used to prevent movement of soil, underground utilities, roadways, and foundations. Shoring or shielding is used when the location or depth of the cut makes sloping back to the maximum allowable slope impractical. Shoring systems consist of posts, wates, struts, and sheeting. There are two basic types of shoring, timber and aluminum

A. HYDRAULIC SHORING. The trend today is toward the use of hydraulic shoring, a prefabricated strut and/or wate system manufactured of aluminum or steel. Hydraulic shoring provides a critical safety advantage over timber shoring because workers do not have to enter the trench to install or remove hydraulic shoring. Other advantages of most hydraulic systems are that they:

- Are light enough to be installed by one worker;
- Are gauge-regulated to ensure even distribution of pressure along the trench line; . Can have their trench faces "preloaded" to use the soil's natural cohesion to prevent movement; and
- Can be adapted easily to various trench depths and widths.

All shoring should be installed from the top down and removed from the bottom up. Hydraulic shoring should be checked at least once per shift for leaking hoses and/or cylinders, broken connections, cracked nipples, bent bases, and any other damaged or defective parts.

FIGURE V:2-8. SHORING VARIATIONS: TYPICAL ALUMINUM HYDRAULIC SHORING INSTALLATIONS.





VII. SHIELDING TYPES.

was designed to withstand.

Earth excavation to a depth of 2 ft (0.61 m)

below the shield is permitted, but only if the

the support system. Conditions of this type

heaving, and boiling as well as surcharging,

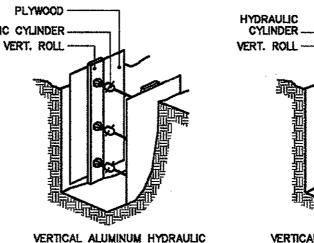
excavating below the bottom of a shield. Careful

above is the primary and most prudent approach

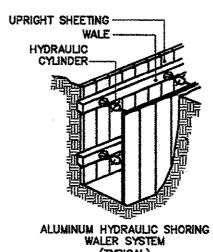
visual inspection of the conditions mentioned

vibration, adjacent structures, etc., on

to hazard identification and control.



VERTICAL ALUMINUM HYDRAULIC



- UPRIGHT (WHEN SPACED)

- B. <u>PNEUMATIC SHORING</u> works in a manner similar to hydraulic shoring. The primary difference is that pneumatic shoring uses air pressure in place of hydraulic pressure. A disadvantage to the use of pneumatic shoring is that an air compressor must be on site.
- Screw Jacks. Screw jack systems differ from hydraulic and pneumatic systems in nat the struts of a screw jack system must be adjusted manually. This creates a hazard because the worker is required to be in the trench in order to adjust the strut. In addition, uniform "preloading" cannot be achieved with screw jacks, and their weight creates handling difficulties.
- 2. <u>Single-Cylinder Hydraulic Shores</u>. Shores of this type are generally used in a water system, as an assist to timber shoring systems, and in shallow trenches where face stability is required.
- 3. <u>Underpinning</u>. This process involves stabilizing adjacent structures, foundations, and other intrusions that may have an impact on the excavation. As the term indicates, underpinning is a procedure in which the foundation is physically reinforced. Underpinning should be conducted only under the direction and with the approval of a registered professional engineer.

A. TRENCH BOXES are different from shoring because, instead of

shoring up or otherwise supporting the trench face, they are

intended primarily to protect workers from cave-ins and similar

box and the face of the trench should be as small as possible.

backfilled to prevent lateral movement of the box. Shields may

not be subjected to loads exceeding those which the system

incidents. The excavated area between the outside of the trench

the space between the trench boxes and the excavation side are

FIGURE V:2-9. SHORING VARIATIONS.

FIGURE 5:2-7. TIMBER SHORING.

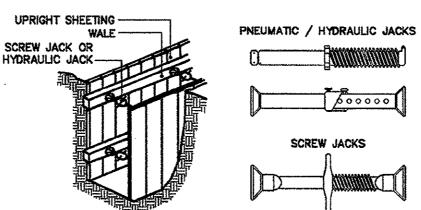
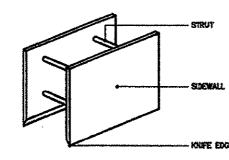
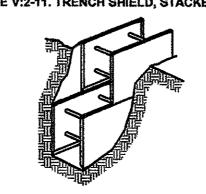


FIGURE V:2-10. TRENCH SHIELD FIGURE V:2-11. TRENCH SHIELD, STACKED.



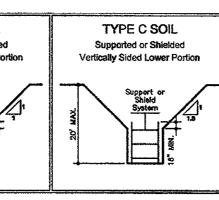


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B. COMBINED USE. Trench boxes are generally used in open areas, but they also may be used in combination with sloping and benching. The box should extend at least 18 in (0.45 m) above the surrounding area if there is sloping toward excavation. This can be accomplished by providing a benched area adjacent to the box.

shield is designed to resist the forces calculated for the full depth of the trench and there are no indications while the trench is open of possible loss of soil from behind or below the bottom of require observation on the effects of bulging,

TYPE A SOIL TYPE B SOIL Supported or Shielded Supported or Shielded Vertically Sided Lower Portion Vertically Sided Lower Portion



A. SLOPING. Maximum allowable slopes for excavations less than 20 ft (6.09 m) based on soil type and angle to the horizontal are as follows:

TABLE V:2-1. ALLOWABLE SLOPES.

Soil Type Height/Depth Ratio Slope Angle Stable Rock Vertical 3/4:1 Type A Type B 1:1 45° 1.5:1 Type C Type A (short term) 0.5:1 (For a MAXIMUM excavtion of 12 feet)

FIGURE V:2-13. SLOPE CONFIGURATIONS: EXCAVATIONS IN LAYERED SOILS.

FIGURE V:2-12. SLOPE AND SHIELD CONFIGURATIONS.

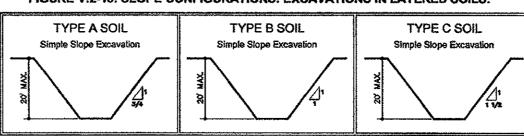


FIGURE V:2-13. SLOPE CONFIGURATIONS: EXCAVATIONS IN LAYERED SOILS. (continued)

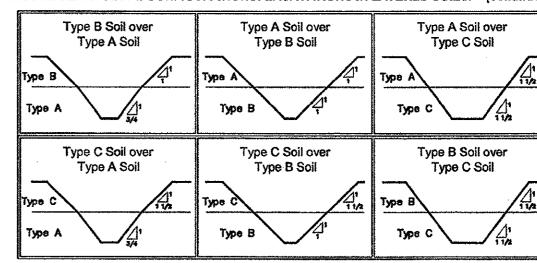
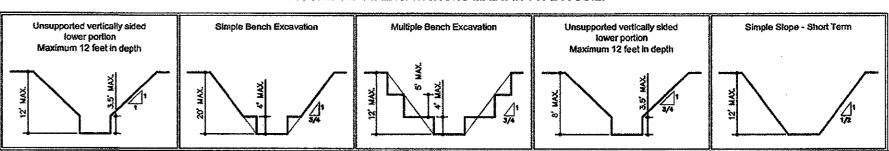


FIGURE V:2-14. EXCAVATIONS MADE IN TYPE A SOIL



BENCHING. There are two basic types of benching, simple and multiple. The type of soil determines the horizontal to vertical ratio of the benched

As a general rule, the bottom vertical height of the trench must not exceed 4 ft (1.2 m) for the first bench. Subsequent benches may be up to a maximum of 5 ft (1.5 m) vertical in Type A soil and 4 ft (1.2 m) in Type B soil to a total trench depth of 20 ft (6.0 m). All subsequent benches must be below the maximum allowable slope for that soil type. For Type B soil the trench excavation is permitted in cohesive soil only.

FIGURE V:2-15. EXCAVATIONS MADE IN TYPE B SOIL Simple Bench Excavation Multiple Bench Excavation ermitted in cohesive soils ONLY) (Permitted in cohesive soils ONLY

FIGURE V:2-16. TEMPORARY SPOIL.

IX. SPOIL.

TEMPORARY SPOIL. Temporary spoil must be placed no closer than 2 ft (0.61 m) from the surface edge of the excavation, measured from the nearest base of the spoil to the cut. This distance should not be measured from the crown of the spoil deposit. This distance requirement ensures that loose rock or soil from the temporary spoil will not fall on employees in the trench.

Spoil should be placed so that it channels rainwater and other run-off water away from the excavation. Spoil should be placed so that it cannot accidentally run, slide, or fall back into the

PERMANENT SPOIL. Permanent spoil should be placed at some distance from the excavation. Permanent spoil is often created where underpasses are built or utilities are buried. The improper placement of permanent spoil, i.e. insufficient distance from the working excavation, can cause an excavation to be out of compliance with the horizontal-to-vertical ratio requirement for a particular excavation. This can usually be determined through visual observation. Permanent spoil can change undisturbed soil to disturbed soil and dramatically after slope requirements.

X. SPECIAL HEALTH AND SAFTY CONSIDERATIONS.

- COMPETENT PERSON. The designated competent person should have and be able to demonstrate the following: • Training, experience, and knowledge of (1) soil analysis, (2) use of protective systems and (3) requirements of 29 CFR Part 1926 Subpart P. • Ability to detect (1) conditions that could result in cave-ins, (2) failures in protective systems, (3) hazardous atmospheres and (4) other hazards including those Authority to take prompt corrective measures to eliminate existing and predictable hazards and to stop work when required.
- SURFACE CROSSING OF TRENCHES. Surface crossing of trenches should be discouraged; however, if trenches must be crossed, such crossings are permitted only under the following conditions: Vehicle crossings must be designed by and installed under the supervision of a registered professional engineer Walkways or bridges must be provided for foot traffic. These structures shall (1) have a safety factor of 4, (2) have a minimum clear width of 20 in (0.51m), (3)
- <u>INGRESS AND EGRESS</u>. Access to and exit from the trench require the following conditions:

Metal ladders should be used with caution, particularly when electric utilities are present

- Trenches 4 ft or more in depth should be provided with a fixed means of egress. • Spacing between ladders or other means of egress must be such that a worker will not have to travel more than 25 ft laterally to the nearest means of egress. Ladders must be secured and extend a minimum of 36 in (0.9 m) above the landing.
- D. EXPOSURE TO VEHICLES. Procedures to protect employees from being eral injured or killed by vehicle traffic include: Providing employees with and requiring them to wear warning vests or other suitable garments marked with or made of reflectorized or high-visibility materials. • Requiring a designated, trained flagperson along with signs, signals, and barricades when necessary.
- E. EXPOSURE TO FALLING LOADS . Employees must be protected from loads or
 - objects falling from lifting or digging equipment. Procedures designed to ensure their protection include;

be fitted with standard rails and (4) extend a minimum of 24 in (.61 m) past the surface edge of the trench.

- Employees are not permitted to work under raised loads.
- Employees are required to stand away from equipment that is being loaded or unloaded. • Equipment operators or truck drivers may stay in their equipment during loading and unloading if the equipment is properly equipped with a cab shield or
- WARNING SYSTEMS FOR MOBILE EQUIPMENT. The following steps should be taken to prevent vehicles from accidentally falling into the trench: Barricades must be installed where necessary. Hand or mechanical signals must be used as required.
- Stop logs must be installed if there is a danger of vehicles falling into the trench. Soil should be graded away from the excavation; this will assist in vehicle control and channeling of run-off water.
- G. HAZARDOUS ATMOSPHERES AND CONFINED SPACES. Employees shall not be permitted to work in hazardous and/or toxic atmospheres. Such
- atmospheres include those with: . Less than 19.5% or more than 23.5% oxygen; • A combustible gas concentration greater than 20 % of the lower flammable limit; and Concentrations of hazardous substances that exceed those specified in the Threshold Limit Values for Airborne Contaminants established by the ACGIH

(American Conference of Governmental Industrial Hygienists). All operations involving such atmospheres must be conducted in accordance with OSHA requirements for occupational health and environmental controls (see Subpart D of 29 CPR 1926) for personal protective equipment and for lifesaving equipment (see Subpart E, 29 CFR 1926). Engineering controls (e.g.,

When testing for atmospheric contaminants, the following should be considered:

ventilation) and respiratory protection may be required.

• Employees who enter confined spaces must be trained.

- Testing should be conducted before employees enter the trench and should be done regularly to ensure that the trench remains safe.
- The frequency of testing should be increased if equipment is operating in the trench. • Testing frequency should also be increased if welding, cutting, or burning is done in the trench.

Employees required to wear respiratory protection must be trained, fit-tested, and enrolled in a respiratory protection program. Some trenches qualify as confined spaces. When this occurs, compliance with the Confined Space Standard is also required.

- H. EMERGENCY RESCUE EQUIPMENT. Emergency rescue equipment is required when a hazardous atmosphere exists or can reasonably be expected to exist. Requirements are as follows: • Respirators must be of the type suitable for the exposure. Employees must be trained in their use and a respirator program must be instituted. Attended (at all times) lifelines must be provided when employees enter bell-bottom pier holes, deep confined spaces, or other similar hazards.
- STANDING WATER AND WATER ACCUMULATION. Methods for controlling standing water and water accumulation must be provided and should consist of the following if employees are permitted to work in the excavation:
- Use of special support or shield systems approved by a registered professional engineer. Water removal equipment, i.e. well pointing, used and monitored by a competent person.
- Safety hamesses and lifelines used in conformance with 29 CFR 1926.104.
- Surface water diverted away from the trench. Employees removed from the trench during rainstorms.
- Trenches carefully inspected by a competent person after each rain and before employees are permitted to re-enter the trench.
- INSPECTIONS. Inspections shall be made by a competent person and should be documented. The following guide specifies the frequency and conditions
 - requiring inspections: · Daily and before the start of each shift;
 - · As dictated by the work being done in the trench;
 - After every rainstorm; · After other events that could increase hazards, e.g. snowstorm, windstorm, thaw, earthquake, etc.;
 - When fissures, tension cracks, sloughing, undercutting, water seepage, bulging at the bottom, or other similar conditions occur;
 - When there is a change in the size, location, or placement of the spoil pile; and • When there is any indication of change or movement in adjacent structures.



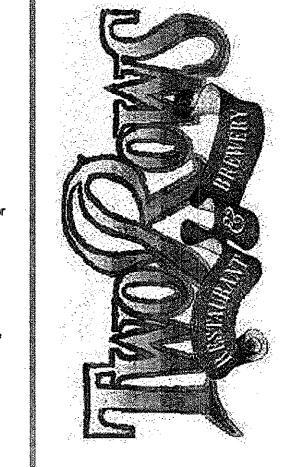
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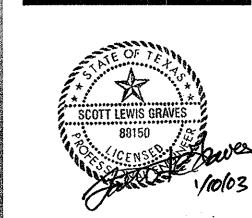
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Miami

expesite.com



17225 Dallas Parkway Addison, TX



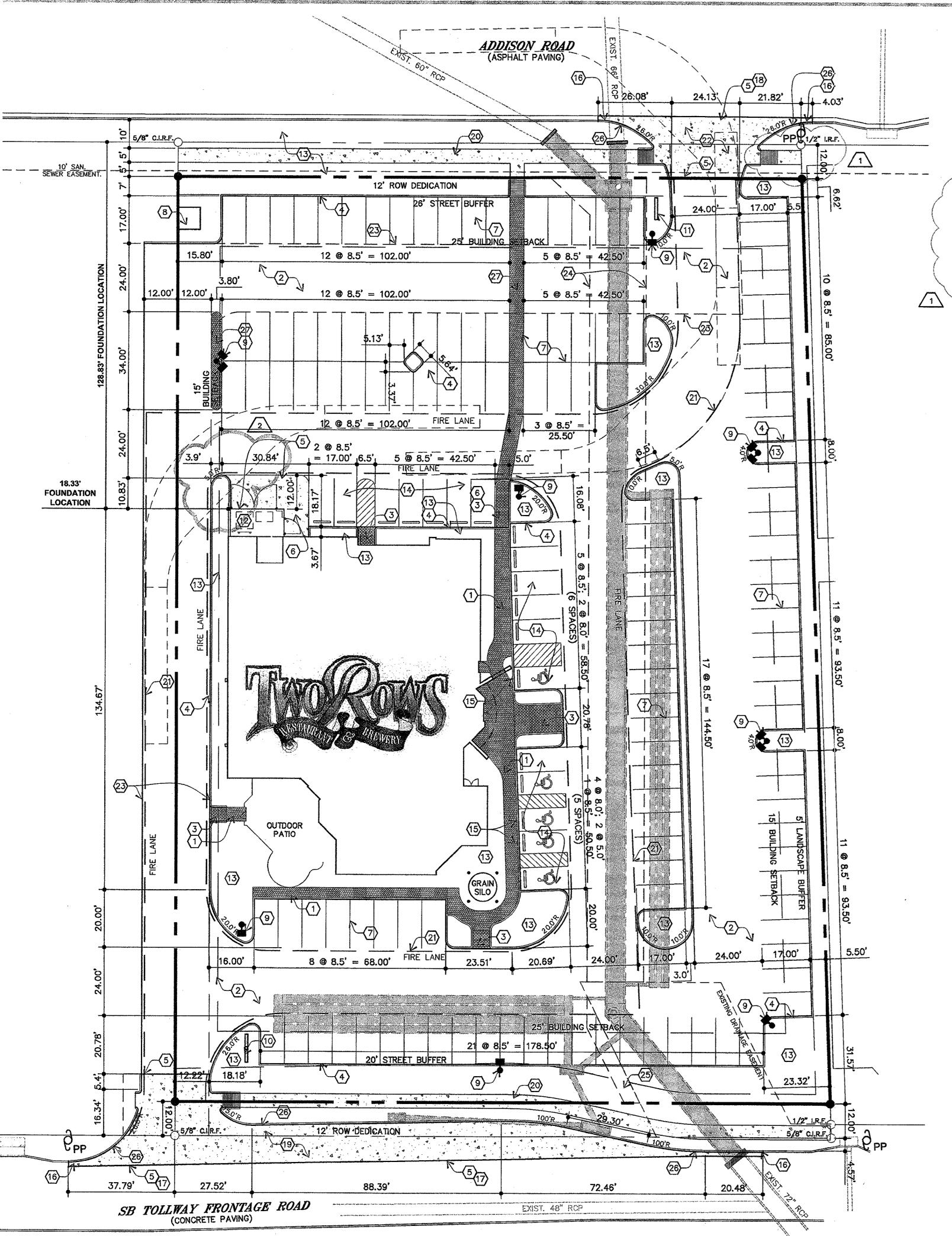
REVISIONS

PROTOTYPE

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GENERAL NOTES

- ALL UTILITY WORK WITHIN THE RIGHT OF WAY OF THE TOLLWAY WILL BE GOVERNED BY THE CITY OF DALLAS. CONTRACTOR WILL KEEP A COPY OF THE UTILITY PERMIT ISSUED BY THE CITY OF DALLAS ON SITE AT ALL TIMES.
- 2. 48 HOURS PRIOR TO BEGINNING WORK WITHIN THE RIGHT OF WAY OF THE TOLLWAY, CONTRACTOR MUST INFORM THE CITY OF DALLAS TRANSPORTATION DEPARMENT. CONTRACTOR WILL CONTACT: RUSSELL FINELY

214.957.1036 (MOBIL PHONE) 214.670.5896 (OFFICE)

ALL TRAFFIC CONTROL WILL BE SUBJECT TO THE INSPECTION AND APPROVAL OF THE CITY OF DALLAS.

ALL UTILITY WORK WITHIN THE RIGHT OF WAY OF ADDISON ROAD WILL BE GOVERNED BY THE TOWN OF ADDISON, CONTRACTOR WILL KEEP A COPY OF THE ROW/EXCAVATION PERMIT ISSUED BY THE TOWN OF ADDISON ON SITE AT

- ALL UTILITY, STREET AND DRAINAGE WORK NOT WITHIN THE RIGHT OF WAY OF THE TOLLWAY WILL COMPLY WITH THE TOWN OF ADDISON STANDARDS AND SPECIFICATIONS. ALL WORK WILL BE INSPECTED AND APPROVED BY THE TOWN OF ADDISON PUBLIC WORKS DEPARTMENT.
- 5. TRAFFIC CONTROL ON ADDISON ROAD WILL COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

KEYED NOTES

- MODULAR BLOCK PAVERS (SIDEWALK), SEE SHEET C3.3 AND C3.4 .
- (2) MODULAR BLOCK PAVERS (PAVEMENT), SEE SHEET C3.3 AND C3.4 .
- MODULAR BLOCK PAVERS (ADA COMPLIANT), SEE SHEET C3.3 AND C3.4 .
- FORMED CONCRETE CURB, SEE DETAIL C2.1-08.
- HEAVY-DUTY CONCRETE PAVING AND TURN DOWN EDGE. SEE DETAIL C2.1-02 AND C2.1-04.
- 6 SERVICE RAMP, SEE DETAIL C2.1-09.
- 4" CONTRASTING COLORED MODULAR BLOCK PAVERS. SEE SHEET C3.3
 AND C3.4 .
- CONCRETE TRANSFORMER PAD AND POSTS PER LOCAL UTILITY SPECIFICATIONS.
- 9 SITE LIGHT, SEE SHEET C4 AND DETAIL C4.1-05.
- SITE SIGN (POLE). ALL SIGNAGE SHALL COMPLY WITH THE TOWN OF ADDISON REQUIREMENTS. VERIFY SIZE AND EXACT LOCATION WITH SIGN COMPANY REPRESENTATIVE.
- SITE SIGN (MONUMENT). ALL SIGNAGE SHALL COMPLY WITH THE TOWN OF ADDISON REQUIREMENTS. VERIFY SIZE AND EXACT LOCATION WITH SIGN COMPANY REPRESENTATIVE.
- TRASH ENCLOSURE, SEE SHEET A4.2 AND S1.0 .
- LANDSCAPING OR LAWN AREA. SEE LANDSCAPE PLANS.
- AREA TO MEET ADA AND LOCAL ACCESSIBILITY CODES AND REQUIREMENTS. PAVEMENT AT HANDICAP SPACES SHALL SLOPE UP TO SIDEWALK ELEVATION. SEE DETAIL C2.1-05. SEE SHEET C3 FOR TOP AND BOTTOM CURB ELEVATIONS. PROVIDE 6' LONG CONCRETE BUMPER BLOCKS AT HANDICAP PARKING SPACES AND OTHER NOTED PARKING SPACES, SECURE WITH 2 #4 RODS, 4' LONG.
- GENERAL CONTRACTOR TO PROVIDE AND INSTALL (5) POSTS FOR HANDICAP PARKING SIGNS. SIGNS PROVIDED BY GENERAL CONTRACTOR TO MEET ALL LOCAL REQUIREMENTS, SEE DETAIL C2.1-07.
- TAPER LAST 10' OF 6" CONCRETE CURB FROM TYPICAL CURB DETAIL TO MEET AND MATCH CONFIGURATION AND ELEVATION OF EXISTING ADJOINING CURB OR PAVEMENT.
- DRIVEWAY TIE-IN (CONCRETE ROAD). SAWCUT EDGE OF EXISTING PAVING 2'0" FROM BACK OF CURB. APPROACH IS TO MEET AND MATCH EXISTING ROAD PAVING. ALL WORK IS TO BE DONE IN ACCORDANCE WITH LOCAL GOVERNING REGULATIONS.
- DRIVEWAY TIE-IN (ASPHALT ROAD), SEE DETAIL C2.1-04. SAW CUT A CLEAN EDGE AND REPAIR EXISTING ASPHALT AS NECESSARY. APPROACH IS TO MEET AND MATCH EXISTING ROAD PAVING. ALL WORK IS TO BE DONE IN ACCORDANCE WITH LOCAL GOVERNING REGULATIONS.
- 12' WIDE CONCRETE TURNLANE. SEE HEAVY-DUTY DETAIL C2.1-02 FOR PAVEMENT DETAIL AND C2.1-11 FOR TURNLANE SECTION.
- 5' WIDE CONCRETE SIDEWALK. SEE DETAIL C2.1-01
- MODULAR BLOCK PAVERS (FIRE LANE). SEE SHEET C3.3 AND C3.4 .
- CONCRETE DRIVE APPROACH. SEE DETAIL C2.1-02.
- 24 FOOT ACCESS EASEMENT TO BE FILED UNDER SEPARATE INSTRUMENT DI UINERO
- 20 FOOT DRAINAGE EASEMENT.
- DRAINAGE EASEMENT.
- MONOLITHIC CONCRETE CURB (CONCRETE PAVING ONLY). SEE DETAIL C2.1-10.
- MODULAR BLOCK PAVERS (PAVEMENT), SEE SHEET C3.3 AND C3.4 . COLOR TO MATCH ADA COMPLIANT RAMPS. LAYING PATTERN TO BE DIFFERENT THAN ADJACENT PAVEMENT.

PARKING TABULATION

REQUIRED **PARKING**

1 PARKING SPACES PER 70 SF 10,120 SF / 70 = 144.6 = 145 REQUIRED

PARKING PROVIDED 140 SPACES + 5 H.C. SPACES 145 PARKING SPACES TOTAL

STAKING NOTES

- A. THE BUILDING AND PARKING ARE PARALLEL AND PERPENDICULAR TO EAST/WEST AND SOUTH PROPERTY LINES.
- B. ALL EXISTING CONDITIONS, TOPOGRAPHY, UTILITIES, EASEMENTS & LEGAL DESCRIPTION IS AS TAKEN FROM A SURVEY OF LAND SITUATED IN CITY OF ADDISION, DALLAS COUNTY, TEXAS AS PREPARED BY:

VESELKA, MYCOSKIE & ASSOCIATES 200 E. ABRAM STREET ARLINGTON, TEXAS 76010 817.467.1671

- C. NOTIFY OWNER OF ANY DISCREPANCIES FOUND.
- D. ALL RADII ARE 3.0' UNLESS NOTED.
- E. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- F. REGULAR PARKING STALLS ARE 8.5' x 17.0'.
- G. HANDICAP PARKING STALLS ARE 8.0' x 17.0'.

SITE DATA

PROPERTY OWNER: TWO ROWS ADDISON, L.P.

PROPOSED USE: RESTAURANT

ZONING DISTRICT: LR

ADJACENT ZONING CLASSIFICATION:

NORTH: SOUTH: LR WEST: R-1 / PD

BUILDING SETBACK:

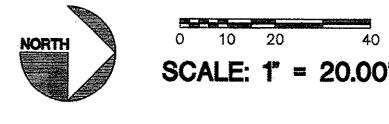
FRONT YARD...... 25 FEET 25 FEET

PARCEL SIZE: **BUILDING AREA:** GREEN AREA: **IMPERVIOUS AREA: BUILDING HEIGHT:** NO. OF STORIES:

SIDE YARD...

73,984 SF (1.70 ACRES) 10,120 SF 16,405 SF (22% COVERAGE) 47,459 SF 25'-0"

15 FEET



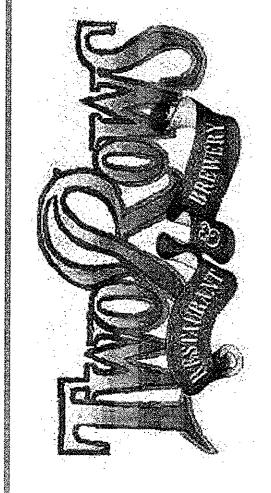


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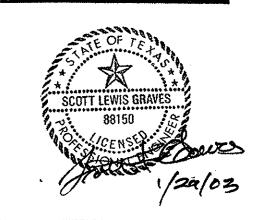
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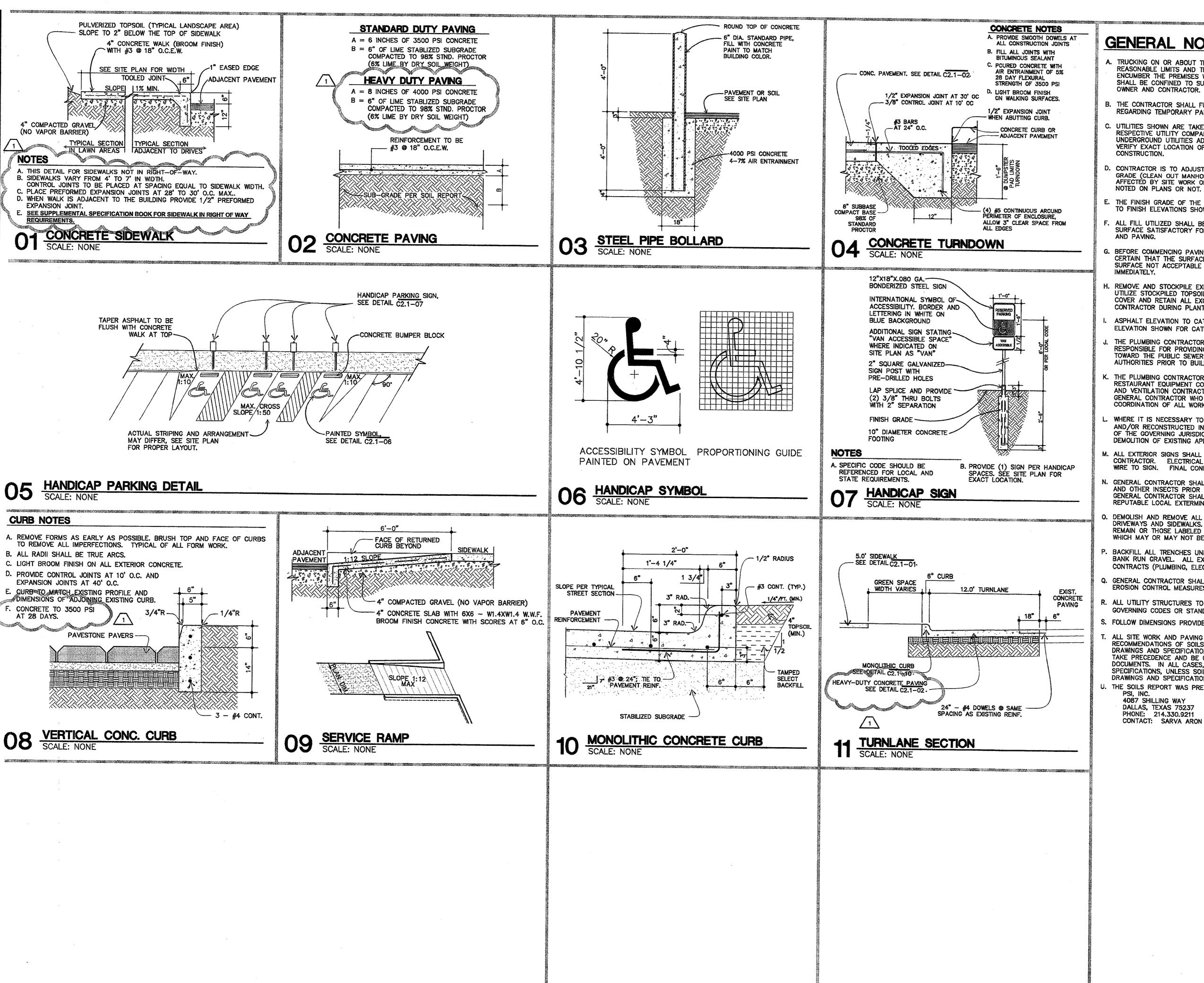
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Civil Resubmittal 01/10/03

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GENERAL NOTES

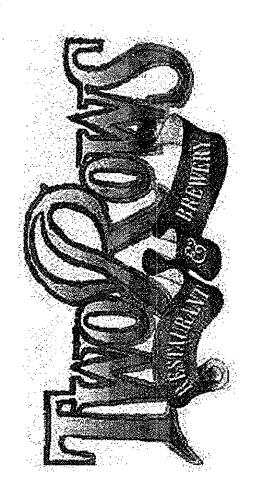
- A. TRUCKING ON OR ABOUT THE SITE WILL BE PERMITTED ONLY WITHIN REASONABLE LIMITS AND THE CONTRACTOR SHALL NOT UNREASONABLY ENCUMBER THE PREMISES WITH EQUIPMENT AND MATERIALS. THE STORAGE SHALL BE CONFINED TO SUCH LIMITS AS MAY BE JOINTLY AGREED UPON BY OWNER AND CONTRACTOR.
- B. THE CONTRACTOR SHALL FURTHER ENFORCE THE OWNERS INSTRUCTIONS REGARDING TEMPORARY PARKING, USE OF ROADS, AND FIRE PREVENTION.
- C. UTILITIES SHOWN ARE TAKEN FROM THE SURVEY AND RECORDS OF RESPECTIVE UTILITY COMPANIES AND DO NOT NECESSARILY REPRESENT ALL UNDERGROUND UTILITIES ADJACENT TO OR UPON SITE SHOWN ON PLAN. VERIFY EXACT LOCATION OF UNDERGROUND UTILITIES PRIOR TO BEGINNING
- D. CONTRACTOR IS TO ADJUST ANY UTILITY ELEMENT MEANT TO BE FLUSH WITH GRADE (CLEAN OUT MANHOLES, CATCH BASINS, INLETS, ETC.) THAT IS AFFECTED BY SITE WORK OR GRADE CHANGES, WHETHER SPECIFICALLY NOTED ON PLANS OR NOT. REFER TO SHEET C2.
- E. THE FINISH GRADE OF THE BLACKTOP PAVEMENT SHALL SLOPE UNIFORMLY TO FINISH ELEVATIONS SHOWN ON THE GRADING PLAN.
- F. ALL FILL UTILIZED SHALL BE ADEQUATELY COMPACTED TO PRODUCE A SURFACE SATISFACTORY FOR THE PROPER INSTALLATION OF BASE COURSE
- G. BEFORE COMMENCING PAVING WORK, THE PAVING CONTRACTOR MUST MAKE CERTAIN THAT THE SURFACES TO BE COVERED ARE IN PROPER CONDITION. SURFACE NOT ACCEPTABLE SHALL BE REPORTED TO THE OWNER
- H. REMOVE AND STOCKPILE EXISTING TOP SOIL FROM AREAS TO BE GRADED. UTILIZE STOCKPILED TOPSOIL FOR FINAL GRADING ACTIVITIES IN TURF AREAS. COVER AND RETAIN ALL EXCESS TOP SOIL FOR USE BY THE LANDSCAPE CONTRACTOR DURING PLANTING BED PREPARATION.
- ASPHALT ELEVATION TO CATCH BASINS IS TO BE 1/4" ABOVE RIM ELEVATION SHOWN FOR CATCH BASIN (TYPICAL).
- THE PLUMBING CONTRACTOR SHALL VERIFY ALL SEWER INVERTS AND IS RESPONSIBLE FOR PROVIDING ADEQUATE SLOPE OF PROPOSED SEWER TOWARD THE PUBLIC SEWER IN STRICT ACCORDANCE WITH THE GOVERNING AUTHORITIES PRIOR TO BUILDING CONSTRUCTION.
- K. THE PLUMBING CONTRACTOR, ELECTRICAL CONTRACTOR, SIGN CONTRACTOR, RESTAURANT EQUIPMENT CONTRACTOR, AND HEATING, AIR CONDITIONING, AND VENTILATION CONTRACTOR SHALL BE UNDER THE DIRECTION OF THE GENERAL CONTRACTOR WHO WILL BE HELD RESPONSIBLE FOR THE COORDINATION OF ALL WORK ON THIS PROJECT.
- WHERE IT IS NECESSARY TO CUT PUBLIC CURBS, THEY SHALL BE RESTORED AND/OR RECONSTRUCTED IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE GOVERNING JURISDICTION. RECONSTRUCT PUBLIC CURBS AFTER DEMOLITION OF EXISTING APPROACHES.
- M. ALL EXTERIOR SIGNS SHALL BE SUPPLIED TO THE OWNER BY SIGN CONTRACTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT AND WIRE TO SIGN. FINAL CONNECTIONS BY ELECTRICAL CONTRACTOR.
- N. GENERAL CONTRACTOR SHALL PROVIDE GROUND POISONING FOR TERMITES AND OTHER INSECTS PRIOR TO FINAL CONCRETE FLOOR INSTALLATION. GENERAL CONTRACTOR SHALL SUBMIT TO OWNER WRITTEN GUARANTEE FROM REPUTABLE LOCAL EXTERMINATING COMPANY.
- O. DEMOLISH AND REMOVE ALL EXISTING STRUCTURES, TREES, FENCES, SLABS, DRIVEWAYS AND SIDEWALKS. EXCEPT THOSE SPECIFICALLY NOTED TO REMAIN OR THOSE LABELED EXISTING. VERIFY EXTENT OF DEMOLITION WORK WHICH MAY OR MAY NOT BE SHOWN ON PLANS.
- P. BACKFILL ALL TRENCHES UNDER SLABS, WALKS, AND PAVED AREAS WITH BANK RUN GRAVEL. ALL EXCAVATING AND BACKFILLING IS BY INDIVIDUAL CONTRACTS (PLUMBING, ELECTRICAL, ETC.).
- Q. GENERAL CONTRACTOR SHALL PROVIDE TEMPORARY OR PERMANENT SOIL EROSION CONTROL MEASURES TO ALL DISTURBED AREAS OUTSIDE PROPERTY.
- R. ALL UTILITY STRUCTURES TO BE CONSTRUCTED IN ACCORDANCE WITH ALL GOVERNING CODES OR STANDARDS (CITY, COUNTY OR STATE).
- S. FOLLOW DIMENSIONS PROVIDED. DO NOT SCALE FROM DRAWINGS.
- T. ALL SITE WORK AND PAVING SHALL BE IN ACCORDANCE WITH, OR SURPASS RECOMMENDATIONS OF SOILS REPORT. IF SOILS REPORT CONFLICTS WITH DRAWINGS AND SPECIFICATIONS, THE MORE PROHIBITIVE OF THE TWO SHALL TAKE PRECEDENCE AND BE CONSIDERED TO BE THE INTENT OF THE BID DOCUMENTS. IN ALL CASES, STRICTLY ADHERE TO DRAWINGS AND SPECIFICATIONS, UNLESS SOILS REPORT RECOMMENDATION EXCEEDS THE DRAWINGS AND SPECIFICATIONS.
- U. THE SOILS REPORT WAS PREPARED BY: 4087 SHILLING WAY DALLAS, TEXAS 75237



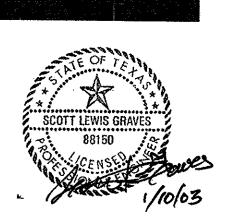
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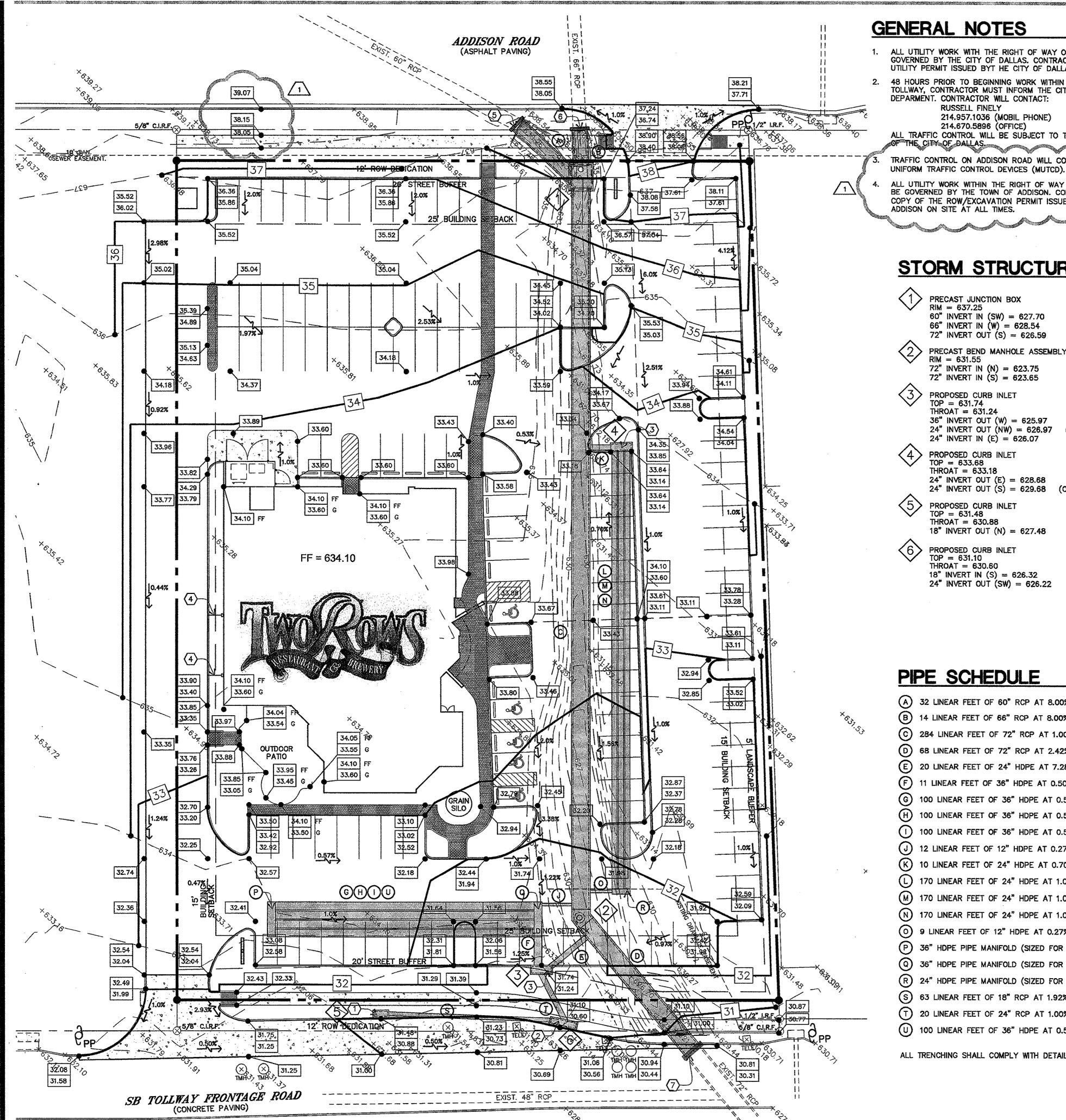


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GENERAL NOTES

- ALL UTILITY WORK WITH THE RIGHT OF WAY OF THE TOLLWAY WILL BE GOVERNED BY THE CITY OF DALLAS. CONTRACTOR WILL KEEP A COPY OF THE UTILITY PERMIT ISSUED BYT HE CITY OF DALLAS ON SITE AT ALL TIMES.
- 2. 48 HOURS PRIOR TO BEGINNING WORK WITHIN THE RIGHT OF WAY OF THE TOLLWAY, CONTRACTOR MUST INFORM THE CITY OF DALLAS TRANSPORTATION DEPARMENT. CONTRACTOR WILL CONTACT:

RUSSELL FINELY 214.957.1036 (MOBIL PHONE)

PRECAST JUNCTION BOX

60" INVERT IN (SW) = 627.7066" INVERT IN (W) = 628.54 72" INVERT OUT (S) = 626.59

72" INVERT IN (N) = 623.7572" INVERT IN (S) = 623.65

36" INVERT OUT (W) = 625.97

24" INVERT IN (E) = 626.07

24" INVERT OUT (E) = 628.68

18" INVERT OUT (N) = 627.48

18" INVERT IN (S) = 626.3224" INVERT OUT (SW) = 626.22

24" INVERT OUT (NW) = 626.97 (OVERFLOW)

24" INVERT OUT (S) = 629.68 (OVERFLOW)

PROPOSED CURB INLET

PROPOSED CURB INLET TOP = 633.68

PROPOSED CURB INLET

PROPOSED CURB INLET

THROAT = 633.18

TOP = 631.48

TOP = 631.10

THROAT = 630.88

THROAT = 630.60

PRECAST BEND MANHOLE ASSEMBLY

RIM = 637.25

RIM = 631.55

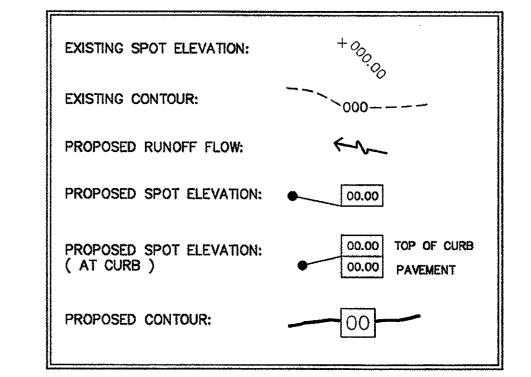
TOP = 631.74THROAT = 631.24

- 214.670.5896 (OFFICE) ALL TRAFFIC CONTROL WILL BE SUBJECT TO THE INSPECTION AND APPROVAL TRAFFIC CONTROL ON ADDISON ROAD WILL COMPLY WITH THE MANUAL ON
- ALL UTILITY WORK WITHIN THE RIGHT OF WAY OF ADDISON ROAD WILL BE GOVERNED BY THE TOWN OF ADDISON. CONTRACTOR WILL KEEP A COPY OF THE ROW/EXCAVATION PERMIT ISSUED BY THE TOWN OF ADDISON ON SITE AT ALL TIMES.

KEYED NOTES

- PROPOSED STORM STRUCTURE (5.0' INLET OPENING). SEE DETAIL C4.1-02. SEE SHEET C1.0 FOR EROSION CONTROL DURING CONSTRUCTION.
- PROPOSED STORM STRUCTURE (10.0' INLET OPENING). SEE DETAIL C4.1-02. SEE SHEET C1.0 FOR EROSION CONTROL DURING CONSTRUCTION.
- PROPOSED STORM STRUCTURE (7.5' INLET OPENING), SEE DETAIL C4.1-02. SEE SHEET C1.0 FOR EROSION CONTROL DURING CONSTRUCTION.
- 6" P.V.C. STORM LINE FROM DOWNSPOUTS. RUN LINE THROUGH CURB, SEE DETAIL MEP1-04. SEE SHEET A2.2 FOR EXACT LOCATION.
- $\langle 5 \rangle$ CONCRETE COLLAR. SEE DETAIL C4.1-05. TIE-IN ELEV = 630.26 (6) CONCRETE COLLAR. SEE DETAIL C4.1-05. TIE-IN ELEV = 629.66
- (7) CONCRETE COLLAR. SEE DETAIL C4.1-05. TIE-IN ELEV = 622.00

STORM STRUCTURE SCHEDULE GRADING LEGEND



PIPE SCHEDULE

- (A) 32 LINEAR FEET OF 60" RCP AT 8.00% SLOPE
- (B) 14 LINEAR FEET OF 66" RCP AT 8.00% SLOPE
- (C) 284 LINEAR FEET OF 72" RCP AT 1.00% SLOPE (D) 68 LINEAR FEET OF 72" RCP AT 2.42% SLOPE
- (E) 20 LINEAR FEET OF 24" HDPE AT 7.28% SLOPE (OVERFLOW PIPE)
- (F) 11 LINEAR FEET OF 36" HDPE AT 0.50% SLOPE
- (G) 100 LINEAR FEET OF 36" HDPE AT 0.50% SLOPE
- (H) 100 LINEAR FEET OF 36" HDPE AT 0.50% SLOPE
- (1) 100 LINEAR FEET OF 36" HDPE AT 0.50% SLOPE
- (J) 12 LINEAR FEET OF 12" HDPE AT 0.27% SLOPE
- (K) 10 LINEAR FEET OF 24" HDPE AT 0.70% SLOPE (OVERFLOW PIPE)
- (L) 170 LINEAR FEET OF 24" HDPE AT 1.00% SLOPE
- (M) 170 LINEAR FEET OF 24" HDPE AT 1.00% SLOPE
- (N) 170 LINEAR FEET OF 24" HDPE AT 1.00% SLOPE
- (0) 9 LINEAR FEET OF 12" HDPE AT 0.27% SLOPE
- (P) 36" HDPE PIPE MANIFOLD (SIZED FOR 3 36" PIPES)
- (Q) 36" HDPE PIPE MANIFOLD (SIZED FOR 4 36" PIPES & 1 12" PIPE)
- (R) 24" HDPE PIPE MANIFOLD (SIZED FOR 3 24" PIPES & 1 12" PIPE)
- (S) 63 LINEAR FEET OF 18" RCP AT 1.92% SLOPE
- T) 20 LINEAR FEET OF 24" RCP AT 1.00% SLOPE
- (U) 100 LINEAR FEET OF 36" HDPE AT 0.50% SLOPE

ALL TRENCHING SHALL COMPLY WITH DETAIL C4.1-01.

AREA CALCULATIONS

PRE-DEVELOPED	AREA		POST-DEVELOPED	AREA	
GRASS BUILDING PAVING	-	SF SF SF	GRASS BUILDING PAVING	16,405 10,120 47,459	SF
TOTAL	77.004		TOTAL	77,700	

STORMWATER STORAGE

THE TOTAL STORAGE REQUIRED IS 3,826 CF

THIS WATER IS STORED IN THE PIPES, MANHOLES, AND ALSO BY PONDING ON THE PARKING LOT. THE FOLLOWING SHOWS THE AMOUNT OF WATER HELD BY EACH COMPONENT OF THE SYSTEM.

510 L.F. OF 24" PIPE = 1,602 CF 400 L.F. OF 36" PIPE = 2,826 CF

THE TOTAL AMOUNT OF STORAGE PROVIDED IS 4,428 C.F.

IT SHOULD BE NOTED THAT ADDITIONAL STORAGE CAPACITY WILL BE PROVIDED IN MANIFOLD PIPES IN EACH DETENTION SYSTEM, AS WELL AS THE CATCH BASINS. THEY WERE NOT CALCULATED SINCE THE CAPACITY IN THE PIPES EXCEEDS THE

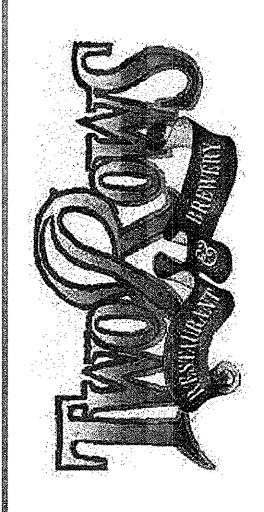


0 10 20 SCALE: 1" = 20.00"

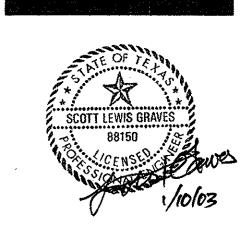
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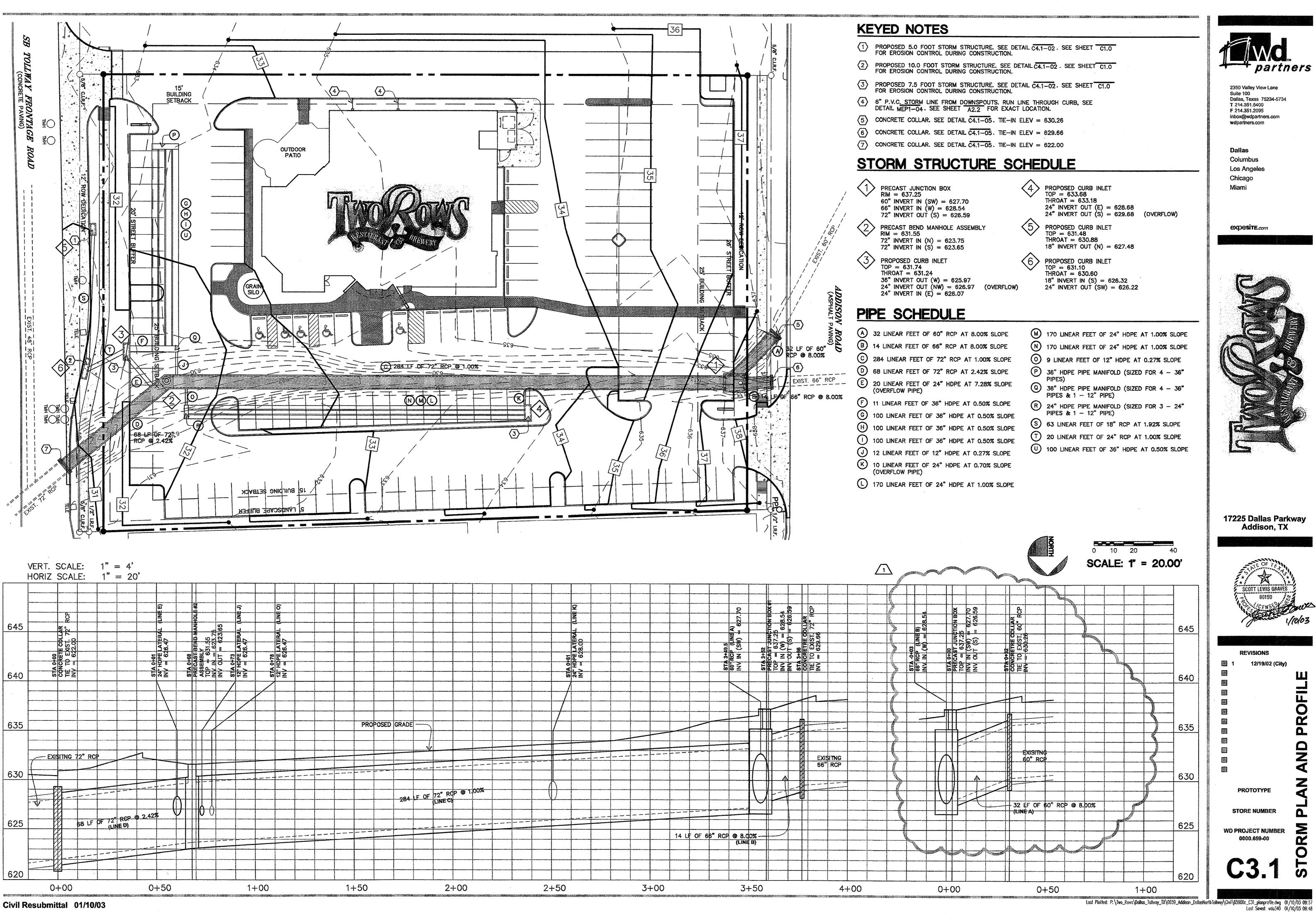
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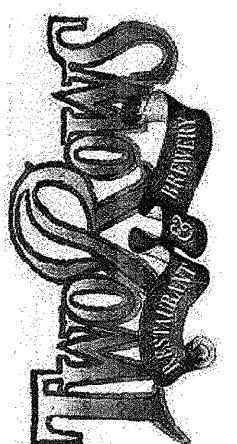
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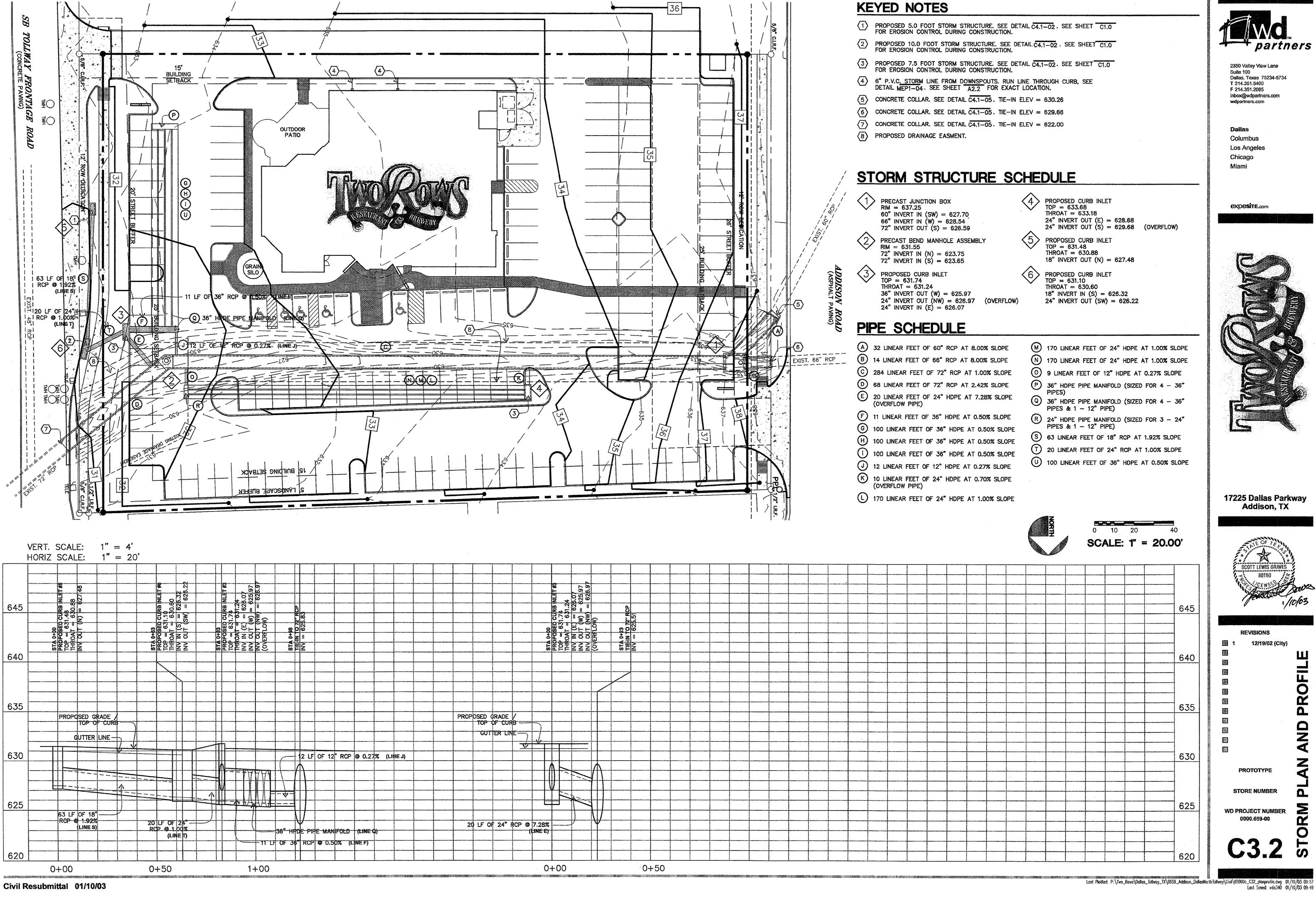


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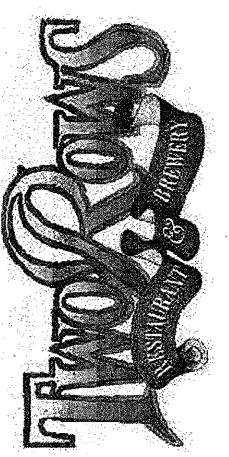




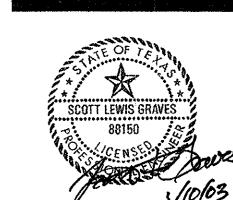
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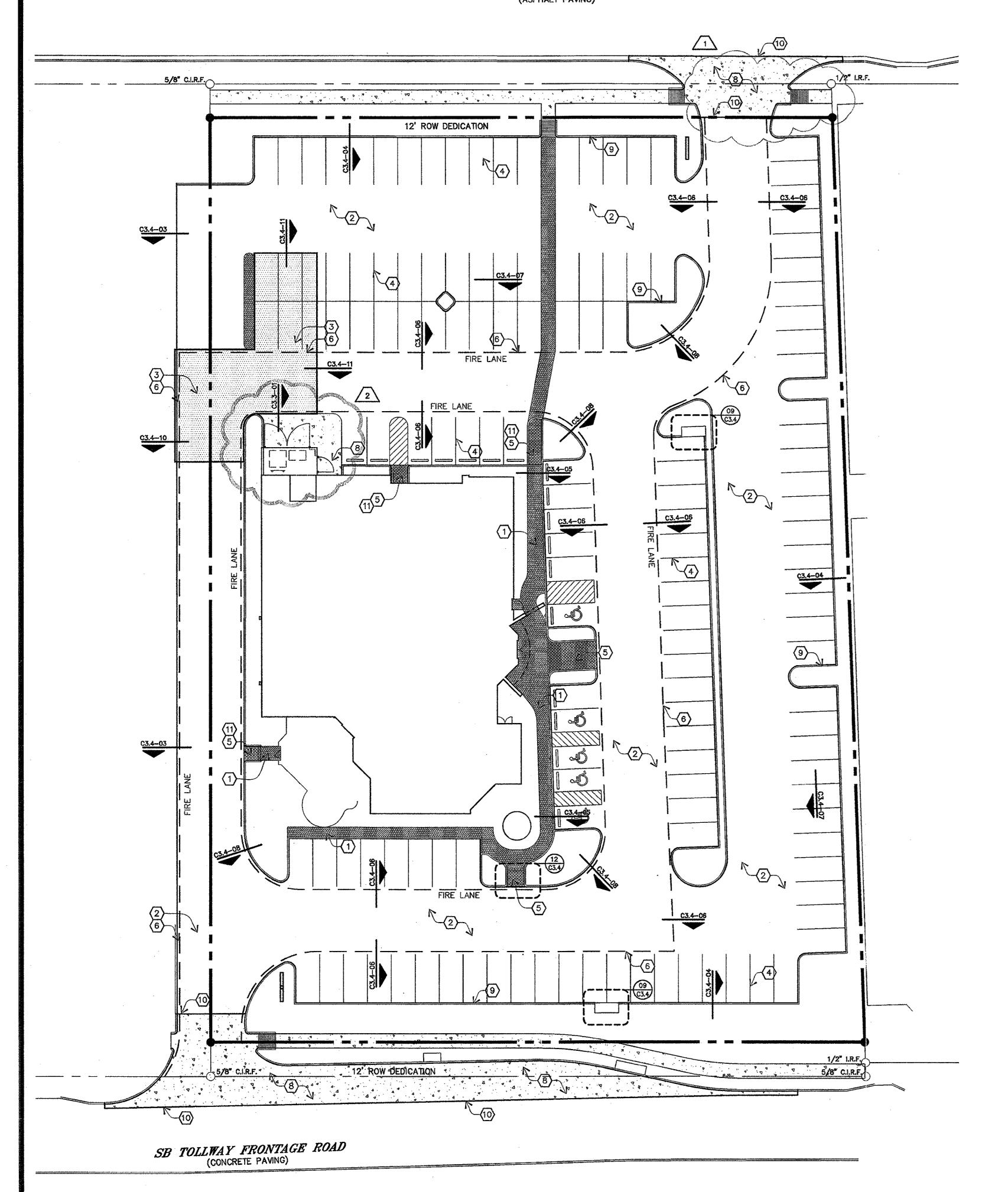
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ADDISON ROAD (ASPHALT PAVING)



KEYED NOTES

- MODULAR BLOCK PAVERS (SIDEWALK), SEE DETAIL C3.4-02.
- (2) MODULAR BLOCK PAVERS (STANDARD PAVEMENT), SEE DETAIL C3.4-01.
- (3) MODULAR BLOCK PAVERS (HEAVY DUTY PAVEMENT), SEE DETAIL C3.4-10.
- MODULAR BLOCK PAVERS (CONTRASTING COLOR). TYPICAL ALL PARKING LOT STRIPING. SEE DETAIL C3.4-07.
- MODULAR BLOCK PAVERS (ADA COMPLIANT), SEE DETAIL C3.4-12.
- (6) MODULAR BLOCK PAVERS (FIRE LANE). SEE DETAIL C3.4-06.
- (7) STANDARD DUTY CONCRETE PAVING, SEE DETAIL C3.4-08
- (8) HEAVY DUTY CONCRETE PAVING. SEE DETAIL C2.1-02.
- 9 FORMED CONCRETE CURB, SEE DETAIL C2.1-08.
- TURN DOWN EDGE, SEE DETAIL C2.1-04.
- (11) SERVICE RAMP, SEE DETAIL C2.1-09.

GENERAL NOTES

- 1. MODULAR BLOCK PAVERS TO BE USED FOR SIDEWALKS WILL BE "HOLLAND 98", 3 1/8" INCH THINK, COLOR TO BE CUSTOM BLEND TO MATCH BUILDING FACADE COLORS, AS MANUFACTURED BY PAVESTONE COMPANY.
- 2. MODULAR BLOCK PAVERS TO BE USED FOR STANDARD/HEAVY-DUTY PAVEMENT WILL BE "HOLLAND 98", 3 1/8" INCH THINK, COLOR TO BE PEWTER, AS MANUFACTURED BY PAVESTONE COMPANY.
- 3. MODULAR BLOCK PAVERS TO BE USED FOR CONTRASTING PAVEMENT COLOR WILL BE "HOLLAND 98", 3 1/8" INCH THINK, COLOR TO BE CHARCOL, AS MANUFACTURED BY PAVESTONE COMPANY.
- 4. MODULAR BLOCK PAVERS TO BE USED FOR ADA ACCESSIBLE RAMPS WILL BE "ADA DETECTABLE WARNING PAVER", 3 1/8" INCH THINK, COLOR TO BE CONTRASTING TO ADJACENT SIDEWALK, AS MANUFACTURED BY PAVESTONE COMPANY.

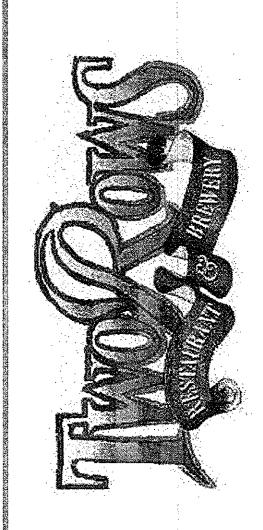


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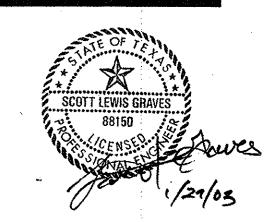
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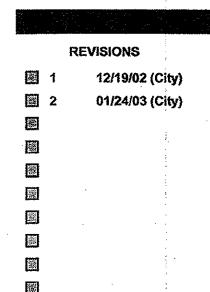
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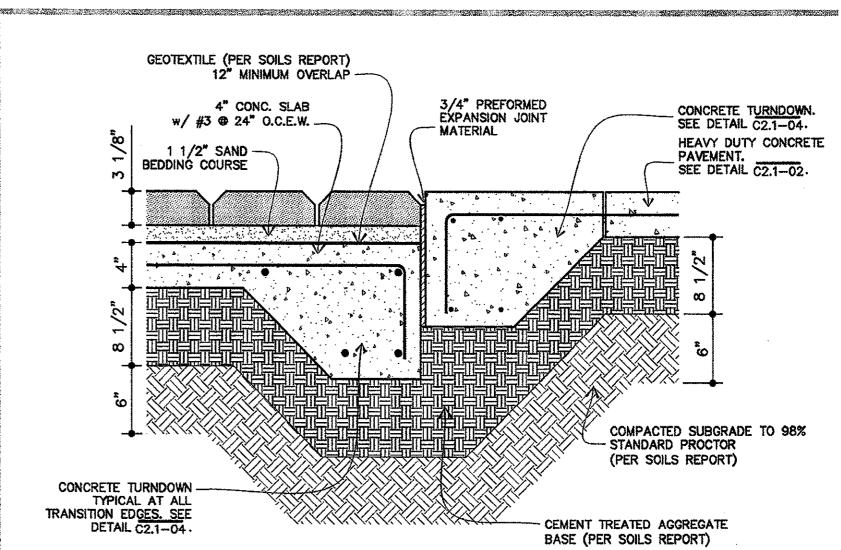
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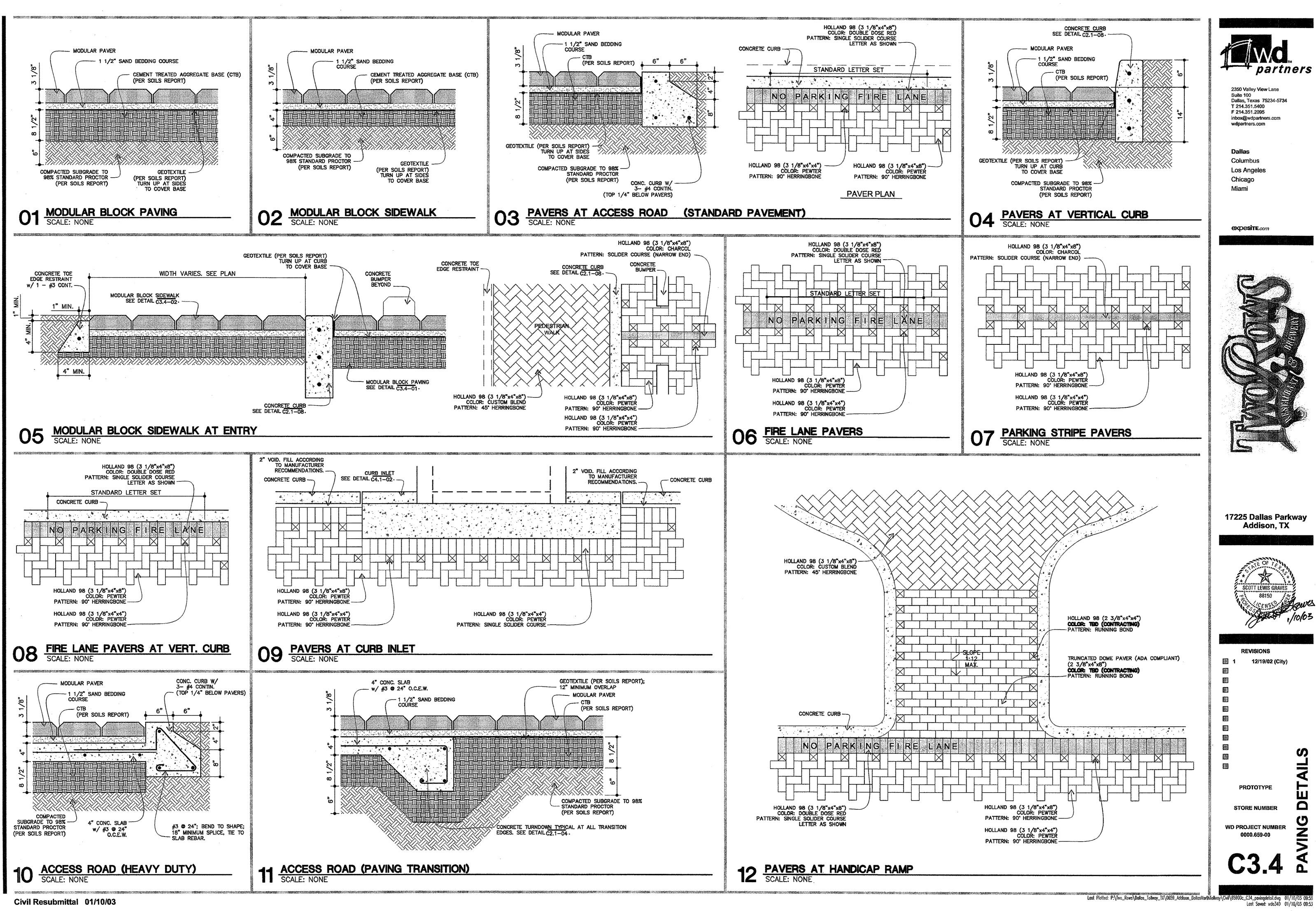
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C3.3

SCA



O1 PAVEMENT TRANSITION
SCALE: NONE

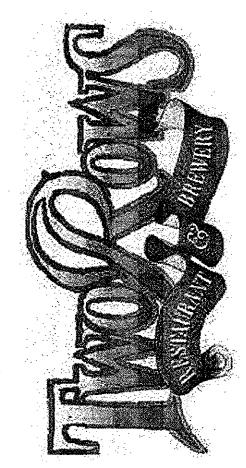


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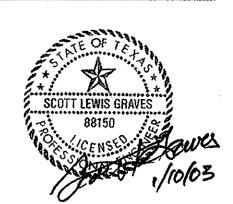
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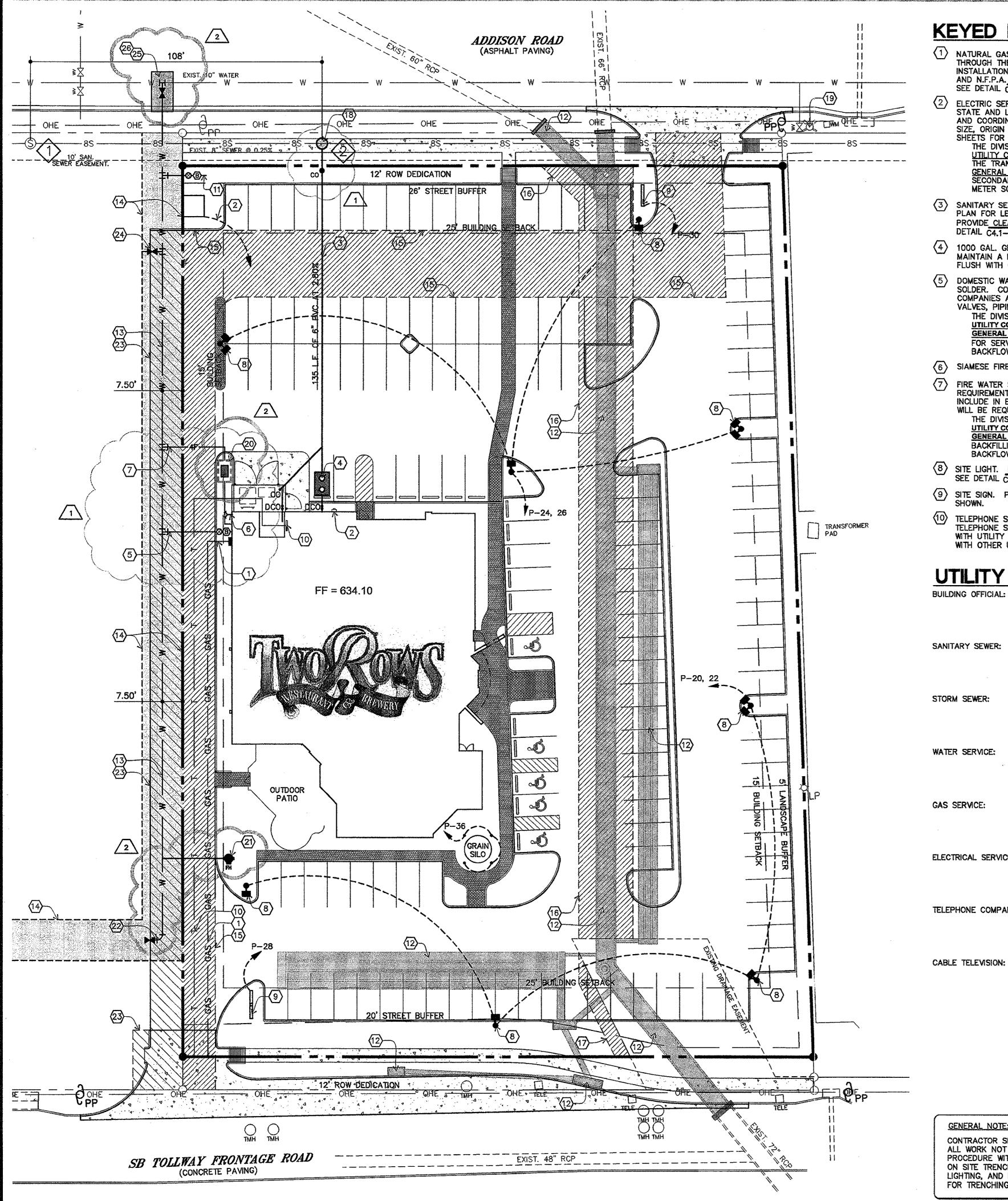


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KEYED NOTES

- (1) NATURAL GAS SERVICE. GAS COMPANY SHALL SIZE AND INSTALL SERVICE THROUGH THE METER LOCATED AT THE BUILDING. ALL MATERIALS AND INSTALLATION ARE TO BE IN ACCORDANCE WITH ALL STATE AND LOCAL CODES AND N.F.P.A. STANDARDS. INCLUDE TWO GUARD POSTS AT METER LOCATION. SEE DETAIL C2.1-03.
- 2 ELECTRIC SERVICE. CONTRACTOR SHALL INSTALL 2 4" CONDUITS PER ALL STATE AND LOCAL CODES, POWER COMPANY, N.F.P.A., AND N.E.C. STANDARDS AND COORDINATE WITH THE POWER COMPANY TO VERIFY THE TRANSFORMER SIZE, ORIGIN OF SERVICE, AND ALL STANDARDS FOR WORK. SEE ELECTRICAL SHEETS FOR SECONDARY WIRING DESIGN. THE DIVISION OF WORK SHALL BE AS FOLLOWS:

UTILITY COMPANY: SHALL PROVIDE PRIMARY WIRING AND FINAL CONNECTION TO GENERAL CONTRACTOR: SHALL PROVIDE TRANSFORMER PAD, PRIMARY AND

SECONDARY CONDUIT, ALL TRENCHING AND BACKFILL, SECONDARY WIRING AND

- (3) SANITARY SEWER LATERAL. PIPE SHALL BE P.V.C. ASTM D-3034 SDR 35, SEE PLAN FOR LENGTH, SIZE AND SLOPE. JOINTS SHALL CONFORM TO ASTM D-3212. PROVIDE_CLEANOUTS (SINGLE OR DOUBLE) AS INDICATED BY "CO" OR "DCO" PER DETAIL C4.1-03
- 1000 GAL. GREASE INTERCEPTOR. INSTALL PER ALL GOVERNING CODES.

 MAINTAIN A MINIMUM DISTANCE OF 8 FEET FROM BUILDING. SET MANHOLE LIDS
 FLUSH WITH GRADE. SEE SHEET MEP-03.
- (5) DOMESTIC WATER SERVICE. PIPING SHALL BE 2" TYPE "K" COPPER WITH SILVER SOLDER. CONTRACTOR MUST VERIFY REQUIREMENTS OF LOCAL CODES, UTILITY COMPANIES AND GOVERNING OFFICIALS. INCLUDE IN BASE BID ALL ADDITIONAL VALVES, PIPING STRUCTURES, ETC., THAT WILL BE REQUIRED. THE DIVISION OF WORK WILL BE AS FOLLOWS:

UTILITY COMPANY: SHALL PROVIDE REQUIRE INSPECTIONS. GENERAL CONTRACT: SHALL PROVIDE ALL TRENCHING, PIPING, AND BACKFILLING FOR SERVICE CONNECTION, A 2" METER, AND A 2" DOUBLE CHECK VALVE BACKFLOW PREVENTER.

- 6 SIAMESE FIRE DEPARTMENT CONNECTION.
- (7) FIRE WATER SERVICE. PIPING SHALL BE 4" PVC. CONTRACTOR MUST VERIFY REQUIREMENTS OF LOCAL CODES, UTILITY COMPANIES AND GOVERNING OFFICIALS. INCLUDE IN BASE BID ALL ADDITIONAL VALVES, PIPING STRUCTURES. ETC., THAT WILL BE REQUIRED. THE DIVISION OF WORK WILL BE AS FOLLOWS: UTILITY COMPANY: SHALL PROVIDE REQUIRE INSPECTIONS. GENERAL CONTRACT: SHALL PROVIDE ALL TRENCHING, PIPING, AND
- BACKFILLING FOR SERVICE CONNECTION AND A 4" DOUBLE CHECK VALVE BACKFLOW PREVENTER WITH DETECTOR ASSEMBLY. 8 SITE LIGHT. PROVIDE 1 1/2" P.V.C. CONDUIT BACK TO ELECTRIC PANELS,
- 9 SITE SIGN. PROVIDE 1" P.V.C. CONDUIT BACK TO ELECTRIC PANELS, CIRCUIT AS
- (10) TELEPHONE SERVICE. CONTRACTOR TO PROVIDE 2" CONDUIT WITH PULL WIRE FOR TELEPHONE SERVICE. VERIFY EXACT ROUTING AND TERMINATION REQUIREMENTS WITH UTILITY COMPANIES BEFORE STARTING WORK. CONTRACTOR TO COORDINATE WITH OTHER UTILITIES AND UTILIZE SHARED TRENCHING IF PERMITTED.

UTILITY CONTACTS

SEE DETAIL C4.1-05. CIRCUIT AS SHOWN.

CITY OF ADDISON (LYNN CHANDLER) 16801 WESTGROVE DRIVE

ADDISON, TEXAS 75001 972.450.2889 (972.450.2837 (

SANITARY SEWER: CITY OF ADDISON (STEVE CHUTCHIAN) 16801 WESTGROVE DRIVE

> ADDISON, TEXAS 75001 972.450.2886 (T 972.450.2837 (F)

STORM SEWER: CITY OF ADDISON (STEVE CHUTCHIAN) 16801 WESTGROVE DRIVE ADDISON, TEXAS 75001 972.450.2886 (T)

972.450.2837 (1

WATER SERVICE: CITY OF ADDISON (STEVE CHUTCHIAN) 16801 WESTGROVE DRIVE ADDISON, TEXAS 75001 972.450.2886 (T

972.450.2837 (F)

GAS SERVICE: TXU ELECTRIC AND GAS

972.888.1330 (T 972.888.1304 (F)

ELECTRICAL SERVICE: TXU ELECTRIC AND GAS

> 972.888.1330 (T 972.888.1304 (F)

TELEPHONE COMPANY:

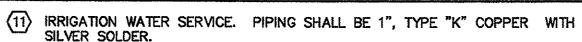
972.840.2388

CABLE TELEVISION: CHARTER COMMUNICATION

800.477.0887

GENERAL NOTE:

CONTRACTOR SHALL SUPPLY AND INSTALL ALL ITEMS AND PERFORM ALL WORK NOT COVERED BY UTILITY COMPANIES. VERIFY INSTALLATION PROCEDURE WITH UTILITY COMPANY. ON SITE TRENCHING SHALL BE MINIMIZED WHEN POSSIBLE. UTILITIES, LIGHTING, AND IRRIGATION SHALL MAKE USE OF SHARED TRENCHING. FOR TRENCHING INFORMATION, SEE DETAIL C4.1-01



THE DIVISION OF WORK SHALL BE AS FOLLOWS: UTILITY COMPANY: SHALL PROVIDE REQUIRE INSPECTIONS. CONTRACTOR: SHALL PROVIDE 1" METER, TAPPED FROM 8" MAIN AND 1" BACKFLOW PREVENTOR. PIPING DOWN STREAM OF BFP SHALL BE 1-1/4" SCH. 40 PVC, 12" BELOW GRADE WITH SHUTOFF VALVE.

- (12) STORM DRAIN SHOWN FOR INFORMATION PURPOSE ONLY. SEE SHEET C3.0 FOR
- 8" WATER MAIN. SEE SHEET C4.1 FOR INSTALLATION DETAILS.
- (14) 15' WATER LINE EASEMENT TO BE FILED UNDER SEPARATE INSTRUMENT BY OTHERS.
- 15 12' ACCESS EASEMENT.
- (16) 20' DRAINAGE EASEMENT.
- (17) DRAINAGE EASEMENT.
- (18) 4' DIAMETER MANHOLE. SEE DETAIL C4.1-07.
- (19) EXISTING FIRE HYDRANT
- 20 PRECAST CONCRETE VAULT FOR DOUBLE CHECK VALVE WITH DETECTOR ASSEMBLY. MINIMUM INTERIOR DIMENSIONS TO BE 52" x 90". LID AND ACCESS HATCH TO HAVE H20 TRAFFIC RATING.
- (21) PROPOSED FIRE HYDRANT. SEE DETAIL C4.2-03.
- (22) 8" 90" BEND AND 8" GATE VALVE. SEE DETAIL C4.2-02.
- 23 12' ACCESS EASEMENT TO BE FILED UNDER SEPARATE INSTRUMENT BY OTHERS.
- 8"x8"x8" TEE AND 8" GATE VALVE. SEE DETAIL C4.2-02.
- 25) 8"x10" TAPPING SLEEVE AND VALVE. SEE DETAIL C4.2-04
- (26) ASPHALT REPAIR. SEE DETAIL C4.1-01

GENERAL NOTES

- ALL UTILITY WORK WITH THE RIGHT OF WAY OF THE TOLLWAY WILL BE GOVERNED BY THE CITY OF DALLAS. CONTRACTOR WILL KEEP A COPY OF THE UTILITY PERMIT ISSUED BYT HE CITY OF DALLAS ON SITE AT ALL TIMES.
- 48 HOURS PRIOR TO BEGINNING WORK WITHIN THE RIGHT OF WAY OF THE TOLLWAY, CONTRACTOR MUST INFORM THE CITY OF DALLAS TRANSPORTATION DEPARMENT. CONTRACTOR WILL CONTACT:

RUSSELL FINELY 214.957.1036 (MOBIL PHONE) 214.670.5896 (OFFICE)

ALL TRAFFIC CONTROL WILL BE SUBJECT TO THE INSPECTION AND APPROVAL OF THE CITY OF DALLAS.

- ALL PUBLIC INFRASTRUCTURE CONSTRUCTED UNDER THIS CONTRACT MUST BE INSTALLED AND INSPECTED ACCORDING TO THE TOWN OF ADDISON REQUIREMENTS. CONTRACTOR IS DIRECTED TO THE SUPPLEMENTAL SPECIFICATION BOOKLET WHICH OUTLINES THE TOWN REQUIREMENTS. THE BOOKLET HAS BEEN ISSUED WITH THE DRAWINGS AND ARE HEREBY A PART OF THE CONTRACT DOCUMENTS.
- ALL UTILITY WORK WITHIN THE RIGHT OF WAY OF ADDISON ROAD WILL BE GOVERNED BY THE TOWN OF ADDISON. CONTRACTOR WILL KEEP A COPY OF THE ROW/EXCAVATION PERMIT ISSUED BY THE TOWN OF ADDISON ON SITE AT
- 5. ALL UTILITY, STREET AND DRAINAGE WORK NOT WITHIN THE RIGHT OF WAY OF THE TOLLWAY WILL COMPLY WITH THE TOWN OF ADDISON STANDARDS AND SPECIFICATIONS. ALL WORK WILL BE INSPECTED AND APPROVED BY THE TOWN OF ADDISON PUBLIC WORKS DEPARTMENT.

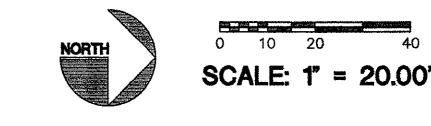
SEWER STRUCTURE SCHEDULE

EXISTING MANHOLE RIM = 638.668" INVERT IN (N) = 626.01 8" INVERT OUT (S) = 625.96

PROPOSED MAHOLE RIM = 637.508" INVERT IN (N) = 626.338" INVERT OUT (S) = 626.23 6" INVERT IN (E) = 626.33

UTILITY LINE LEGEND

PROPOSED GAS: ----- GAS ----- GAS ----- GAS ----PROPOSED ELECTRIC: PROPOSED WATER: PROPOSED TELEPHONE 6" PVC AT 2.00% MIN. PROPOSED SANITARY SEWER: PROPOSED ELECTRICAL CONDUIT: A-22,24



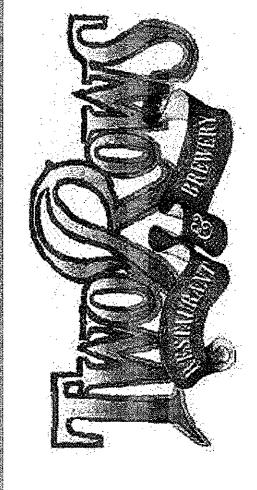


2350 Valley View Lane Suite 100 Dallas, Texas 75234-5734 T 214.351.5400 F 214.351.2095 inbox@wdpartners.com wdpartners.com

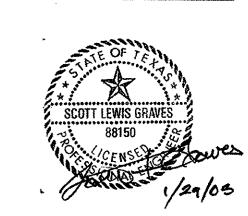
Miami

Columbus Los Angeles Chicago

expesite.com



17225 Dallas Parkway Addison, TX

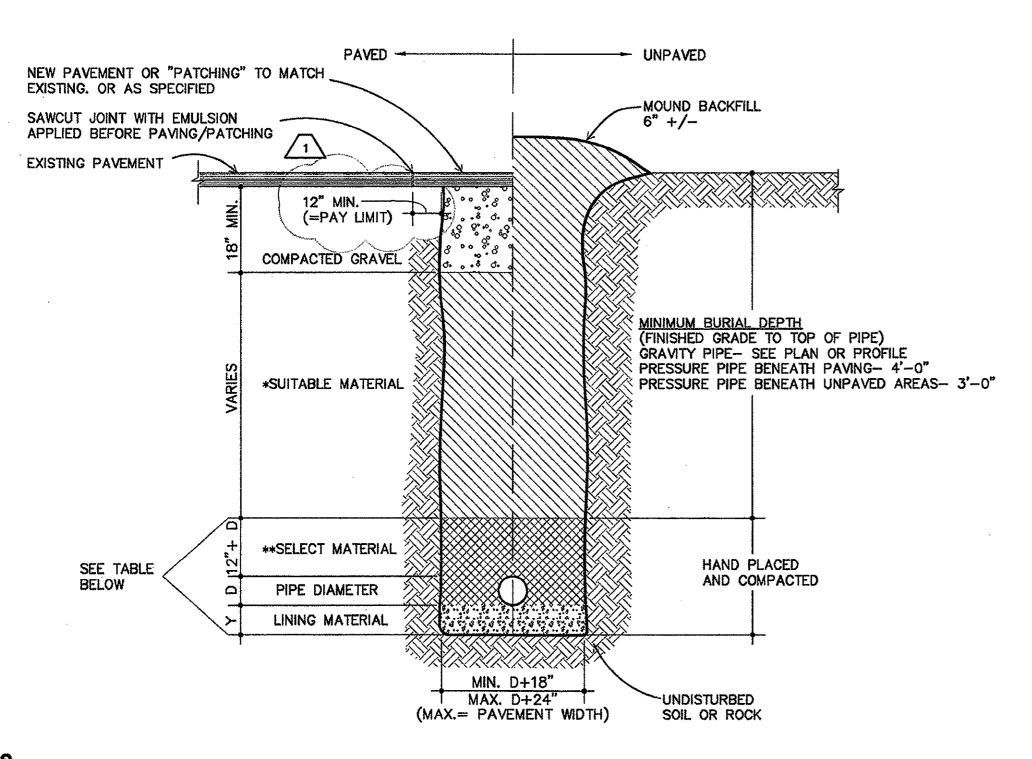


REVISIONS 12/19/02 (City) 01/24/03 (City)

PROTOTYPE

STORE NUMBER

WD PROJECT NUMBER 0000.659-00

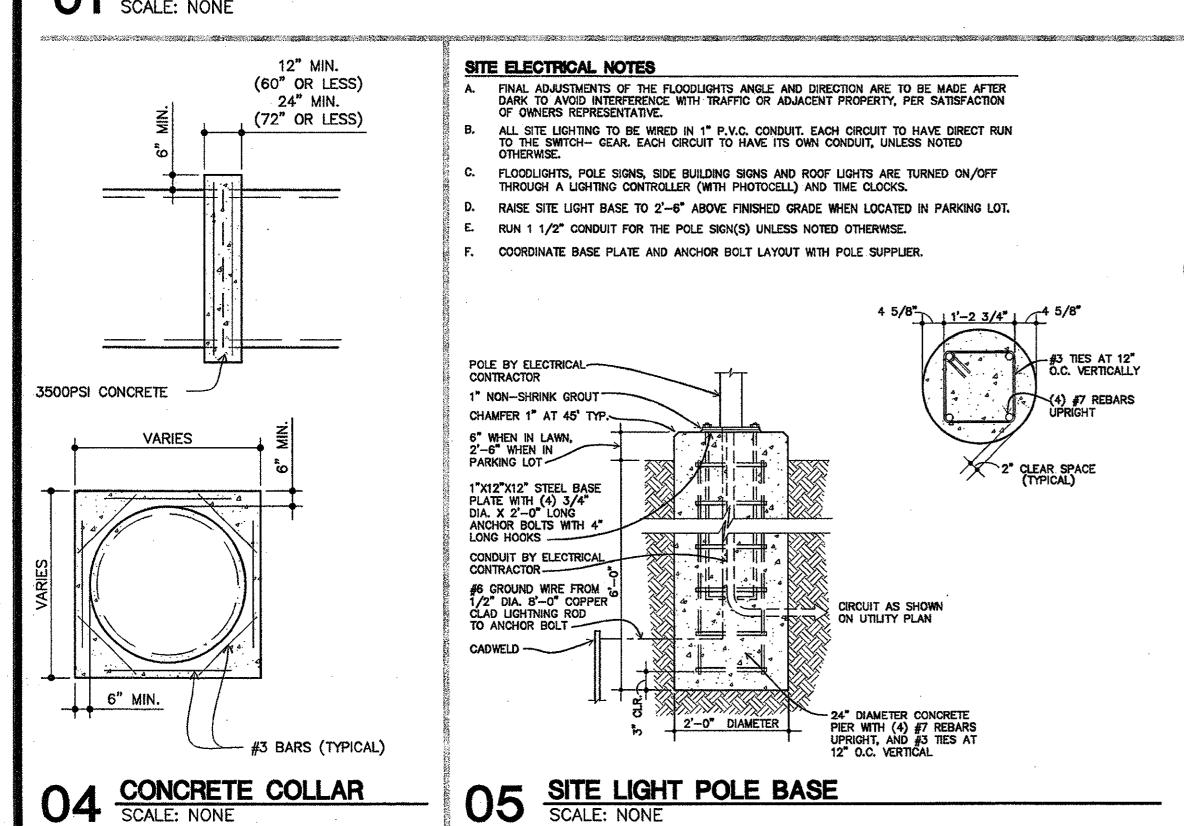


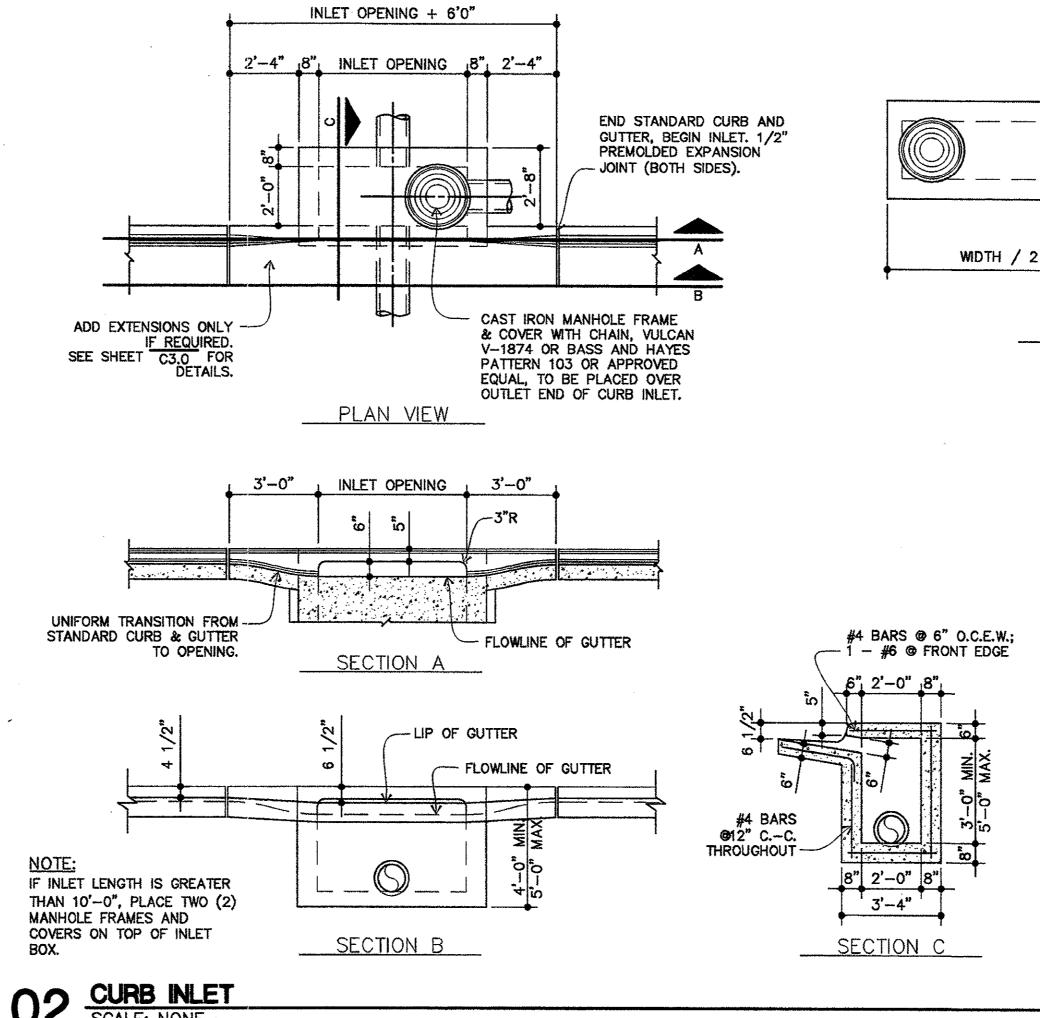
- A. WHERE BACKFILL IS DESIGNATED "COMPACTED", THIS MEANS 90% TO 95% STANDARD PROCTOR, AASHTO T-99. ALL FILL PLACED BELOW PIPES AND STRUCTURES MUST MEET THIS REQUIREMENT.
- B. FOR ALL TRENCHES WITH A GRADE GREATER THAN 4% AND/OR WHERE GROUNDWATER IS APPARENT, INSTALL CLAY DAMS AROUND PIPE AT 100'

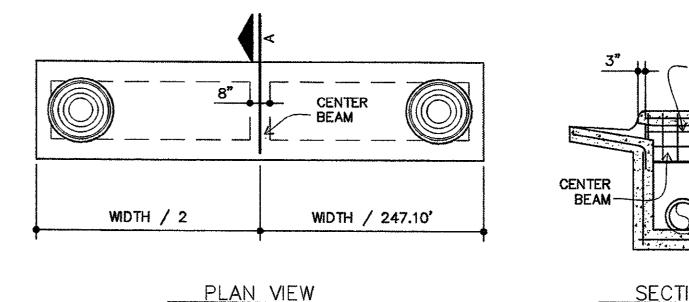
CONDITION AND PIPE	**SELECT MATERIAL	LINING MATERIAL	3" Y-DIMENSION
DUCTILE IRON PIPE IN "ORDINARY SOIL"	TYPE I, II, OR III	SAND OR TYPE III	3"
RCP PIPE IN "ORDINARY SOIL"	TYPE II OR III	SAND OR TYPE III	6"
ALL PIPE OVER BEDROCK OR LEDGE	TYPE II OR III	SAND OR TYPE III	4"
DUCTILE IRON PIPE IN CLAY OR MUCK	TYPE II OR III	SAND	6"
RCP PIPE IN CLAY	TYPE II OR III	SAND	6"
PLASTIC-ALL	SAND OR TYPE III	SAND OR TYPE III	

- * SUITABLE MATERIAL SHOULD CONTAIN NO STONES GREATER THAN 4" IN DIAMETER, NO FROZEN LUMPS, AND ONLY MINOR AMOUNTS OF CLAY OR ORGANIC MATERIAL, ALL MATERIAL TO BE PLACED IN MAXIMUM OF 12" LIFTS AND COMPACTED BEFORE PLACING NEXT LIFT.
- ** TYPE I MATERIAL SHALL BE EITHER GRAVEL OR EXCAVATED MATERIAL CONTAINING NO STONES GREATER THAN 1 1/2" IN DIAMETER, NO FROZEN LUMPS, NO CLAY, AND NO ORGANIC MATERIAL.
- ** TYPE II MATERIAL SHALL BE CLEAN, HARD, CRUSHED OR NATURAL STONE WITH A GRADATION BY WEIGHT OF 100% PASSING A 1 1/2" SQUARE OPENING, NOT MORE THAN 25% PASSING A 3/4" SQUARE OPENING AND NOT MORE THAN 5% PASSING A 1/2" SQUARE
- ** TYPE III MATERIAL SHALL BE CLEAN, HARD, CRUSHED STONE FREE FROM COATINGS AND THOROUGHLY WASHED WITH A GRADATION BY WEIGHT OF 100% PASSING A 1" SQUARE OPENING AND 0 TO 5% PASSING A 1/4" SQUARE OPENING.

TRENCH/BACKFILL NOTES







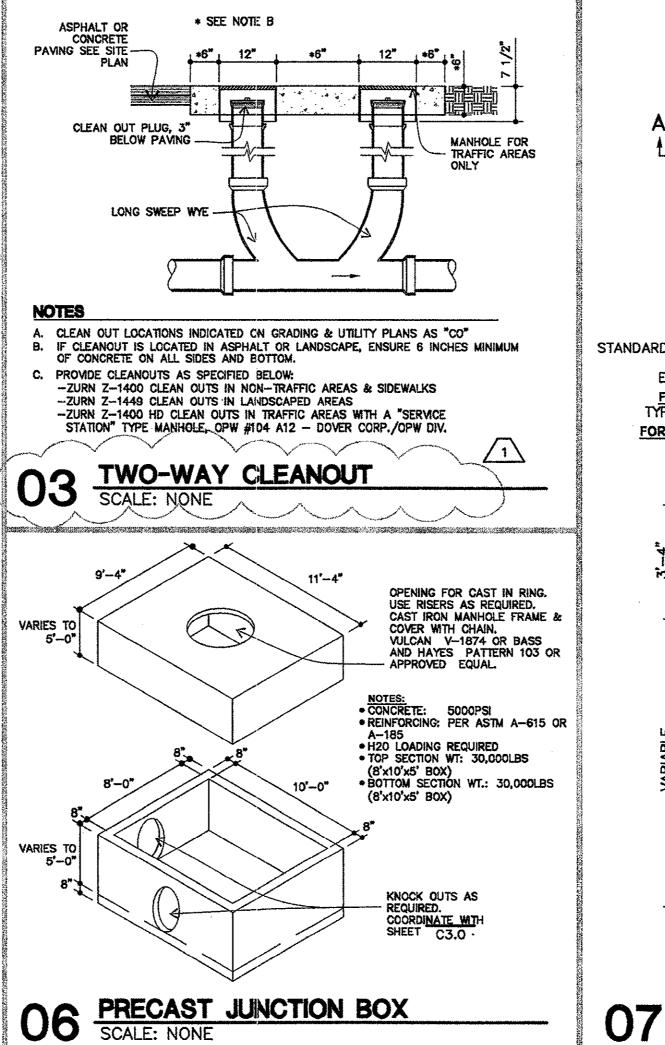
- AT 6" C-C

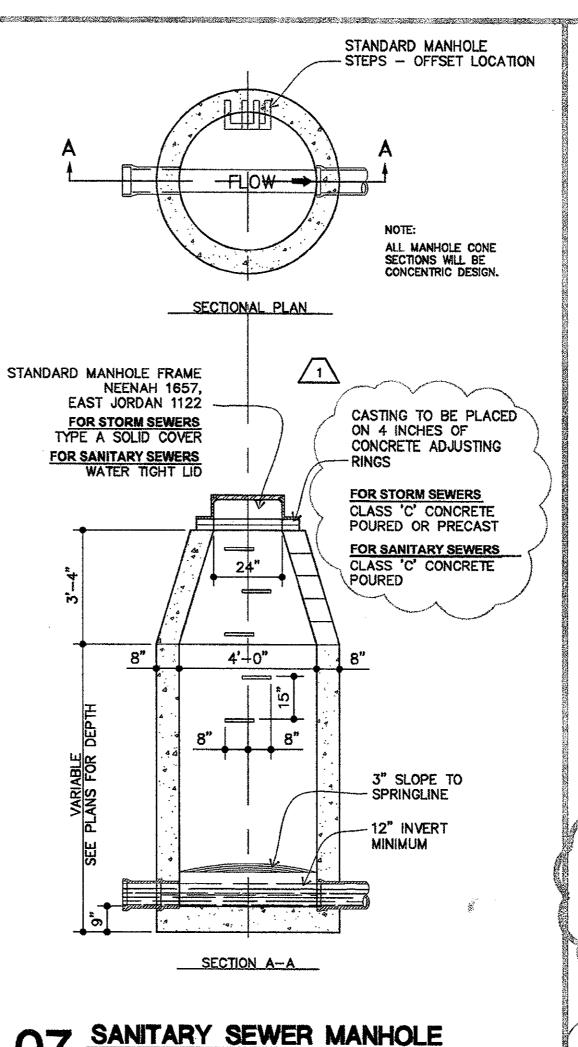
SECTION A (CENTER BEAM DETAIL)

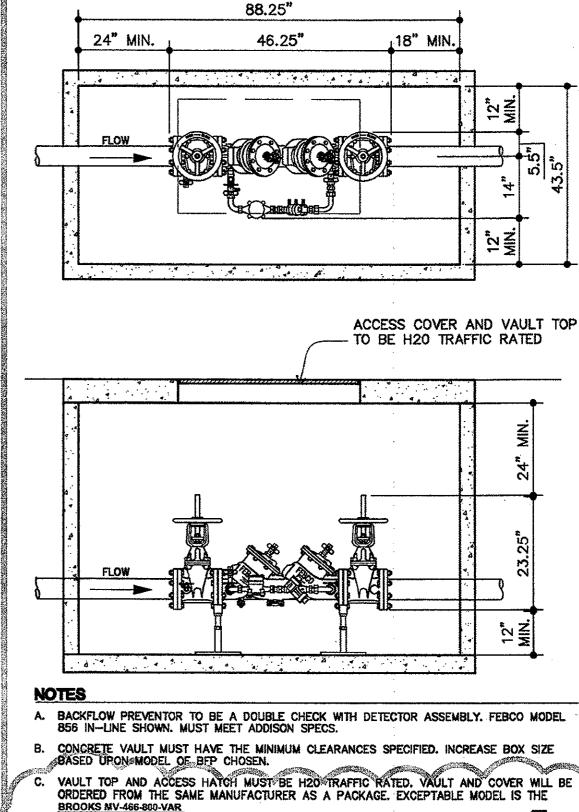
GENERAL NOTES:

- 1. IN GENERAL, INLET REINFORCING STEEL SHALL BE #4 BARS ON 12" CENTERS BOTH WAYS FOR GUTTER, BOTTOM SLAB ENDS, FRONT AND BACK WALLS, AND #4 BARS ON 6" CENTERS BOTH WAYS FOR TOP SLAB. AN ADDITIONAL #6 BAR SHALL BE PLACED IN THE FRONT EDGE OF THE TOP SLAB IN THE INLETS AND ADDITIONAL STEEL SHALL BE PLACED AROUND
- 2. ALL REINFORCING STEEL SHALL BE GRADE 60.
- 3. ALL CONCRETE SHALL BE CLASS "A". ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4".
- 4. ALL REINFORCING STEEL SHALL HAVE A MINIMUM COVER OF 2" TO THE CENTERS OF THE BARS.
- 5. 10'-0" OF EXISTING CURB AND GUTTER UPSTREAM AND 10'-0" OF EXISTING CURB AND GUTTER DOWNSTREAM SHALL BE REMOVED AND REPOURED INTEGRALLY WITH EACH INLET.
- 6. ALL BACK FILLING SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
- 7. CENTER BEAM IS REQUIRED FOR ALL INLET OPENINGS GREATER THAN 10'-0".
- 8. TWO MANHOLE FRAMES AND COVERS ARE REQUIRED WHEN INLET OPENING IS GREATER
- 9. ALL INLET FLOORS ARE TO HAVE A 2% SLOPE TOWARDS THE OUTLET PIPE.
- 10. MINIMUM INLET OPENING SIZE IS 5'-0".
- 11. MAXIMUM INLET OPENING SIZE IS 20'-0".
- 12. OUTLET PIPE TO BE PLACED AT LOWEST END OF FLOOR INLET. MANHOLE COVER TO BE PLACED ABOVE OUTLET END OF INLET.
- 13. MANHOLE FRAME AND COVER SHALL BE CAST IRON, VULCAN V-1874 OR BASS AND HAYES PATTERN 103 OR APPROVED EQUAL.
- 14. MANHOLE COVERS SHALL HAVE CHAINS ATTACHED TO PREVENT COVERS FROM BEING WASHED AWAY DURING FLOOD CONDITIONS.

UZ SCALE: NONE







CONCRETE TO BE 4500 PSI

REINF. TO BE #4 @ 8"O.C.E.W (GRADE 60)

BACKFLOW PREVENTER

D. ACCESS HATCH MUST BE SIZED AND POSITION FOR EASY REMOVAL OF THE BFP IN ONE

SUPPLEMENTAL SPECIFICATION BOOK FOR A COPY OF THE TOWN'S REQUIREMENTS. IN THE

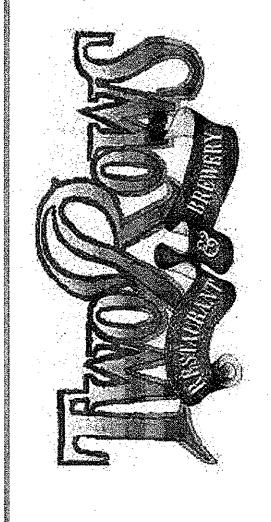
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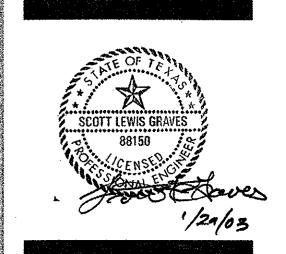
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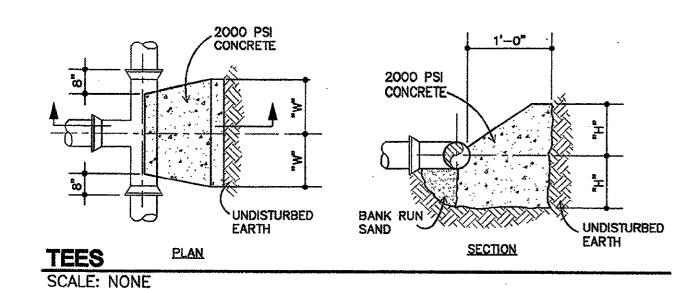
REVISIONS

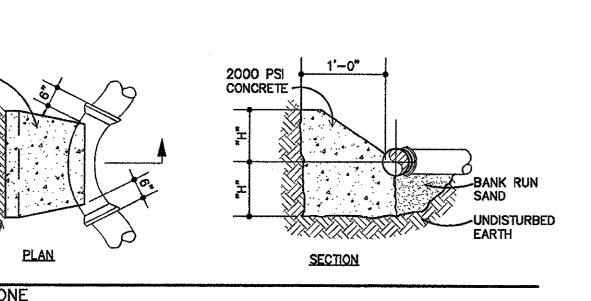
12/19/02 (City) 01/24/03 (City)

PROTOTYPE

STORE NUMBER

WD PROJECT NUMBER 0000.659-00





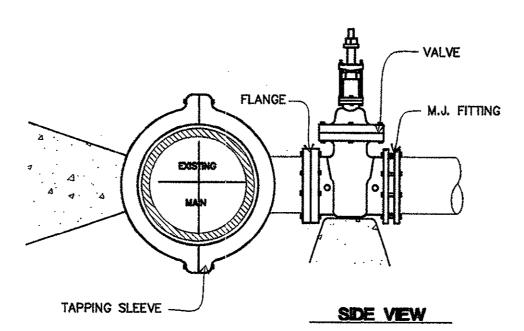
THRUST BLOCK NOTES

- A. THRUST BLOCKS DIRECTLY AGAINST UNDISTURBED EARTH.
- B. NO JOINTS SHALL BE COVERED WITH C. CONCRETE SHALL HAVE A MINIMUM
- COMPRESSIVE STRENGTH OF 2000 PSI. D. ALL THRUST BLOCKS FOR VERTICAL BENDS SHALL INCLUDE STRAPS TO SECURE FITTING
- TO BLOCK.

 E. ALL THRUST BLOCKS ARE DESIGNED FOR 100 PSI NORMAL OPERATING PRESSURE. THE THRUST BLOCKS FOR HIGHER PRESSURE LINES, IF ANY, SHALL BE INCREASED IN SIZE AS DIRECTED BY ENGINEER.

THE	NUST BLOC	K S	CHED	ULE	
DESCRIPTION MINIMUM OF FITTINGS DIMENSIONS		DIAMETER OF PIPE			
	(IN FEET)	6"	8"	10"	12"
TEES	W	1.25	1.5	1.75	2.0
	Н	1.25	2.0	2.25	2.5
90° BENDS	W	2.0	3.0	3.5	4.0
	Н	1.5	2.0	2.25	2.5
45" BENDS	W	1.5	2.0	2.5	3.0
	H	1.0	1.25	1.75	2.0
22 1/2* BENDS	₩	1.5	1.5	2.0	2.5
	H	1.0	1.0	1.5	1.5
11 1/4° BENDS	W	1.0	1.25	1.5	1.5
	Н	1.0	1.0	1.25	1.25
	W	1.25	1.5	1.75	2.0
UAFO	Н	1.25	2.0	2.25	2.5

- GATE/TAPPING VALVE TOP VIEW



NOTES

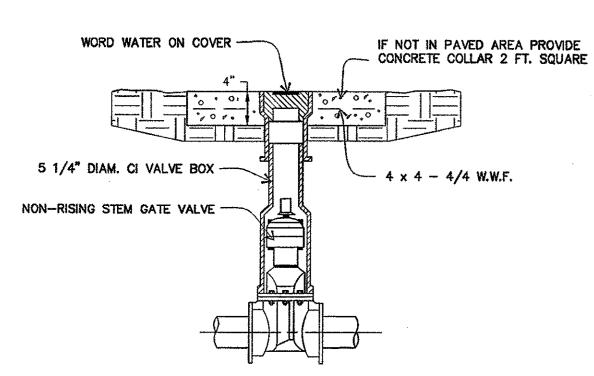
- 1. 3000PSI CONCRETE WILL BE USED FOR FOOTINGS.
- CONCRETE SHALL NOT CONTACT BOLTS OR ENDS OF MECHANICAL JOINT FITTINGS.
- 3. TAPPING SLEEVE AND VALVE WILL MEET TOWN OF ADDISON SPECIFICATIONS. CONSULT THE SUPPLEMENTAL SPECIFICATION BOOK FOR A COPY OF THE TOWN'S REQUIREMENTS. IN THE EVENT ADDSION REQUIREMENTS ARE MORE STRINGENT, THE TOWN'S REQUIREMENTS SUPERCEDE THIS DETAIL AND

04 TAPPING SLEEVE AND VALVE SCALE: NONE

O1 THRUST BLOCKS SCALE: NONE

EARTH

BENDS

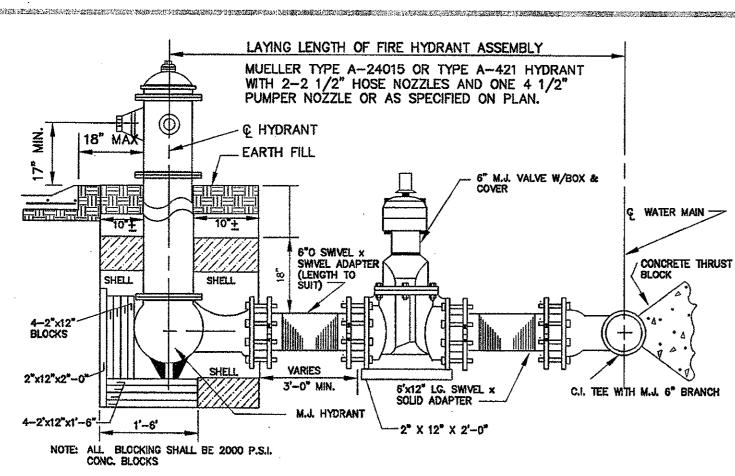


NOTES

- 1. CENTER AND TOP SECTION SHALL BE OF THE ADJUSTABLE SCREW
- BASE SHALL BE NO. 4 ROUND FOR 4 INCH VALVES; NO. 6 OVAL FOR 6 AND 8 INCH VALVES; AND NO. 160 OVAL FOR 10 TO 16 INCH VALVES. GATE VALVES SHALL HAVE
- 3. ALL GATE VALVES WILL MEET TOWN OF ADDISON SPECIFICATIONS. CONSULT THE SUPPLEMENTAL SPECIFICATION BOOK FOR A COPY OF THE TOWN'S REQUIREMENTS. IN THE EVENT ADDSION REQUIREMENTS ARE MORE STRINGENT, THE TOWN'S REQUIREMENTS SUPERCEDE THIS DETAIL AND NOTES.

SPECIFICATION #GV-95.1

O2 GATE VALVE AND BOX SCALE: NONE



NOTES

1. FIRE HYDRANTS WILL MEET TOWN OF ADDISON SPECIFICATIONS. CONSULT THE SUPPLEMENTAL SPECIFICATION BOOK FOR A COPY OF THE TOWN'S REQUIREMENTS. IN THE EVENT ADDSION REQUIREMENTS ARE MORE STRINGENT, THE TOWN'S REQUIREMENTS SUPERCEDE THIS DETAIL AND NOTES.

SPECIFICATION #FH-95.1

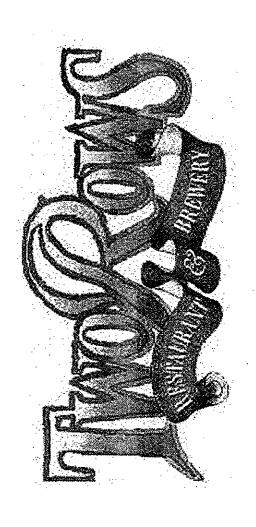
2350 Valley View Lane Dallas, Texas 75234-5734 T 214.351.5400 F 214.351.2095 inbox@wdpartners.com

wdpartners.com

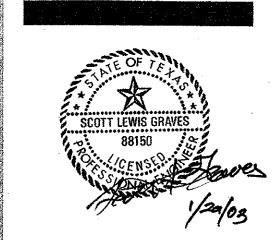
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01/24/03 (City)

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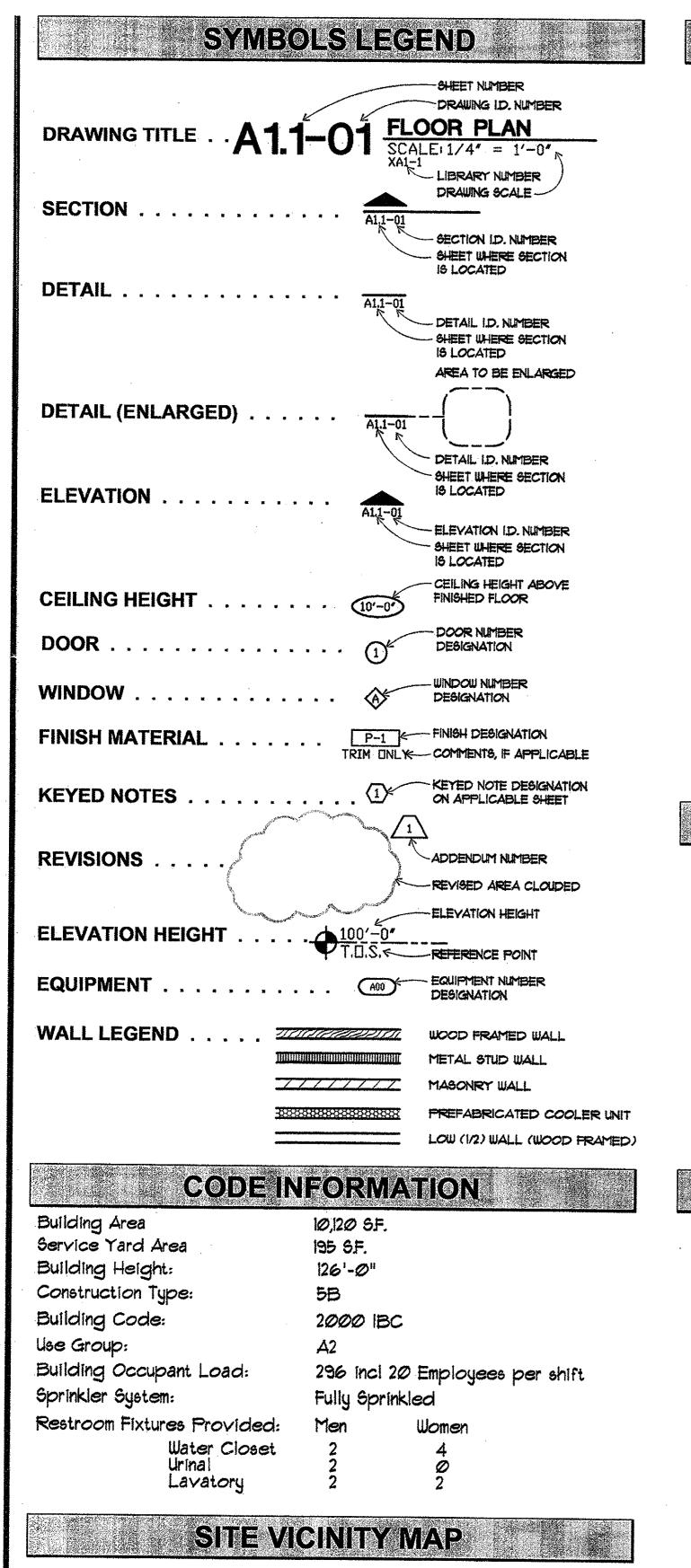
WD PROJECT NUMBER

Civil Resubmittal 01/10/03

REV./DATE

000.659-00





COLLIN COUNTY
DALLAS COUNTY

SOJOURN DRIVE

ADDISON AIRPORT

SITE

BENT TREE COUNTRY CLUB

OWNER

17225 DALLAS PARKWAY ADDISON, TEXAS

ARCHITECT/ENGINEER



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terry.ho@wdpartners.com
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Dallas

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Los Angeles
Chicago
Miami

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PLUMBING: LES FOLSE 16801 WESTGROVE DRIVE ADDISON, TX 75001-9010 (972) 450-2887 email: Ifolse@ci.addison.tx.us

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4798 AIRPORT PARKWAY
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email: grobbins@ci.addison.tx.us

NATURAL GAS:
TXU ELECTRIC & GAS

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MECHANICAL:
BRUCE ELLIS
16801 WESTGROVE DRIVE
ADDISON, TX 75001-9010
(972) 450-2888
email: bellis@ci.addison.tx.us

GENERAL PROJECT NOTES

TITLE SHEET CIVIL **國 C1.0 EROSION CONTROL PLAN 図 C1.1 EROSION CONTROL DETAILS ■ C1.2** TRENCH SAFETY PLAN **図 C2.0** SITE PLAN **図 C2.1** SITE DETAILS 圖 C3.0 **GRADING PLAN 図 C3.1** STORM PLAN AND PROFILE **■ C3.2** STORM PLAN AND PROFILE **図** C3.3 **PAVING PLAN 図** C3.4 **PAVING DETAILS 國 C4.0 UTILITY PLAN 図 C4.1 UTILITY DETAILS 國 C4.2 UTILITY DETAILS**

CONSTRUCTION SET

TOWN OF ADDISON
PUBLIC WORKS DEPARTMENT
NAME: Stere Chutchun DATE: 2(3/03)

Special Use Permit	09.30.02
Bldg/ MEP/ Health/ Fire	12.13.02
TDLR Reviewed	12.30.02
Civil Submittal	01.29.03
Construction	00.00.00

