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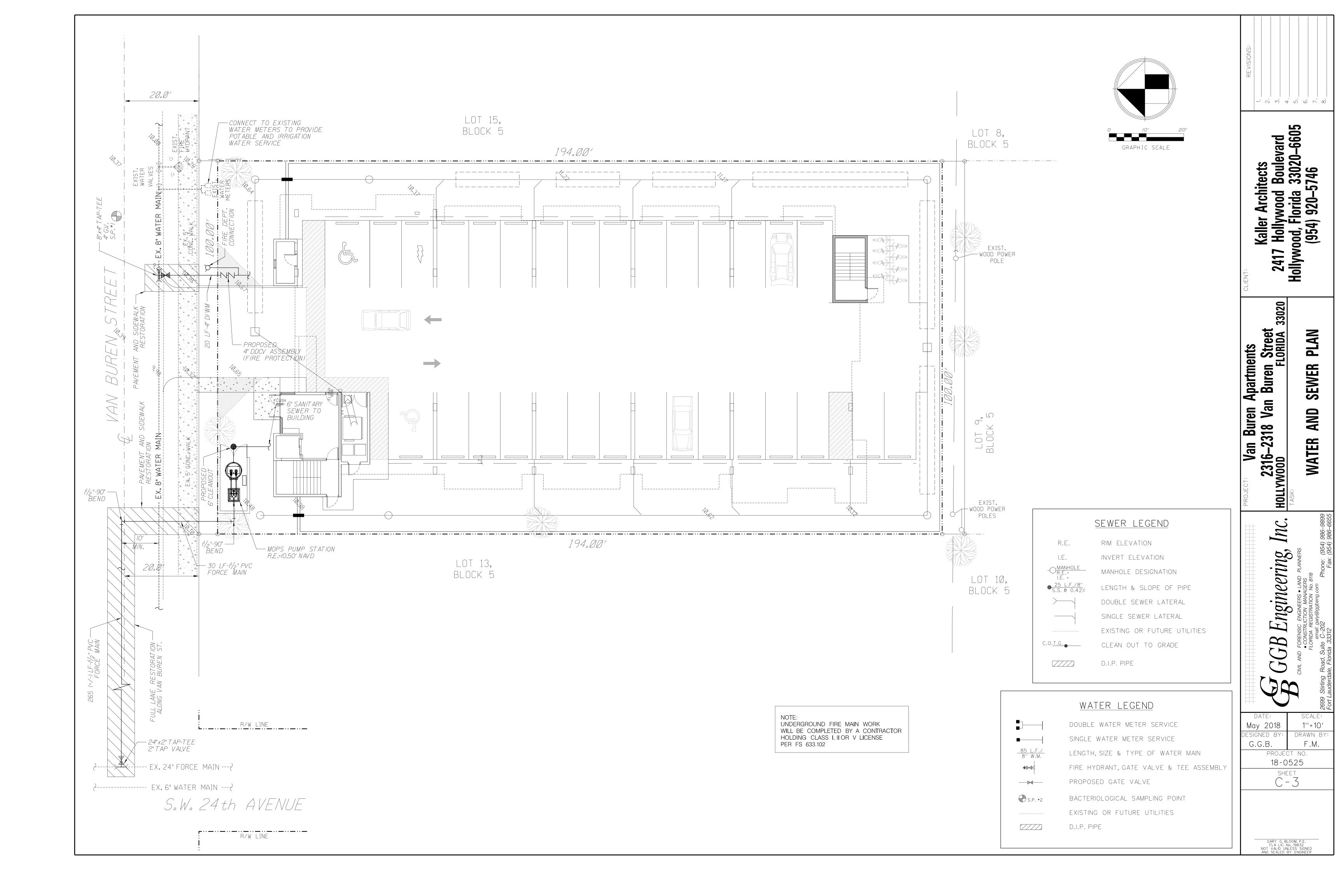
PAVING, GRADING AND DRAINAGE PLAN

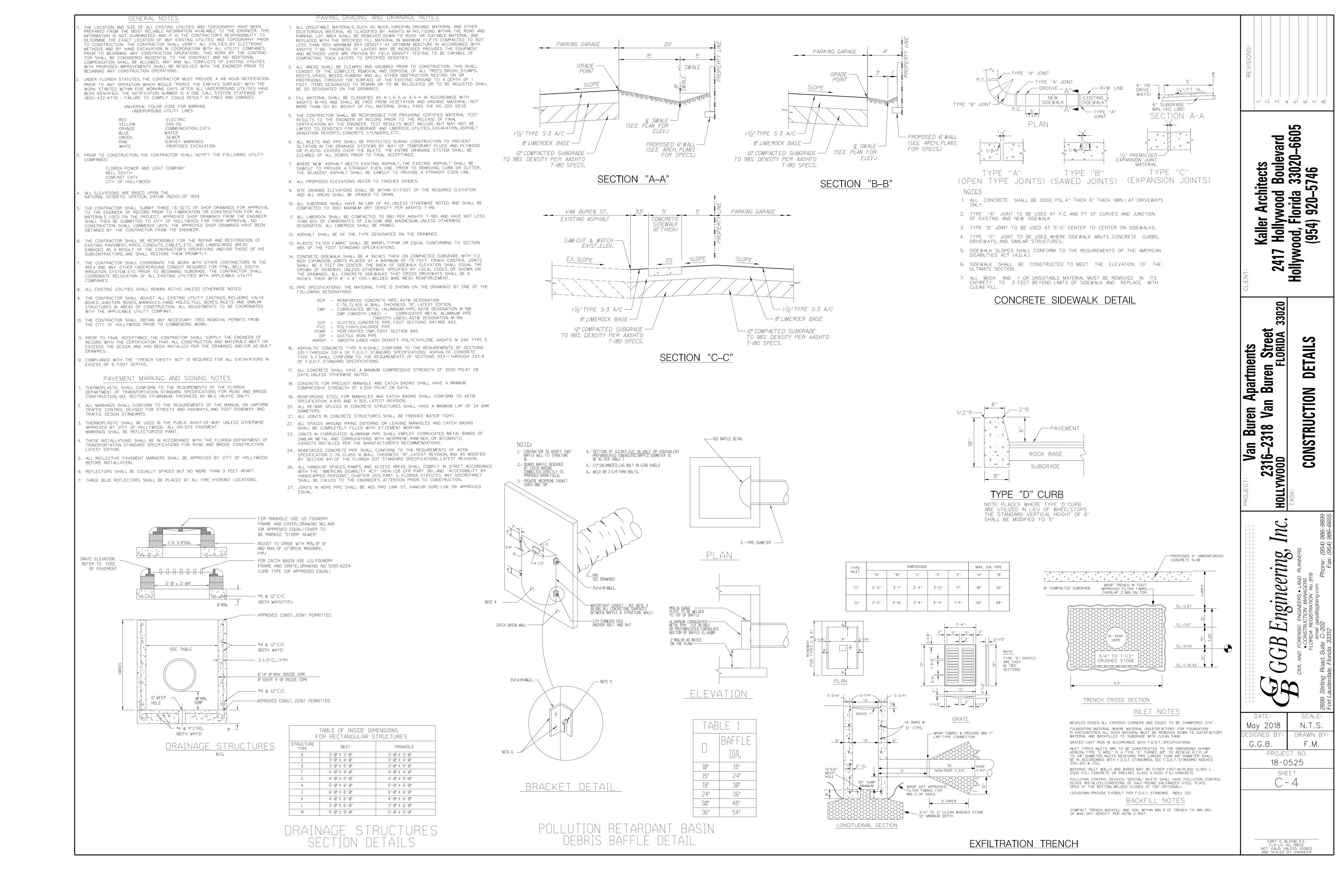
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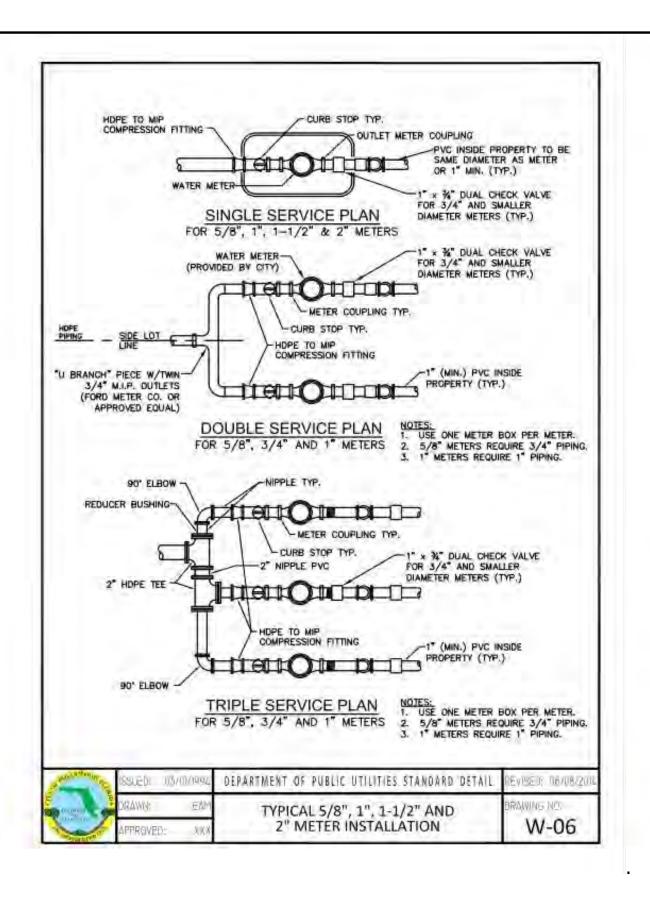
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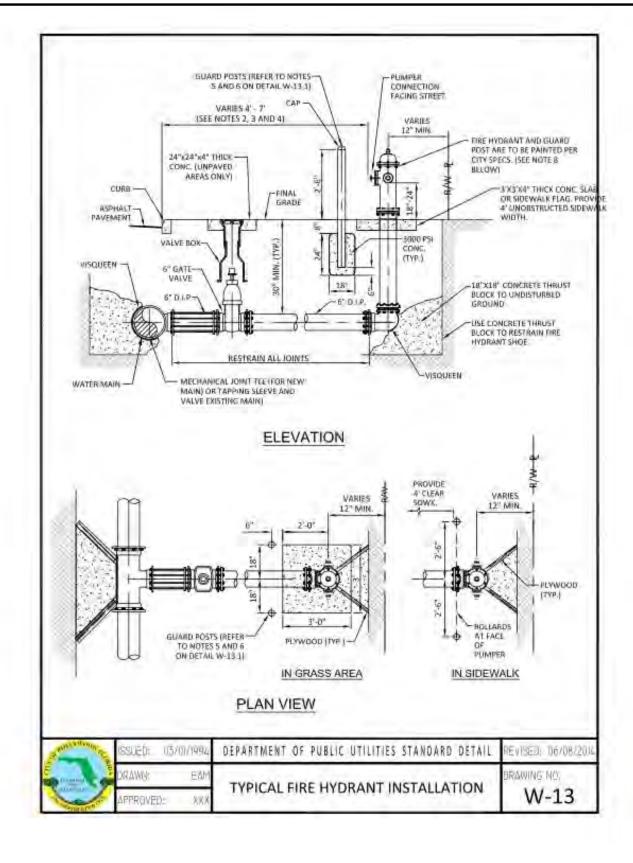
PROJECT NO. 18-0525

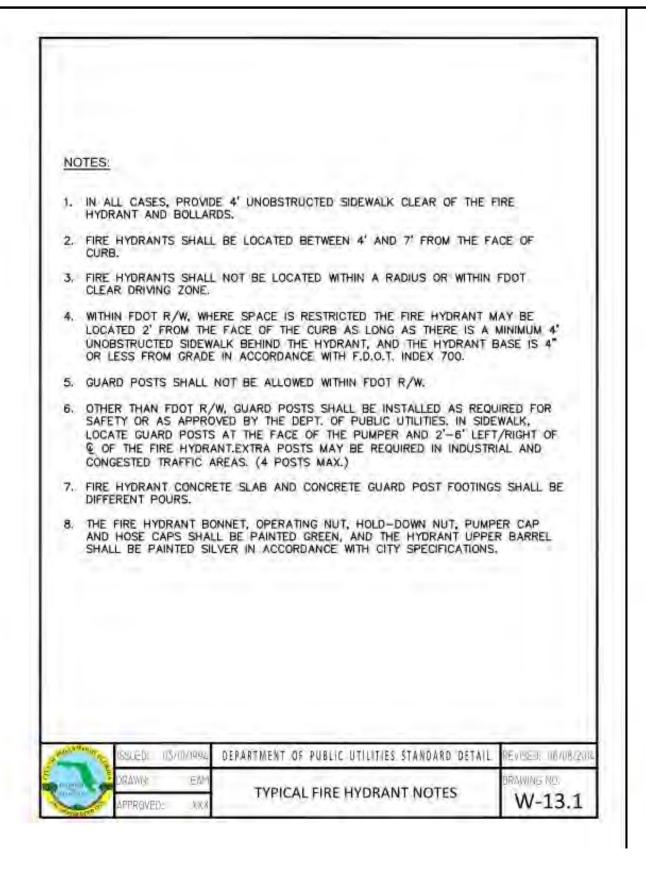
GARY G.BLOOM, P.E. FLA LIC. No. 19832 NOT VALID UNLESS SIGNED AND SEALED BY ENGINEER

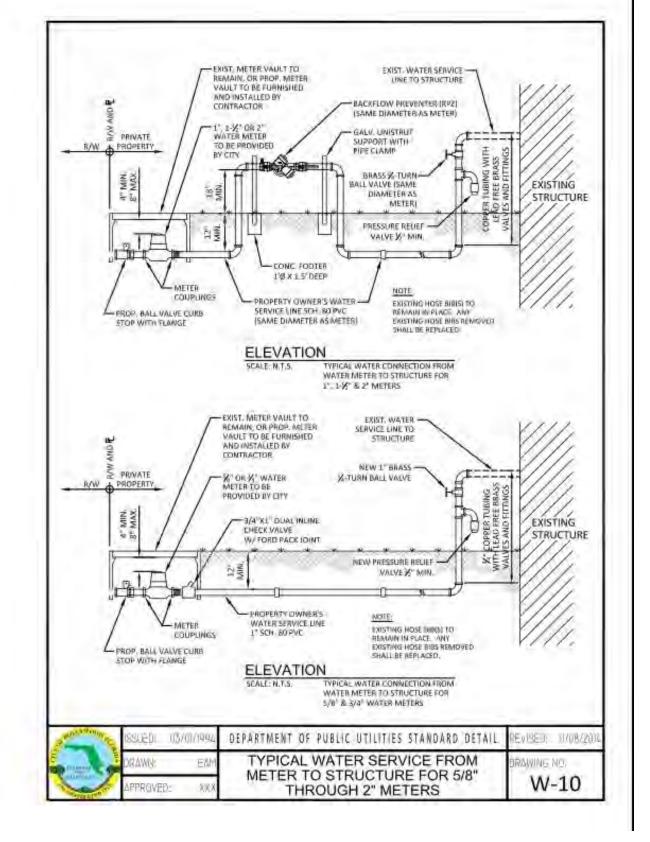


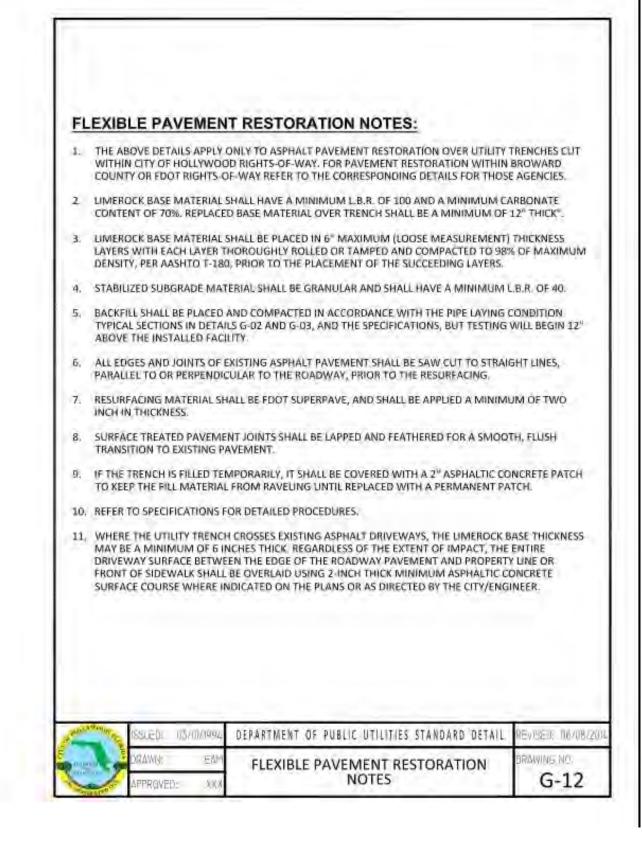


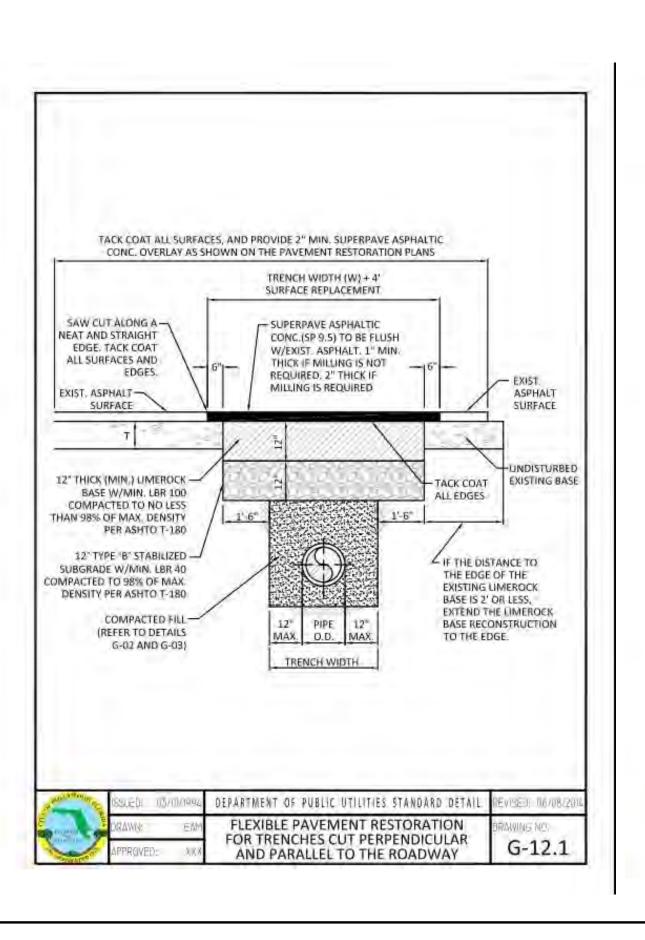


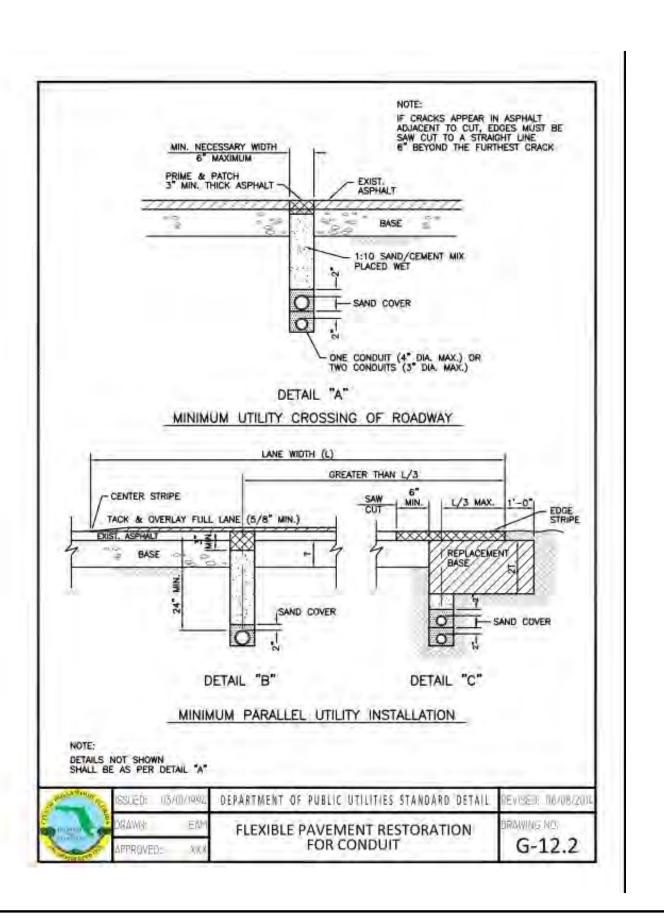












Apartments n Buren Street FLORIDA ETAIL CONSTRUCTION Van Van Buren 16–2318 Var Ingineering, \mathcal{H} May 2018 DRAWN BY PROJECT NO. 18-0525

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ALL WATER MAINS SHALL BE DESIGNED FOR A MINIMUM WORKING PRESSURE OF 150 PSI AND HAVE COMPRESSION TYPE BELL AND SPIGOT JOINTS. THE WATER SYSTEM SHALL BE HYDROSTATICALLY PRESSURE TESTED AND DISINFECTED PER AWWA / ANSI C651/05 AND TESTED FOR A PERIOD OF 2 HOURS AT NOT LESS THAN 150 PSI IN ACCORDANCE WITH ANSI / AWWA STANDARD C600-05 WITH AN ALLOWABLE LEAKAGE AS DETERMINED BY THE FOLLOWING FORMULA:

$L = S D P^{0.5} / 148,000$ WHERE: = ALLOWABLE LEAKAGE IN GALLONS / HOUR S = PIPE LENGTH IN FEET D = NOMINAL DIAMETER OF PIPE IN INCHES P = AVERAGE TEST PRESSURE IN PSI

SHALL CONFORM TO REQUIREMENT OF SDR 18.

TEST PRESSURE SHALL NOT VARY MORE THAN 5 PSI THROUGHOUT THE TEST. THE MAXIMUM ALLOWABLE LEAKAGE SHALL BE BASED ON A MAXIMUM WHEN THE LENGTH OF PIPE TESTED EXCEEDS 2000 FEET THRUST BLOCKS AS SHOWN ON THE DETAIL SHEETS SHALL BE PROVIDE AT ALL BENDS UNLESS NOTED OTHERWISE ON PLANS. IF RESTRAINT JOIN PIPE ISSPECIFIED ON THE PLANS, IT SHALL BE INSTALLED THE REQUIREMENTS OF THE PIPE MANUFACTURER AND THE UTILITY DEPARTMENT.NO CONCRETE THRUST BLOCKS WILL BE ALLOWED EXCEPT FOR FIRE HYDRANTS.

BACTERIOLOGICAL TESTING SHALL BE IN ACCORDANCE WITH AWWA / ANSI C651-05 LATEST REVISION. PVC WATER MAIN PIPE (BLUE) SHALL MEET THE REQUIREMENTS OF AWWA

C-900.97 "POLYVINYL CHLORIDE (PVC) PRESSURE PIPE", CLASS 150 PIPE

ALL PVC PIPE SHALL BE SUITABLE FOR USE AS A PRESSURE CONDUIT.PROVISIONS MUST BE MADE FOR EXPANSION AND CONTRACTION AT EACH JOINT WITH AN ELASTOMERIC RING. THE BELL SHAL OF AN INTEGRAL WALL SECTION WITH AN ELASTOMERIC RING WHICH MEETS THE REQUIREMENTS OF ASTM F-477 STANDARD SPECIFICATIONS FOR ELASTOMERIC SEALS (GASKETS FOR JOINTING PLASTIC PIPE). THE WALL THICKNESS IN THE BELL SECTION SHALL CONFORM TO THE REQUIREMENTS OF ASTM D-3139.

PVC PIPE SHALL BE DELIVERED TO THE JOB SITE FROM THE FACTORY AND STORED AT THE JOB SITE IN PALLETIZED UNITS OR BUNDLES TO PREVENT UNNECESSARY DEFLECTION PRIOR TO INSTALLATION. EACH PALLETIZED UNIT SHALL BE SIZED TO LIMIT THE STACKING OF PIPE NOT MORE THAN SIXTY (60) INCHES HIGH OR AS APPROVED BY THE ENGINEER.

CARE SHALL BE TAKEN DURING THE TRANSPORTING OF THE PIPE TO INSURE THAT THE BINDING AND TIE DOWN METHODS DO NOT DAMAGE OR DEFLECT THE PIPE IN ANY MANNER, PIPE BENT, DEFLECTED, OR OTHERWISE DAMAGED DURING SHIPPING WILL BE REJECTED.

PVC MAINS SHALL BE LAID WITH A MINIMUM OF 36" CLEAR COVER. FITTINGS SHALL BE MECHANICAL JOINT DUCTILE IRON PRESSURE CLASS 350 THROUGH 12", ALL FITTINGS SHALL BE CEMENT MORTAR LINED AND SEALED THE SAME AS PIPE IN ACCORDANCE WITH AWWA/ANSI C110/A21.10-

PVC AND D.I.P. PIPE SHALL BE DEFLECTED NO MORE THAN ONE HALF(1/2) THE MANUFACTURERS RECOMMENDATION. JOINTS FOR BELL AND SPIGOT PVC/DIP PIPE AND FITTINGS SHALL BE MECHANICAL OR RUBBER GASKET (EITHER ON SPIGOT OR IN BELL)COMPRESSION TYPE AS SPECIFIED IN ACCORDANCE WITH AWWA/ANSI STANDARD C111/A21.11-00. SPECIAL FITTINGS AND JOINTS

ALL WATER MAINS SHALL HAVE CONTINUOUS DETECTOR TAPE 18 INCHES BELOW GRADE ALONG ALL WATER MAINS, DETECTOR TAPE SHALL HAVE BLUE SIDE-UP. A 14 GAUGE MULTI STRAND WIRE SHALL BE ATTACHED TO NON-CONDUCTIVE WATER MAIN TO FACILITATE FUTURE LOCATION. AN EXTRA 4' OF WIRE SHALL BE PROVIDED AT BLOWOFFS, FIRE HYDRANTS, ETC. POLYETHYLENE ENCASEMENT/WRAP SHALL BE INSTALLED ON ALL IRON POLYWRAP SHALL BE INSTALLED IN ACCORDANCE WITH THE MINIMUM

SHALL BE CONSIDERED FOR SPECIFIC INSTALLATION.

ANSI/AWWA C105/A21.5-05 STANDARDS.

DUCTILE IRON WATER MAIN SEALCOAT SHALL BE COAL TAR EPOXY OR DUCTILE IRON PIPE JOINTS SHALL BE PUSH-ON TYPE AND RESTRAINED A MINIMUM DISTANCE AS SPECIFIED IN RESTRAINEND DETAIL ON APPLICABLE

DETAIL SHEET, USING MEGA-LUG OR APPROVED EQUAL USING TR-FLEX U.S. PIPE OR FLEX RING BY AMERICAN PIPE. WATER MAIN STUBS FOR FUTURE EXTENSION INCLUDING ALL FITTINGS

BACK TO TEE (IF STUB LENGHTS IS LEES THAN TWO PIPE LENGTH)LENGHTS WILL BE RESTRAINT JOINT PIPE FOR THE LAST TWO LENGTHS. (AS REQUIRED BY ENGINEER OR UTILITY DEPT.) DUCTILE IRON PIPE SHALL BE CLASS 350 AND SHALL BE CEMENT LINED AND SEALCOATED IN ACCORDANCE WITH AWWA / ANSI STANDARD C151/A21.51-02. WATER MAINS SHALL BE LAID WITH A MINIMUM 30

CLEAR COVER, DUCTILE IRON FITTINGS SHALL BE CLASS 350 THROUGH 1 AND CLASS 250 IN SIZES 16" AND LARGER, ALL FITTINGS SHALL BE CEMENT LINED AND SEALCOATED THE SAME AS PIPE IN ACCORDANCE WITH AWWA / ANSI STANDARDS C104/A21.4-03 AND C153/A21.53-00. NEOPRENE GASKETS SHALL BE USED. ALL WATER MAINS SHALL BE BEDDED AND BACKFILLED PER STANDARD TRENCH DETAILS.

CONTRACTOR IS RESPONSIBLE FOR THE EXISTING ON-SITE WATER SYSTEM UNTIL FINAL INSPECTION, CERTIFICATION AND APPROVAL BY THE CONTRACTOR IS RESPONSIBLE WHETHER, OR NOT NOTED ON PLANS FOR

RAISING OR LOWERING OF EXISTING GATE VALVE BOXES, METER BOXES, ETC. THAT MAY NEED ADJUSTMENT TO MEET PROPOSED FINISH GRADES. ALL EXISTING WATER MAINS AND COMPONENTS DESIGNATED FOR REMOVAL ARE THE PROPERTY OF THE UTILITY, MATERIALS SHALL BE REMOVED FROM GROUND AS CAREFULLY AS POSSIBLE AND SALVAGED FOR UTILITY.SHOULD UTILITY REFUSE SAID WATER COMPONENTS, THEN THE CONTRACTOR WILL BE RESPONSIBLE FOR OFF-SITE DISPOSAL. CONTRACTOR TO REFER TO ARCHITECTURAL (PLUMBING) PLANS TO CONFIRM LOCATIONS AND ELEVATIONS OF ALL WATER FIRE AND SEWER

BUILDING CONNECTIONS. DEVELOPER IS RESPONSIBLE TO DEDICATE UTILITY EASEMENTS TO THE UTILITY FOR ALL PUBLIC WATER MAINS THAT ARE TO BE ULTIMATELY OWNED AND MAINTAINED BY THE UTILITY. EASEMENTS TO BE GRANTED UPON

THE CONCLUSION OF THE WORK FROM AS-BUILT PIPE LOCATIONS, UNLESS OTHERWISE REQUIRED BY THE UTILITY. CONTRACTOR IS RESPONSIBLE TO DELIVER AS-BUILT WATER PLANS, MYLAR,

AND COMPUTER DISK TO THE ENGINEER OF RECORD PRIOR TO FINAL CERTIFICATION TO THE UTILITY. AS-BUILTS SHALL BE SIGNED AND SEALED BY A REGISTERED FLORIDA SURVEYOR.

MAINTAIN A 10-FOOT HORIZONTAL CLEARANCE BETWEEN ALL UTILITIES AND BUILDING STRUCTURES, UNLESS OTHERWISE SHOWN ON THE PLANS. LANDSCAPING SHALL NOT BE INSTALLED WITHIN 6' OF ALL WATER MAINS AND SERVICES OR WITHIN A 5' RADIUS OF ALL FIRE HYDRANTS, UNLESS APPROVED BY THE ENGINEER.

WATER MAINS SHALL BE DEFLECTED OVER DRAINAGE AT ALL CONFLICTS. ALL WATER SERVICES SHALL TERMINATE A MINIMUM OR 5' FROM BUILDING. UNDERGROUND WATER MAINS AND FIRE HYDRANTS SHALL BE INSTALLED AND OPERATIONAL PRIOR TO BUILDING CONSTRUCTION AS REQUIRED BY THE LOCAL FIRE DEPARTMENT AND THE SOUTH FLORIDA BUILDING CODE, LATEST

ALL WATER MAIN INSTALLATION SHALL COMPLY WITH THE COLOR CODING REQUIREMENTS OF CHAPTER 62-555.320 FAC.

WATER SERVICE LINES:

WATER SERVICES SHALL BE POLYETHYLENE TUBING (PE 3408) COMPLYING WITH APPLICABLE REQUIREMENTS FOR PE, AWWA C902-02 HIGH MOLECULAR WEIGHT PLASTIC MATERIAL ASTM D-2666, 250 PSI RATING (CTS-OD) SDR 9. SERVICE PIPE SHALL BE INSTALLED AS A SINGLE RUN WITHOUT

JOINTS FOR TUBING SHALL BE OF THE COMPRESSION TYPE UTILIZING A TOTALLY CONFINED GRIP SEAL AND COUPLING NUT, STAINLESS STEEL TUBE STIFFENER INSERTS SHALL ALSO BE USED FOR TUBING SERVICES. SERVICE LINES SHALL BE MARKED WITH 2" X 4" POST PAINTED BLUE.

ALL WATER SERVICES SHALL BE BEDDED AND BACKFILLED PER STANDARD TRENCH DETAIL. PIPE DEFLECTION SHALL BE NO MORE THAN ONE HALF OF THE MANUFACTURER'S RECOMMENDATION.

MINIMUM COVER SHALL BE 24". ALL WATER SERVICE LINES UNDER PAVED AREAS SHALL BE SLEEVED IN SCHEDULE 40 PVC AND SHALL BE OF ONE SINGLE LENGTH WITHOUT UNIONS.

FORD STAINLESS INSERTS ARE REQUIRED FOR PLASTIC PIPE.

GATE VALVES:

GATE VALVES 4" AND LARGER SHALL BE MECHANICAL JOINT TYPE AND COMPLY WITH AWWA / ANSI STANDARD C509-01.

MECHANICAL JOINTS SHALL CONFORM TO AWWA / ANSI C111/A21.11-00 ALL GATE VALVES ARE TO BE IRON BODY, BRONZE MOUNTED, DOUBLE DISK, NON-RISING STEM, RESILIENT SEAT TYPE, OPENING LEFT (COUNTER CLOCKWISE). THE INTERIOR LINING SHALL BE FUSION BONDED EPOXY ACCORDING TO AWWA 550-90 AND AN EXTERIOR EPOXY COAT (BOTH 40

GATE VALVES 4" TO 12" SHALL HAVE A MAXIMUM WORKING PRESSURE OF 200 PSI AND BE TESTED AT 400 PSI. GATE VALVES SHALL BE RESILIENT SEATED MUELLER, CLOW RESILIENT WEDGE, M & H, OR APPROVED EQUAL, WITH RESTRAINT JOINTS.

GATE VALVES UNDER 4" IN SIZE SHALL BE BRONZE GATE VALVES CONFORMING TO MSS STANDARD PRACTICE SP-37. THEY SHALL BE DOUBLE DISK, NON-RISING STEM, OPEN LEFT (COUNTER CLOCKWISE) WITH OPERATING WHEEL. PEWTER AND POT METAL OPERATING WHEELS SHALL NOT BE PERMITTED. GATE VALVES SHALL MEET AWWA C500-02 STANDARDS. VALVE BOXES SHALL BE CAST IRON EXTENSION TYPE WITH NOT LESS THAN

5-1/4" DIAMETER SHAFT AND WITH COVERS MARKED "WATER", PAINTED

BLUE, USF 7500 OR APPROVED EQUAL. GATE VALVES 18" AND LARGER WILL BE SUBSTITUTED WITH BUTTERFLY VALVES AS MANUFACTURED BY PRATT, DEZURIK, CLOW, OR APPROVED BUTTERFLY VALVES ARE TO BE CAST OR DUCTILE IRON BODY; ALLOY CAST IRON OR DUCTILE IRON DISK; BODY MOUNTED ADJUSTABLE SEAT; ONE-PIECE STAINLESS STEEL SHAFT; SHORT OR LONG BODY TYPE; WITH THE VALVE CLASS, SHAFT SIZE AND OTHER SPECIAL REQUIREMENTS SELECTED

VALVE OPERATION IS TO BE APPROVED GEAR ACTUATORS, WITH SEALED ENCLOSURES FOR BURIED OR SUBMERGED SERVICE, POSITION INDICATORS WILL BE FURNISHED AS REQUIRED, UNITS ARE TO BE EQUIPPED WITH ACTUATING NUTS, CAST IRON HANDWHEELS, OR CHAIN OPERATORS, WITH GALVANIZED STEEL CHAINS, AS APPROPRIATE FOR THE INSTALLATION. APPURTENANCES ARE TO BE FURNISHED BY THE VALVE MANUFACTURER.

IN ACCORDANCE WITH THE SPECIFIC DESIGN; AND ARE TO COMPLY WITH

THE PROVISIONS OF AWWA C504-00, "RUBBER SEATED BUTTERFLY VALVES.

WATER SERVICE FITTINGS:

METER VALVES (ASTM B-62 LATEST) SHALL BE FORD ANGLE STOPS MODEL #KV43-342W FOR SINGLE SERVICES AND FORD MODEL #UV63-42W FOR DOUBLE SERVICES OR APPROVED EQUAL.

CURB STOPS SHALL BE OF THE INVERTED KEY TYPE WITH TEE-HEAD SHUT OFF. CURB STOPS SHALL BE MADE OF BRASS ALLOY IN ACCORDANCE WITH ASTM SPECIFICATION B62-82A. METER VALVES AND CORPORATION STOPS (FORD BALL CORP. NO. FC 202) SHALL BE OF BRONZE CONSTRUCTION IN ACCORDANCE WITH ASTM

STAINLESS STEEL SERVICE SADDLES BY FORD. INLET THREAD FOR METER VALVES AND CURB STOPS SHALL BE AWWA TAPER THREAD IN ALL SIZES IN ACCORDANCE WITH ANSI / AWWA STANDARD C800-05. OUTLET CONNECTIONS SHALL HAVE A COMPRESSION TYPE FITTING SAME

PECIFICATION B62-82A WITH EPOXY COATED DUCTILE IRON BODY

CONTRACTOR TO REVIEW WATER DETAILS TO DETERMINE EXTENT OF JURISDICTION OF WATER SERVICE AND METER MATERIALS (METERS, ETC.) SUPPLIED AND INSTALLED BY UTILITY.

FIRE HYDRANTS:

ALL FIRE HYDRANTS SHALL COMPLY WITH AWWA / ANSI STANDARD C502-05 AND THE FOLLOWING DESIGN STANDARDS: THE FIRE HYDRANTS SHALL BE OF THE COMPRESSION TYPE, OPENING AGAINST THE PRESSURE AND CLOSING WITH THE LINE PRESSURE WITH (1)-5 1/4" VALVE OPENING. THE HYDRANT SHALL BE EQUIPPED WITH (2)-2

/2" HOSE NOZZLES AND (1)-51/4" PUMPER NOZZLE. FIRE HYDRANTS SHALL BE FURNISHED WITH A SEALED OIL OR GREASE RESERVOIR LOCATED IN THE BONNET SO THAT ALL THREADED AND BEARING SURFACES ARE AUTOMATICALLY LUBRICATED WHEN THE HYDRANT OPERATED. THE HYDRANT WILL BE DESIGNED FOR DISASSEMBLY BY USE OF A SHORT DISASSEMBLY WRENCH OR THE HYDRANT SHOE SHALL HAVE INTEGRAL CAST TIE BACK LUGS ON THE MAIN VALVE TO PERMIT THE MAIN VALVE ASSEMBLY AND VALVE SEAT TO BE REMOVED WITHOUT DIGGING EARTH

OR DISASSEMBLING THE HYDRANT BARREL.

FIRE HYDRANTS SHALL BE FURNISHED WITH A BREAKABLE FEATURE THAT WILL BREAK CLEANLY UPON IMPACT, THIS SHALL CONSIST OF A TWO PART BREAKABLE SAFETY FLANGE WITH A BREAKABLE STEM COUPLING. THE UPPER AND LOWER BARRELS SHALL BE FLUTED AND RIBBED ABOVE AND BELOW THE SAFETY FLANGE OR HAVE AN EXTRA STRENGTH LOWER BARREL.

THE FIRE HYDRANT INTERNAL VALVE SHALL BE 51/4" MINIMUM. THE PENTAGONAL OPERATING NUTS AND THE CAP NUTS SHALL BE 11/2" POINT TO FLAT, DRAIN VALVE OUTLETS FOR THE HYDRANTS SHALL BE PLUGGED OR OMITTED. THE HYDRANTS SHALL OPEN COUNTER CLOCKWISE AND THE DIRECTION OF OPENING SHALL BE CAST ON THE TOP. THE BURY LENGTH, MEASURED FROM THE BOTTOM OF THE CONNECTING PIPE TO THE GROUND LINE AT THE HYDRANT SHALL BE THREE FEET SIX INCHES (42") MINIMUM OR AS REQUIRED BY PLAN.

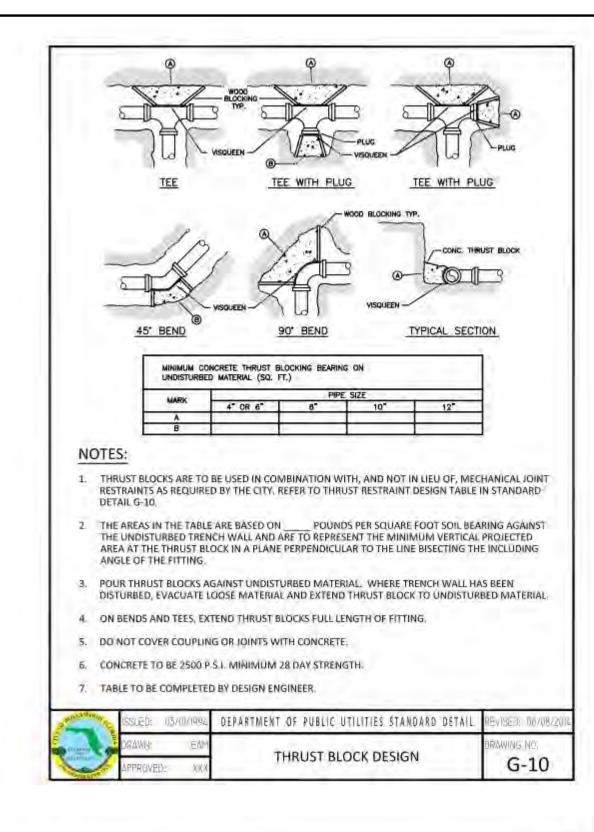
THE HYDRANT SHALL BE EQUIPPED WITH A 6" MINIMUM MECHANICAL JOINT BASE INLET UNLESS OTHERWISE SPECIFIED BY THE ENGINEER. FIRE HYDRANTS SHALL BE MUELLER PAINTED TRAFFIC RED OR AS OTHERWISE SPECIFIED ON PLANS, OR AS REQUIRED BY THE LOCAL

UTILITY COMPANY. REFER TO WATER DETAILS FOR OTHER REQUIREMENTS / INFORMATION RELATED TO FIRE HYDRANTS.

SANITARY SEWER: ALL WORKMANSHIP AND MATERIAL SHALL CONFORM TO STANDARDS OF THE BROWARD COUNTY BUILDING DEPARTMENT, LOCAL MUNICIPALITY AND THE WATER RESOURCE DIVISION, BROWARD COUNTY DEPARTMENT OF NATURAL RESOURCE

UNLESS OTHERWISE NOTED OR APPROVED, ALL GRAVITY MAINS AND SERVICES UP TO 5' OUTSIDE OF BUILDING SHALL BE 8" UNPLASTICIZED POLYVINYL CHLORIDE (PVC) NONPRESSURE PIPE CONFORMING TO ASTM D3034 AND SDR 35 WITH INTEGRAL WALL BELL AND SPIGOT JOINTS FOR PUSH-ON RUBBER GASKET TYPE JOINT SEALS CONFORMING TO ASTM D1869, UNLESS OTHERWISE SPECIFIED ON THE PLANS.

PVC FITTINGS SHALL BE OF MONOLITHIC CONSTRUCTION OF THE TYPE SPECIFIED BY THE MANUFACTURER OF THE PIPE BEING USED. NO SOLVENT WELDS OR THREADED JOINTS WILL BE PERMITTED. ALL JOINTS SHALL BE COMPRESSION GASKET TYPE. THE JOINING OF PIPE ON THE JOB SHALL BE DONE IN STRICT ACCORDANCE WITH THE PIPE MANUFACTURER'S INSTRUCTIONS AND SHALL BE DONE ENTIRELY IN THE TRENCH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.



WATER NOTES CONTINUED:

- VALVE BOXES AND COVERS FOR ALL SIZE VALVES SHALL BE OF CAST IRON CONSTRUCTION AND ADJUSTABLE SCREW-ON TYPE. THE LID SHALL HAVE CAST IN THE METAL THE WORD "WATER" FOR THE WATER LINES. ALL VALVE BOXES SHALL BE SIX INCH (6") NOMINAL DIAMETER AND SHALL BE SUITABLE FOR DEPTHS OF THE PARTICULAR VALVE. THE STEM OF THE BURIED VALVE SHALL BE WITHIN TWENTY-FOUR INCHES (24") OF THE FINISHED GRADE UNLESS OTHERWISE APPROVED BY THE CITY. VALVE BOXES SHALL BE TYLER BRAND, NO SUBSTITUTES.
- 10. FIRE HYDRANTS: PRESENTLY CITY OF HOLLYWOOD UTILITIES SPECIFICATIONS ALLOW ONLY MANUFACTURERS: MUELLER MODEL SUPER CENTURION 200 5 M. SIZE REFERENCE CATALOG NO. A-423 AND AMERICAN DARLING MODEL B-84-8 5½" SIZE. ANY DEVIATION FROM REQUIRED SPECIFICATIONS WILL REQUIRE CITY OF HOLLYWOOD LITILITIES APPROVAL.
- 11. ALL WATER MAIN INSTALLATIONS SHALL COMPLY WITH THE COLOR CODING REQUIREMENTS OF CHAPTER 62-555-320 F.A.C.
- ALL PVC PIPE SHALL CONFORM TO THE REQUIREMENTS OF ANSI/AWWA C900 LATEST REVISION AND CLASS. DR 18: ALL DIP WATER MAINS SHALL BE DUCTILE IRON PRESSURE CLASS 350, WITH WALL THICKNESS COMPLYING WITH CLASS 52. ALL DUCTILE IRON PIPE SHALL CONFORM TO THE REQUIREMENTS OF ANSI/AWWA C151/A21-51-02 AND BE CEMENT LINED AND SEAL COATED PER ANSI/AWWA C104/A21-4-03-
- 3. FITTINGS SHALL BE DUCTILE IRON, MEETING ANSI/AWWA C153/A21.53-00 SPECIFICATIONS, WITH 350 PSI MINIMUM WORKING PRESSURE. FITTINGS MUST BE CEMENT LINED AND SEAL COATED PER ANSI/AWWA C104/A21,4:03, ALL DUCTILE IRON PIPE AND FITTINGS MUST BE MANUFACTURED IN THE UNITED STATES OF
- ALL DUCTILE IRON PIPE TO BE MECHANICAL JOINTS, WRAPPED IN POLY. ADEQUATE PROTECTIVE MEASURES AGAINST CORROSION SHALL BE USED AS DETERMINED BY DESIGN.
- 15. GATE VALVES 4" AND LARGER SHALL BE RESILIENT SEAT AND SHALL MEET ANSI/AWWA C-509-01 SPECIFICATIONS, LATEST REVISION. VALVES MUST BE MUELLER (O.A.E.). VALVE BOXES SHALL BE TYLER. UNION, CONTROL/GATE VALVES 3" AND SMALLER SHALL BE NIBCO T-133 LF. NO SUBSTITUTIONS.
- 16. PAVEMENT RESTORATION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY. 17. ALL TRENCHING, PIPE LAYING, BACKFILL, PRESSURE TESTING, AND DISINFECTING MUST COMPLY WITH THE
- CITY OF HOLLYWOOD SPECIFICATIONS. 18. THE MINIMUM DEPTH OF COVER OVER WATER MAINS IS 30" (DIP) OR 36" (PVC).
- 19. MINIMUM CLEARANCE BETWEEN STORM STRUCTURES AND WATER MAINS SHALL BE 2", AND MAXIMUM DEFLECTION PER EACH JOINT SHALL BE 50% OF MANUFACTURES RECOMMENDATION (MAXIMUM) WHERE DEFLECTION IS REQUIRED.
- 20. TAPPING SLEEVES SHALL BE MUELLER H-615 (O.A.E.): TAPPING VALVES 4" AND LARGER SHALL BE RESILIENT WEDGE TYPE MEETING ANSI/AWWA C509-01. ALL TAPPING VALVES SHALL HAVE A CAST-IN ALIGNMENT RING AND BE CAPABLE OF ACCEPTING A FULL-SIZE CUTTER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING CONFLICTS WITH WATER MAINS PLACED AT MINIMUM COVER. IN CASE OF CONFLICT, WATER MAIN SHALL BE LOWERED TO PASS UNDER CONFLICTS WITH 18" MINIMUM SEPARATION, NO ADDITIONAL PAYMENT SHALL BE DUE TO CONTRACTOR FOR LOWERING THE MAIN OR THE ADDITIONAL FITTINGS USED THEREON.

uno ce	(SSCEDI	1)3/(1)/1092	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 116/08/20	
<u> </u>	DRAWY:	EWA	WATER NOTES	BRAWING NO. W-01.1	
	APPROVED	288	WATER NOTES		

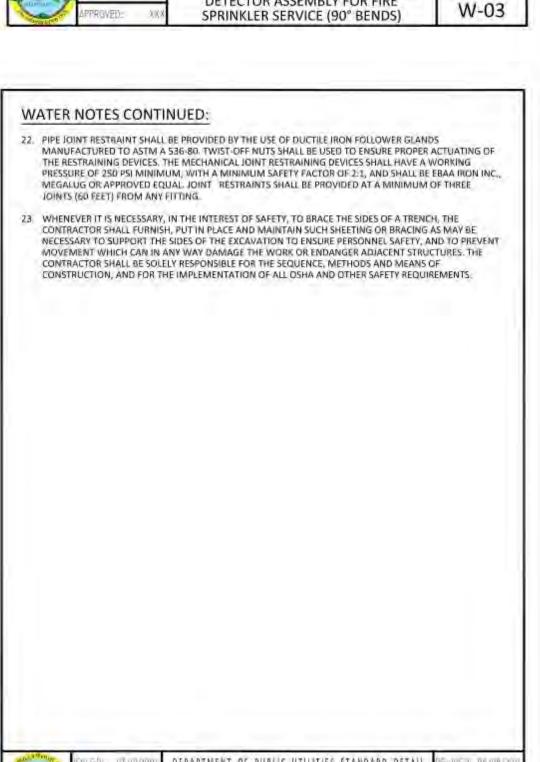
CONNECTION OF PVC PIPE TO MANHOLES SHALL BE MADE WITH "KOR-N-SEAL" MANHOLE COUPLINGS CORRESPONDING TO THE SIZE AND TYPE OF SEWER PIPE OR OTHER ADAPTERS AS MAY BE APPROVED BY THE UTILITY.

A FLOW CHANNEL SHALL BE CONSTRUCTED TO DIRECT INFLUENT INTO FLOW STREAM, REFER TO DETAILS. OUTSIDE DROP CONNECTIONS WILL BE REQUIRED WHEN THE VERTICAL DISTANCE BETWEEN PIPE INVERTS EXCEEDS TWO FEET (2'). DROP CONNECTIONS, WHERE REQUIRED, SHALL BE CAST MONOLITHICALLY WITH THE MANHOLE ELEMENTS AS SHOWN ON DETAILS.

THE LID AND FRAME SHALL BE CAST OF CLOSE-GROUND GRAY IRON CONFORMING TO ASTM A-48, CLASS 30 AND SHALL BE OF UNIFORM OUALITY, FREE OF BLOW HOLES, POROSITY, CRACKS, AND OTHER OBVIOUS VISUAL DEFECTS. THE COMBINED WEIGHT OF THE FRAME AND LID SHALL NOT BE LESS THAN 420 POUNDS, AND THE LID SHALL WEIGH A MINIMUM OF 160 POUNDS. THE SEATING SURFACES BETWEEN FRAMES AND COVERS SHALL BE MACHINED TO FIT TRUE. NO PLUGGING OR FILLING WILL BE ALLOWED. CASTING PATTERNS SHALL CONFORM TO THOSE DESIGNATED BY THE

INTO LIDS, BUT SHALL NOT GO CLEAR THROUGH THE LID MINIMUM COVER ON PUBLIC SANITARY SEWER PIPE SHALL BE 36" ABOVE PVC PIPE, AND 30" ABOVE D.I.P.

MANHOLE LIDS SHALL BE PROVIDED WITH WATERTIGHT POLYETHYLENE MANHOLE INSERTS AS APPROVED BY THE UTILITY DEPARTMENT. INSIDE SURFACES OF MANHOLES TO BE TREATED WITH TWO COATS KOPPERS BITUMASTIC 300-M OR EQUAL, MINIMUM DRY THICKNESS 16 MILS. MANHOLES SHALL BE CURED TWENTY-ONE (21) DAYS BEFORE COATING. MANHOLES SHALL BE PAINTED AT FACTORY PRIOR TO DELIVERY OR ONSITE WITH ONE COAT (BLACK) OUTSIDE OR AS REQUIRED BY THE UTILITY. FIRST COAT TO BE RED, SECOND COAT TO BE BLACK, UNLESS OTHERWISE



0

ELEVATION

4",6",8" FLANGE, D.I.P. 11 1 VALVE, BYPASS DOUBLE CHECK
4",6",8" GATE VALVE (SEE NOTE 6) 12 1 16"X16"X16" CONC. SUPPORT

PROTECTIVE 4" GALV. GUARD POSTS SHALL BE SPACED EVENLY APART AS SHOWN ABOVE OR IN ACCORDANCE WITH

DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL.

DETECTOR ASSEMBLY FOR FIRE

YPICAL 4", 6" AND 8" DOUBLE CHECK

MAY USE 45° BENDS (SEE DETAIL W-07.2) WHEN WORKING AREA IS NOT LIMITED, AS DIRECTED BY CITY.

1TEM QTY, DESCRIPTION
7 N/A PEA GRAVEL (4" DEEP)

8 N/A PLASTIC LINER/WEED STOP (5 MILS)
9 4 RESTRAINED LODITE

LOW FLOW METER

13 1 P.T. 2X4 LUMBER ALL AROUND

0

- 4" DIA. GALV STEEL GUAR POST FILLED

W/CONC

GRADE

GUARD POST

CONC.

NOTE 4 BELOW AND

DETAIL THIS SHEET)

TEM QTY. DESCRIPTION

I 1 4",6",8" VALVE, DOUBLE CHECK

2 4",6",8" D.I.P. SPOOL PIECE

FIELD ADJUST AND CUT ITEM 3 TO THE PROPER LENGTH.

ALL LOW FLOW METER PIPING SHALL BE BRASS OR COPPER.

1 4",6",8" D.I.P. SPOOL PIECE (24" LONG) 10 1 7 4",6",8" FLANGE, D.I.P. 11 1

ALL PIPING SHALL BE D.I.P. CL 50/52 AS APPLICABLE TO MINIMUM STANDARDS.

GATE VALVES SHALL BE CHAINED AND LOCKED TOGETHER TO PREVENT TAMPERING.

4 4",6",8" BEND-90"

5 2 4",6",8" GATE VALVE GEE NO.
6 1 SCREW JACK/ANCHORED

INSPECTOR'S DIRECTIONS.

DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL REVESES: TIGARIA AWING NO. WATER NOTES W-02

INFLUENT AND EFFLUENT SEWERS SHALL BE GROUTED IN PLACE USING A TYPE II WATERPROOF EXPANDING GROUT ACCEPTABLE TO THE ENGINEER. ALL OPENINGS AND JOINTS SHALL BE SEALED WATERTIGHT. REFER TO GENERAL NOTES FOR NON-SHRINK GROUT.

LIFT HOLES THROUGH PRECAST STRUCTURES ARE NOT PERMITTED.

THE LID SHALL HAVE THE WORDS "(PREFERABLY AS REQUIRED BY THE UTILITY)" CAST IN ALL MANHOLE COVERS, CASTINGS SHALL BE CLEANED AND COATED WITH A COAL TAR PITCH VARNISH WHICH IS TOUGH WHEN COLD BUT NOT TACKY OR BRITTLE, PICK TYPE LIFTING HOLES WILL BE CAST

THE ENGINEER AND UTILITY SHALL INSPECT INSIDE OF MANHOLE AFTER EACH APPLICATION / COAT OF PAINT. UPON COMPLETION OF THE WORK A LAMPING INSPECTION SHALL BE MADE OF THE COMPLETED SYSTEM ALONG WITH AN INFILTRATION AND / OR EXFILTRATION TEST. AFTER ALL TESTING INCLUDED IN THIS CONTRACT HAS BEEN COMPLETED; THE CONTRACTOR WILL PROVIDE A TELEVISED INSPECTION OF THE SEWER LINES PRIOR TO BEING ACCEPTED FOR USE AND A SECOND TELEVISED INSPECTION AND LAMPING PRIOR TO RELEASE OF ONE-

MANHOLE JOINTS WILL BE SEALED WITH RAMNEK OR APPROVED EQUAL AND ANTI-HYDRO CEMENT INSIDE AND OUT. ALL SANITARY SEWER GRAVITY MAINS AND SERVICES SHALL BE BEDDED AND BACKFILLED PER STANDARD TRENCH DETAIL. ALL WORKMANSHIP AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE GOVERNING AUTHORITY.

A MINIMUM OF 10-FOOT HORIZONTAL CLEARENCE IS REQUIRED BETWEEN ALL UTILITY PIPE AND BUILDING STRUCTURES, UNLESS OTHERWISE SHOWN ON THE PLANS.

LANDSCAPING SHALL NOT BE INSTALLED WITHIN A MINIMUM OF 6' OF ALL

SANITARY SEWER MAINS AND LATERALS. ALL SEWER LATERALS SHALL TERMINATE AT THE PROPERTY LINE AND / OR A MINIMUM OF 5' FROM BUILDING, UNLESS OTHERWISE SPECIFIED ON THE PLANS. APPROPRIATE CLEANOUT TYPE PER LOCATION IN OR OUT OF PAVEMENT SHALL BE INSTALLED BY THE CONTRACTOR

SERVICE LATERALS SHALL HAVE CLEANOUTS INSTALLED AT A MAXIMUM OF 75' SPACING. CLEANOUTS IN PAVEMENT SHALL HAVE TRAFFIC BEARING LIDS. CONTRACTOR SHALL BE RESPONSIBLE TO COMPLETELY INSPECT THE EXISTING SANITARY SEWER SYSTEM AND / OR LIFT STATION, IF APPLICIABLE, IN ADVANCE OF ANY WORK AND NOTIFY THE ENGINEER IN ADVANCE OF ANY DEFICIENCIES, SHOULD THE CONTRACTOR COMMENCE WORK WITHOUT FIRST INSPECTING THE EXISTING SANITARY SEWER MAINS AND / OR LIFT STATION, THAN THE CONTRACTOR IS RESPONSIBLE FOR ALL

CONTRACTOR SHALL BE RESPONSIBLE FOR THE EXISTING ON-SITE SANITARY SEWER COLLLECTION SYSTEM UNTIL FINAL INSPECTION, CERTIFICATION, AND APPROVAL BY THE GOVERNING AUTHORITY, CONTRACTOR TO INCLUDE THE COST OF CLEANING, REPAIRING, AND TESTING EXISTING SEWER MAINS AND LATERALS AS REQUIRED FOR NEW CONSTRUCTION.

WATER NOTES

- NEW OR RELOCATED UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT THAT WILL CROSS ANY EXISTING OR PROPOSED GRAVITY OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER WILL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES ABOVE THE OTHER PIPELINE OR AT LEAST 12 INCHES BELOW THE OTHER PIPELINE.
- NEW OR RELOCATED UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT THAT WILL CROSS ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORM WATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER WILL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OTHER PIPELINE. [FAC 62-555.314(2), EXCEPTIONS ALLOWED
- UNDER FAC 62-555.314(5)) AT ALL UTILITY CROSSINGS DESCRIBED ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE WILL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE, OR THE PIPES WILL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORM WATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610.

F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE-TYPE SANITARY SEWERS.

III OF CHAPTER 62-610, F.A.C. [FAC 62-555.314(2); EXCEPTIONS ALLOWED UNDER FAC 62-555.314(5)]. NEW UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT TO BE DUCTILE IRON PIPE (D.I.P.) WHEN CROSSING BELOW SANITARY SEWER MAINS.

WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART

- POLYETHYLENE ENCASEMENT MATERIAL SHALL BE USED TO ENCASE ALL BURIED DUCTILE IRON PIPE, FITTINGS, VALVES, RODS, AND APPURTENANCES IN ACCORDANCE WITH AWWA C105, METHOD A. THE POLYETHYLENE TUBING SHALL BE CUT TWO FEET LONGER THAN THE PIPE SECTION AND SHALL OVERLAP THE ENDS OF THE PIPE BY ONE FOOT. THE POLYETHYLENE TUBING SHALL BE GATHERED AND LAPPED TO PROVIDE A SNUG FIT AND SHALL BE SECURED AT QUARTER POINTS WITH POLYETHYLENE TAPE. EACH END OF THE POLYETHYLENE TUBING SHALL BE SECURED WITH A WRAP OF POLYETHYLENE TAPE.
- THE POLYETHYLENE TUBING SHALL PREVENT CONTACT BETWEEN THE PIPE AND BEDDING MATERIAL, BUT IS NOT INTENDED TO BE A COMPLETELY AIRTIGHT AND WATERTIGHT ENCLOSURE, DAMAGED POLYETHYLENE TUBING SHALL BE REPAIRED IN A WORKMANLIKE MANNER USING POLYETHYLENE TAPE, OR THE DAMAGED SECTION SHALL BE REPLACED, POLY WRAP WILL NOT BE PAID FOR AS A SEPARATE BID ITEM. IT SHALL BE
- FIRE HYDRANT BARRELS SHALL BE ENCASED IN POLY WRAP UP TO THE GROUND SURFACE AND THE WEEP HOLES SHALL NOT BE COVERED BY THE POLY WRAP.
- GATE VALVES FOR USE WITH PIPE LESS THAN THREE INCHES (3") IN DIAMETER SHALL BE RATED FOR TWO HUNDRED (200) PSI WORKING PRESSURE, NON-SHOCK, BLOCK PATTERN, SCREWED BONNET, NON-RISING STEM, BRASS BODY, AND SOLID WEDGE. THEY SHALL BE STANDARD THREADED FOR PVC PIPE AND HAVE A MALLEABLE IRON HANDWHEEL. GATE VALVES LESS THAN THREE INCHES (3") IN DIAMETER SHALL BE NIBCO-SCOTT T-113 LF WITH NO SUBSTITUTIONS ALLOWED. LARGE GATE VALVES OVER 3" THRU 16" IN DIAMETER, MUST BE RESIDENT SEAT AND BIDIRECTIONAL FLOW ONLY. MANUFACTURERS: MUELLER, AMERICAN DARLING, AVK, OR CITY APPROVED EQUAL. VALVES FOR SPECIAL APPLICATION WILL REQUIRE

Part of the last	(SSUED)	1)37(1)/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL.	REVISED: 116/08/200
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1	APPROVED.	388	WATER SYSTEM NOTES	W-01

CONTRACTOR SHALL BE RESPONSIBLE TO COMPLETELY INSPECT THE EXISTING SANITARY SEWER SYSTEM AND / OR LIFT STATION, IF APPLICIABLE, IN ADVANCE OF ANY WORK AND NOTIFY THE ENGINEER IN ADVANCE OF ANY DEFICIENCIES. SHOULD THE CONTRACTOR COMMENCE WORK WITHOUT FIRST INSPECTING THE EXISTING SANITARY SEWER MAINS AND / LIFT STATION, THAN THE CONTRACTOR IS RESPONSIBLE FOR ALL

THE CONTRACTOR IS RESPONSIBLE FOR ANY FINAL GRADE ADJUSTMENTS OF EXISTING MANHOLES AND CLEANOUTS TO MEET PROPOSED FINISH GRADE DEVELOPER IS RESPONSIBLE TO DEDICATE UTILITY EASEMENTS TO THE UTILITY FOR ALL PUBLIC SEWER MAINS AND MANHOLES THAT ARE TO ULTIMATELY DWNED AND MAINTAINED BY THE UTILITY. EASEMENTS TO BE GRANTED UPON CONCLUSION OF THE WORK FROM AS-BUILT PIPE LOCATIONS.

CONTRACTOR IS RESPONSIBLE TO DELIVER AS-BUILT SEWER PLANS, MYLAR, AND COMPUTER DISK TO THE ENGINEER PRIOR TO FINAL CERTIFICATION TO THE GOVERNING AUTHORITIES, AS-BUILTS SHALL BE SIGNED AND SEALED BY A REGISTERED FLURIDA SURVEYOR. SANITARY SEWER, POTABLE, AND RECLAIMED WATER SEPARATION NOTES: HE FOLLOWING STATEMENTS MUST BE INCLUDED ON ALL PLANS FOR SEWAGI COLLECTION / TRANSMISSION SYSTEMS AND/OR RECLAIMED WATER MAINS TO MEET THE MINIMUM REQUIREMENTS OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE BROWARD COUNTY DEPARTMENT OF NATURAL RESOURCES PROTECTION.

SANITARY SEWER SYSTEMS AND/OR RECLAIMED WATER MAINS SHALL POTABLE WATER MAINS WHENEVER PHYSIC POSSIBLE, SANITARY SEWER SYSTEMS AND/OR RECLAIMED WATER MAINS CROSSING BELOW POTABLE WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL SEPARATION DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE POTABLE WATER MAIN AND THE CROWN OF THE LOWER PIPE.

HORIZONTAL SEPARATIONS: WHEREVER IT IS PHYSICALLY POSSIBLE:

> 1. SANITARY SEWER SYSTEMS SHALL HAVE A MINIMUM OF A 10-FOOT HORIZONTAL SEPARATION DISTANCE BETWEEN ANY POTABLE WATER MAIN IN PARALLEL INSTALLATIONS. RECLAIMED WATER MAINS SHALL HAVE A MINIMUM OF A 5 FOOT CENTER TO CENTER (ABSOLUTE MINIMUM OF 3 FOOT OUTSIDE OUTSIDE OF PIPE) HORIZONTAL SEPARATION DISTANCE BETWEEN POTABLE WATER MAIN AND/OR A SANITARY SEWER SYSTEM IN PARALLEL INSTALLATIONS.

> 3. WHEREVER EITHER ARE NOT PHYSICALLY POSSIBLE, THEN THE POTABLE WATER MAIN SHALL BE LAID AT THE MAXIMUM PHYSICAL HORIZONTAL SEPARATION DISTANCE POSSIBLE, AND EITHER LAID: A) IN A SEPARATE TRENCH

B) ON AN UNDISTURBED EARTH SHELF WITH A MINIMUM VERTICAL SEPARATION DISTANCE OF 18 INCHES PROVIDED BETWEEN THE INVERT OF THE POTABLE WATER MAIN AND THE CROWN OF THE LOWER PIPE, THUS CONFORMING TO THE MINIMUM VERTICAL CROSSINGS PARAGRAPH.

WHEREVER IT IS NOT POSSIBLE TO MAINTAIN THE MINIMUM VERTICAL OR HORIZONTAL SEPARATION STANDARDS, THEN ALL PIPING MATERIAL SHALL BE DUCTILE IRON PIPE (D.I.P.). ALL D.I.P. SHALL BE CLASS 50 OR HIGHER. ADEQUATE PROTECTIVE MEASURES AGAINST CORROSION SHALL BE USED AS DETERMINED BY THE DESIGN AND SITE CONDITIONS. ADDITIONALLY, ALL JOINTS ON THE POTABLE WATER MAIN. WITHIN 20 FEET OF THE CONFLICT, SHALL BE MECHANICALLY RESTRAINED. AN ABSOLUTE MINIMUM VERTICAL SEPARATION DISTANCE OF 6 INCHES SHALL BE PROVIDED BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE.

INSPECTIONS:

SUBGRADE (DENSITY TESTS SHALL BE APPROVED PRIOR TO THE PLACEMENT LIMEROCK BASE (DENSITY TESTS AND AS-BUILTS MUST BE SUBMITTED WITH A CERTIFIED LETTER FROM THE GEOTECHNICAL FIRM TAKING THE TEST INDICATING THAT THE TEST CONFORMS WITH THE APPROVED PLANS AND SPECIFICATIONS PRIOR TO THE PLACEMENT OF ASPHALT THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND THE GOVERNING AUTHORITIES IN WRITING AT LEAST 48 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION AND PRIOR TO THE INSPECTION OF THE FOLLOWING

- DELIVERY OF MATERIALS
- 2. CLEARING AND EARTHWORK OPERATIONS STORM SEWER:
- LAMPING STRUCTURE INSPECTIONS 4. PAVEMENT:
- SUBGRADE INSPECTIONS
 BASEROCK INSPECTIONS ASPHALT PAVEMENT
- WASTEWATER: PRESSURE TESTING / FLUSHING SANITARY SEWER LAMPING MANHOLE PAINTING LIFT STATION START-UPS
- 6. WATER: PRESSURE TESTING TIE-INS / DISINFECTION / SWABBING / VISUAL
- 7. WALK THROUGH: 1. PRELIMINARY / FINAL

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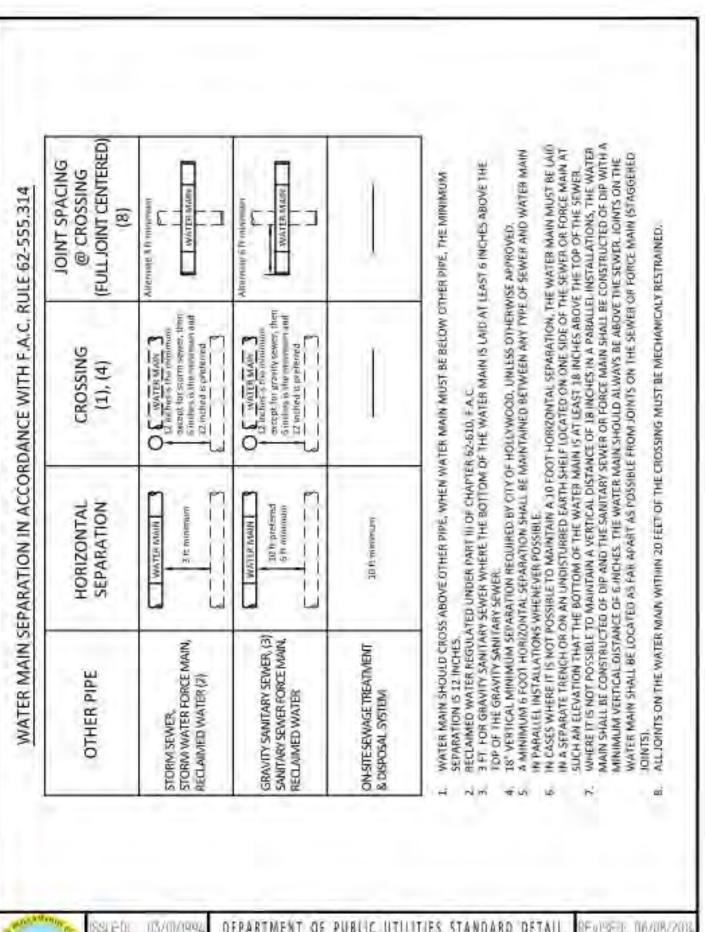
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SCALE: May 2018 N.T.S. DRAWN BY ISIGNED BY

G.G.B. PROJECT NO 18-0525 SHEET C-6

GARY G. BLOOM, P.E. FLA LIC. No. 19832 NOT VALID UNLESS SIGNED AND SEALED BY ENGINEER



TEES AND TAPPING SLEEVES

LENGTH ALONG

RUN (FT.)

BRANCH MIN. RESTRAINED

DIA.

(INCHES)

16" S.

6"

4

RUN DIA

(INCHES)

16"

8"

MIN. LENGTH TO RESTRAIN

ALONG BRANCH (FT.)

DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL

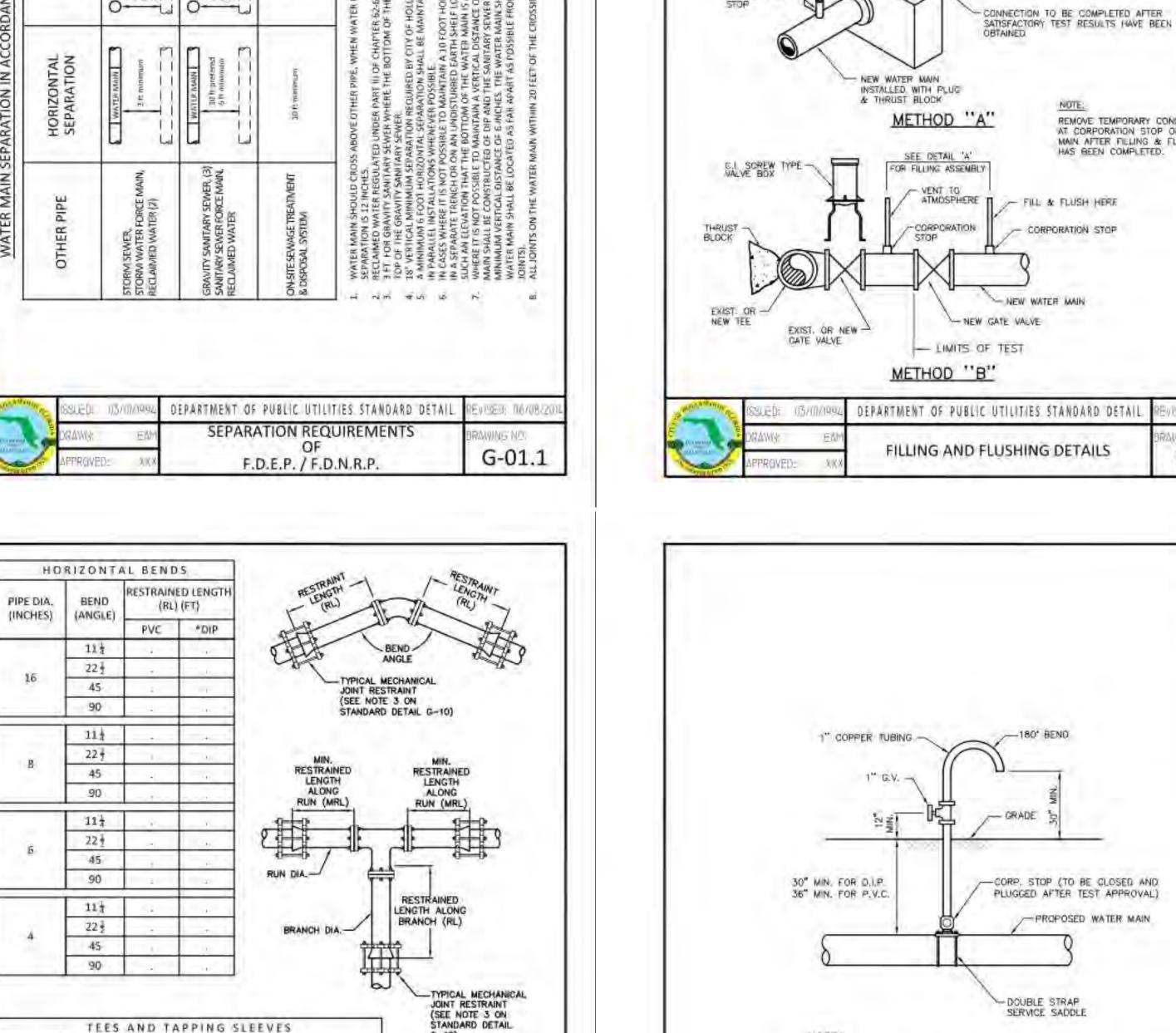
JOINT RESTRAINT DESIGN

FOR PVC AND DIP

HORIZONTAL BENDS AND TEES

*DIP

PVC

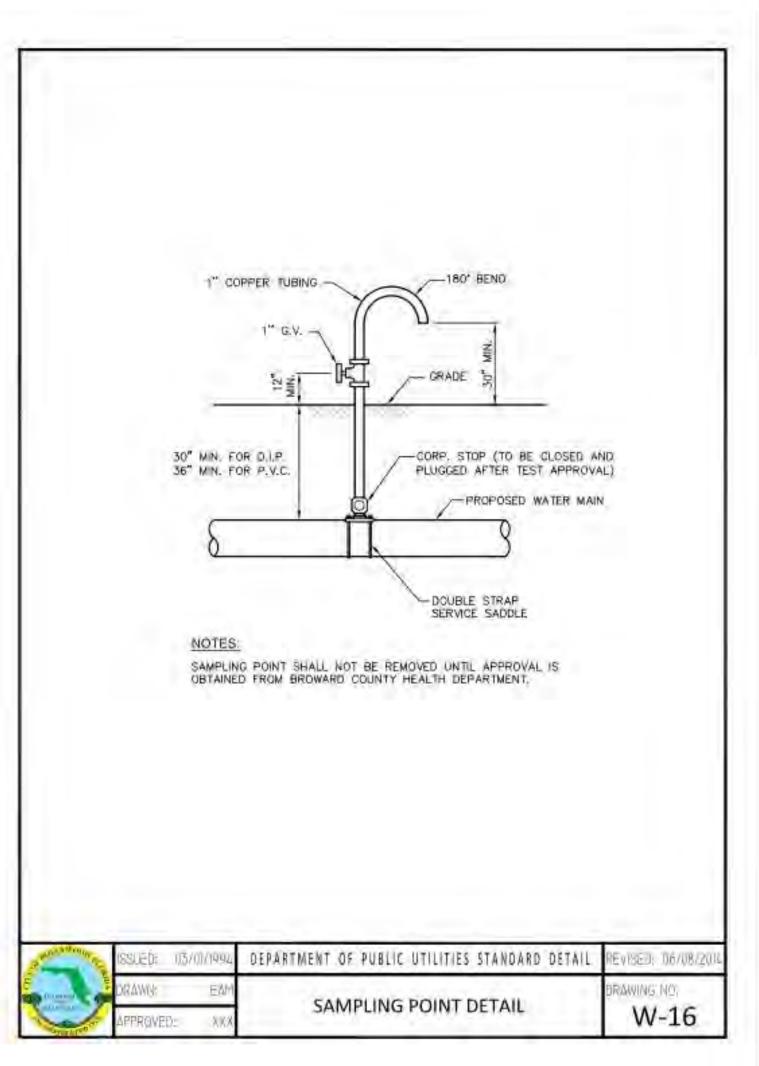


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TESTING AND DISINFECTION NOTES:

BACKFLOW: PREVENTER

EXIST WATER MAIN

REMOVE TEMPORARY CONNECTION AT CORPORATION STOP ON NEW MAIN AFTER FILLING & FLUSHING HAS BEEN COMPLETED.

WINE NO.

W-15

METER BY CITY

CORPORATION

FILLING ASSEMBLY FITTINGS AND EQUIPMENT

DETAIL 'A'

- CORPORATION STOP

- NO CONNECTIONS TO THE EXISTING LINES SHALL BE MADE UNTIL THE PRESSURE AND BACTERIOLOGICAL TESTS HAVE BEEN PERFORMED ON THE PROPOSED WATER MAINS AND THE SYSTEM HAS BEEN APPROVED BY THE CITY OF HOLLYWOOD AND THE BROWARD COUNTY HEALTH DEPARTMENT.
- 2 THE PRESSURE TEST SHALL BE PERFORMED FOR 2 HOURS AT A CONSTANT PRESSURE OF 150 PSI AND IN ACCORDANCE WITH RULE 62-555, 330 (FAC) C600 AWWA LATEST REVISION, EXCEPT AS OTHERWISE SPECIFIED HEREIN AND IN SPECIFICATION SECTION 15995, "PIPELINE TESTING AND DISINFECTION". PRESSURE TEST SHALL BE WITNESSED BY THE CITY OF HOLLYWOOD. THE ALLOWABLE LEAKAGE SHALL BE LESS THAN THE NUMBER OF GALLONS PER HOUR AS DETERMINED BY THE FORMULA:

- L = THE ALLOWABLE LEAKAGE IN GALLONS PER HOUR.
- S = THE LENGTH OF PIPE BEING TESTED.

TESTING AND DISINFECTION".

- D = THE NOMINAL DIAMETER OF THE PIPE BEING TESTED. P = THE AVERAGE TEST PRESSURE IN POUNDS PER SQUARE INCH.
- 3. THE COMPLETE LENGTH OF THE PROPOSED WATER MAIN SHALL BE TESTED, IN LENGTHS NOT TO EXCEED 2,000 FEET PER TEST.
- A PROPOSED WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH THE LATEST EDITION OF ANSI/AWWA STANDARD C651 AND BACTERIOLOGICAL TESTED FOR TWO CONSECUTIVE DAYS IN ACCORDANCE WITH SPECIFICATION SECTION 15995, "PIPELINE
- 5. BACTERIOLOGICAL TESTS SHALL BE REQUESTED AND PAID FOR BY THE CONTRACTOR.
- THE CONTRACTOR SHALL DIRECTLY HIRE A TESTING LABORATORY CERTIFIED BY THE FLORIDA DEPARTMENT OF HEALTH IN ORDER TO COLLECT AND TEST WATER SAMPLES FROM THE WATER DISTRIBUTION SYSTEM TO BE PLACED INTO SERVICE. SAMPLE COLLECTION AND BACTERIOLOGICAL ANALYSES SHALL BE PERFORMED IN ACCORDANCE WITH RULES 62-555.315(6), 62-555.340 AND 62-555.330 (FAC), AS WELL AS ALL REQUIREMENTS OF THE BROWARD COUNTY HEALTH DEPARTMENT PERMIT.
- THE WATER DISTRIBUTION SYSTEM SHALL NOT BE CONSIDERED COMPLETE AND READY DESCRIBED ABOVE

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Architects wood Boulevard lorida 33020–6605 920–5746

2417 Hollywood Hollywood Hollywood, Florida (954) 920–5

Apartments In Buren Street FLORIDA 3 Van Buren A 16–2318 Van

DETAILS

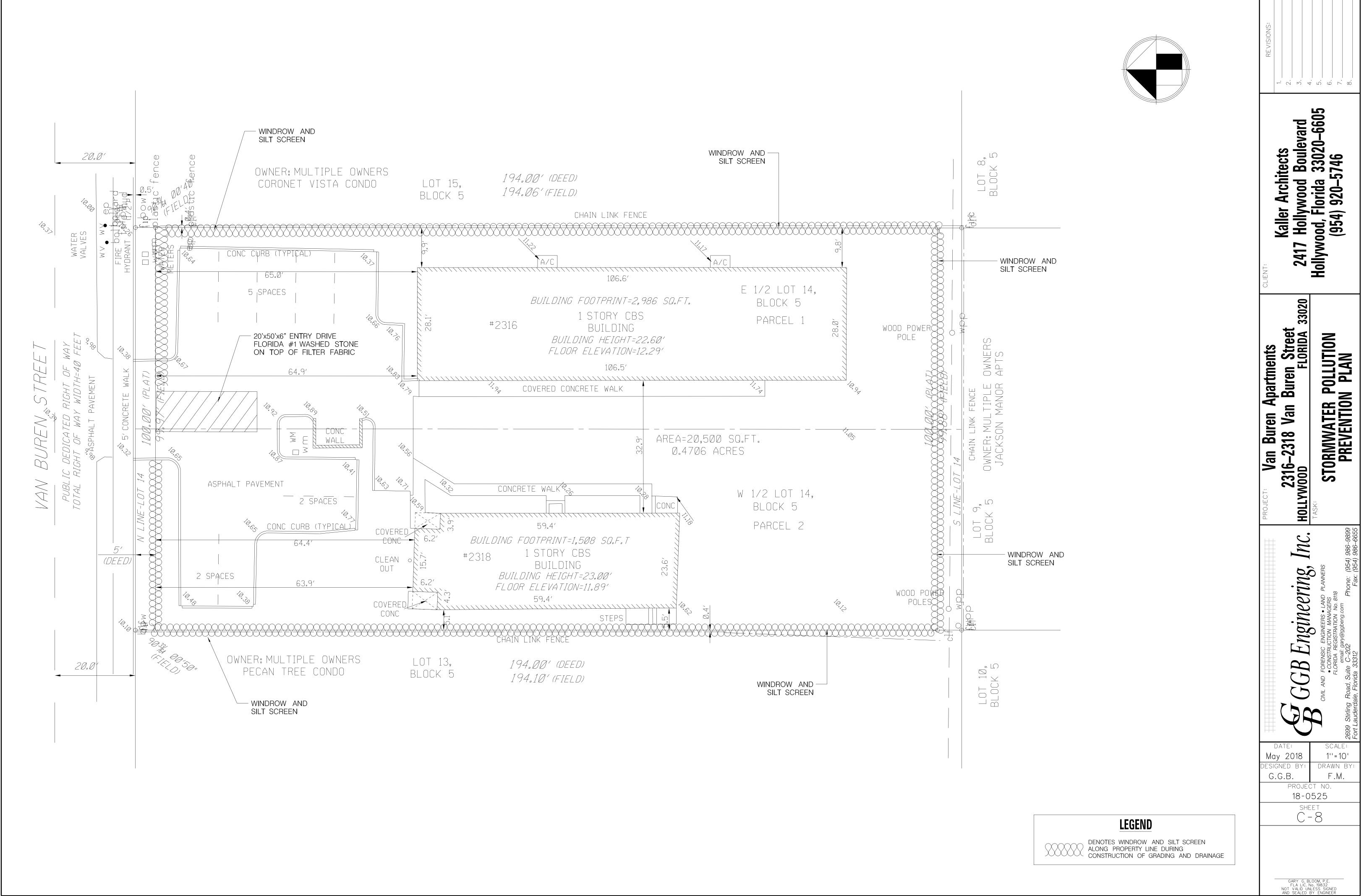
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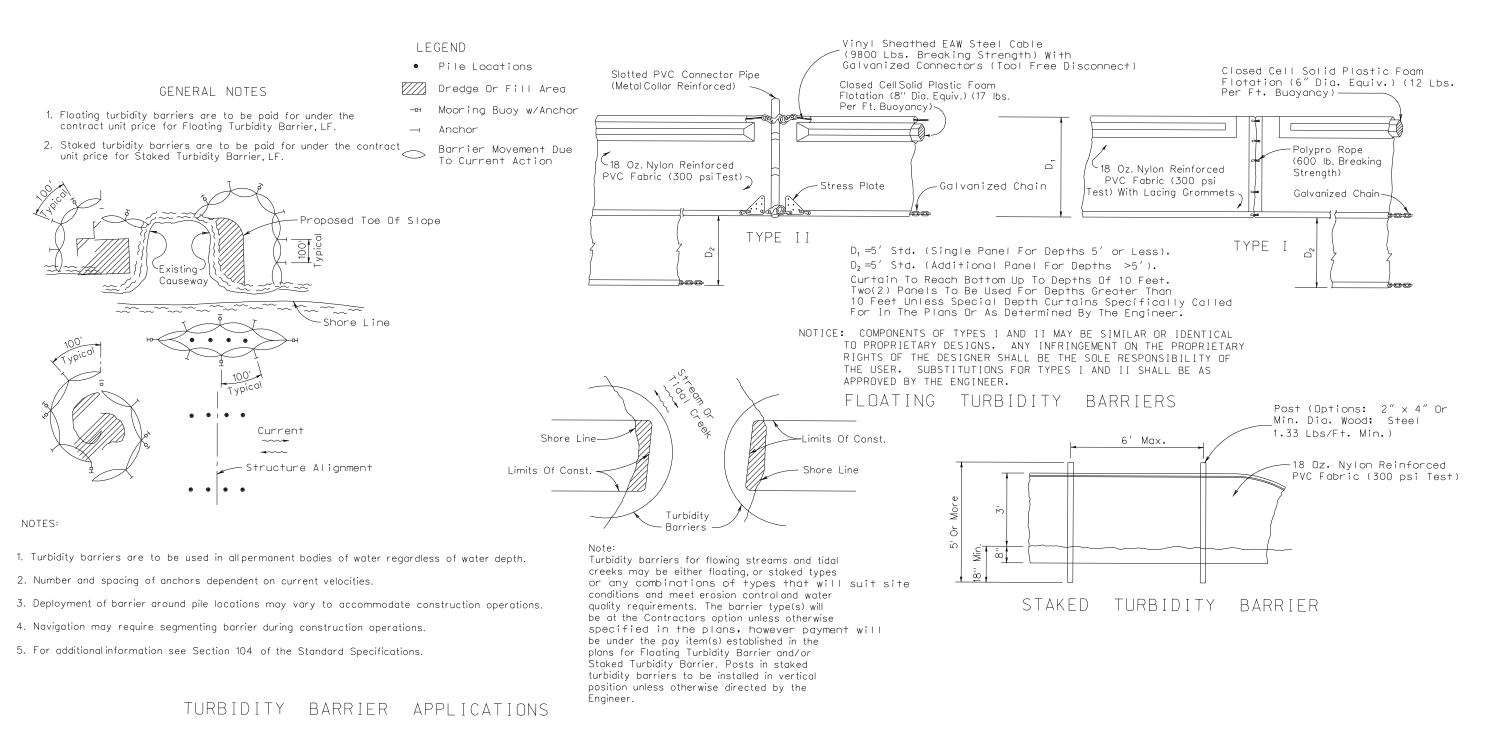
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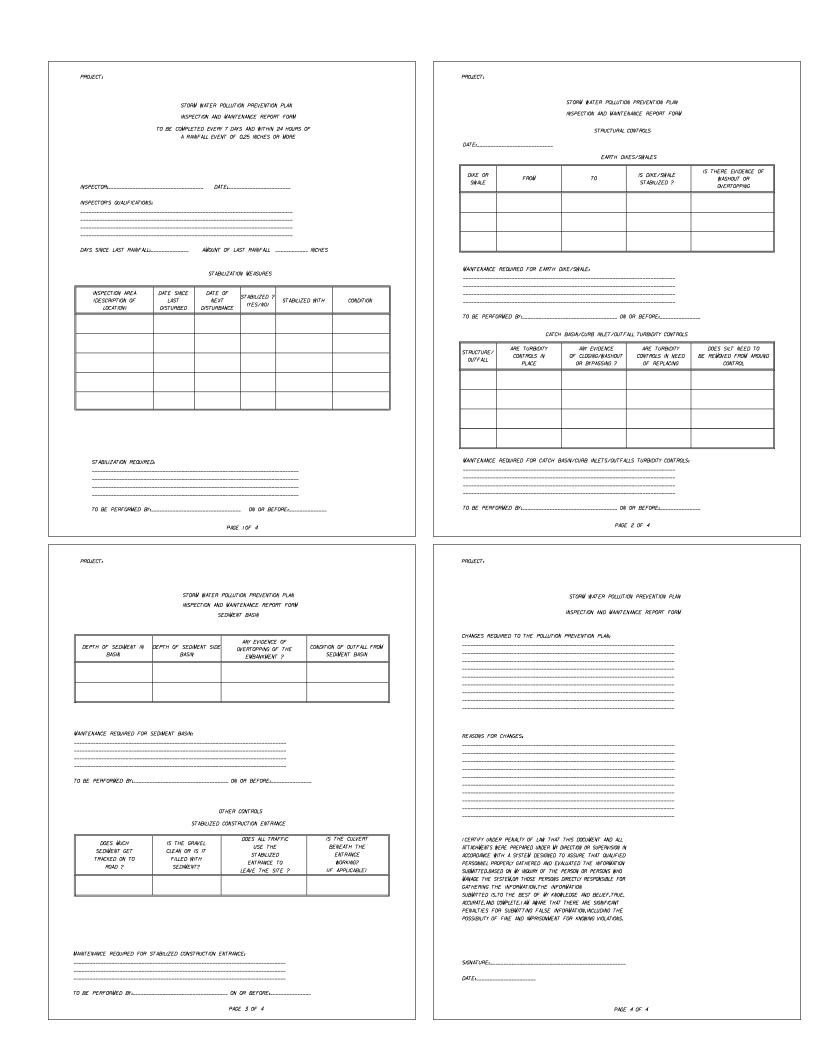
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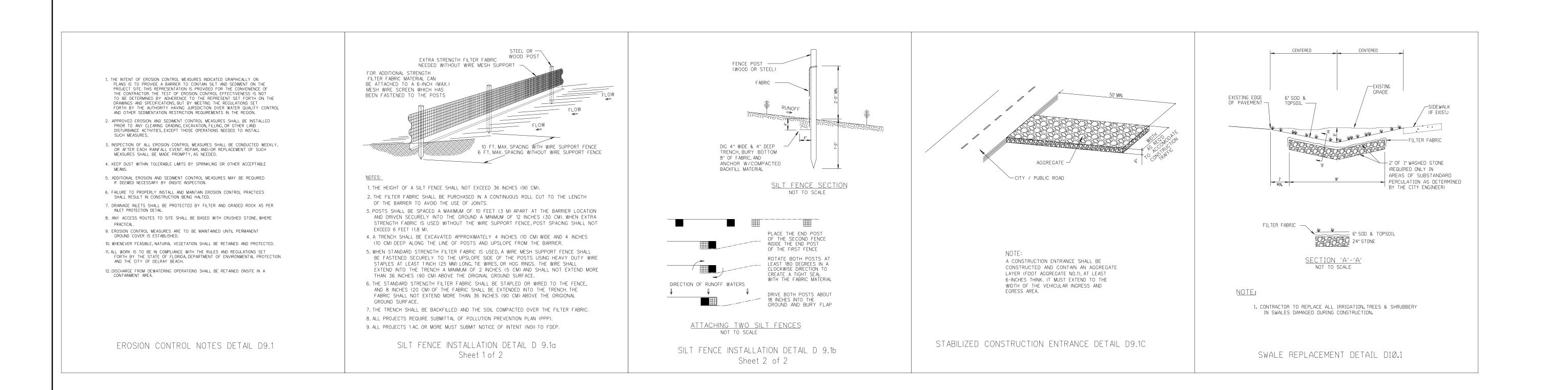


TURBIDITY BARRIER DETAILS PER FDOT INDEX NO. 103



NOTE TO CONTRACTOR:

THIS IS THE CONTRACTORS CERTIFICATION REQUIRED BY THE EPA'S NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES),STORM WATER POLLUTION PREVENTION PLAN FOR CONSTRUCTION SITES OVER I ACRES.THIS CERTIFICATION MUST BE COMPLETED WEEKLY AND AFTER EVERY RAINFALL EVENT OVER 0.25 INCHES.IT IS SUGGESTED THAT THIS SHEET BE REMOVED FROM THE PLAN SET AND DUPLICATED AS NEEDED BY THE CONTRACTOR.



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Kaller Architects 2417 Hollywood Boulevard Hollywood, Florida 33020–6605 (954) 920–5746

Van Buren Apartments
316–2318 Van Buren Street
500
STORMWATER POLLUTION
PREVENTION PLAN

TGB Engineers Land Planners CONSTRUCTION MANAGERS FLORIDA REGISTRATION NO. 8118

DATE: SCALE:

May 2018 N.T.S.

DESIGNED BY: DRAWN BY

G.G.B. F.M.

PROJECT NO.

.B. F.M.

PROJECT NO.

18-0525

SHEET

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GARY G. BLOOM, P.E. FLA LIC. No. 19832 NOT VALID UNLESS SIGNED AND SEALED BY ENGINEER

STORM WATER POLLUTION PREVENTION PLAN

OTHER CONTROLS

ALL WASTE MATERIALS EXCEPT LAND CLEARING DEBRIS SHALL BE

COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER.THE

DUMPSTER WILL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT

TRASH WILL BE HAULED TO A STATE APPROVED LANDFILL.ALL

PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT

PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE

CONSTRUCTION SUPERINTENDENT, THE INDIVIDUAL WHO MANAGES

THE DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE

MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE

MANUFACTURER.SITE PERSONNEL WILL BE INSTRUCTED IN THESE

PRACTICES AND THE SITE SUPERINTENDENT, THE INDIVIDUAL WHO

ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS AS

NEEDED TO PREVENT POSSIBLE SPILLAGE. THE WASTE WILL BE COLLECTED

AND DEPOSED OF IN ACCORDANCE WITH STATE AND LOCAL WASTE DISPOSAL

A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED TO HELP

REDUCE VEHICLE TRACKING OF SEDIMENTS.THE PAVED STREET ADJACENT

TO THE SITE ENTRANCE WILL BE SWEPT AS NEEDED TO REMOVE ANY EXCESS

MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A

INVENTORY FOR POLLUTION PREVENTION PLAN

X Wood

X Masonry Blocks

X Metal Studs

X Roofing Materials

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE

X Petroleum Based Products

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE

THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE

* AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO

* ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY

MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A

* PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL

* SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED

* WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING

* MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL

* THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE MATERIALS ONSITE

USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF

SPILL PREVENTION

X Fertilizers

X Paints

MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

X Cleaning Solvents

MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING

REGULATIONS FOR SANITARY SEWER OR SEPTIC SYSTEMS.

MANAGES DAY-TO-DAY SITE OPERATIONS,WILL BE RESPONSIBLE FOR

SEEING THAT THESE PROCEDURES ARE FOLLOWED.

SEEING THAT THESE PRACTICES ARE FOLLOWED.

PRACTICES WILL BE POSTED AT THE CONSTRUCTION SITE BY THE

REGULATIONS.THE DUMPSTER WILL BE EMPTIED AS NEEDED AND THE

WASTE DISPOSAL (IF APPLICABLE):

WASTE MATERIALS

HAZARDOUS WASTE

OFFSITE VEHICLE TRACKING

PRESENT ONSITE DURING CONSTRUCTION:

MATERIAL MANAGEMENT PRACTICES

DURING THE CONSTRUCTION PROJECT.

ROOF OR OTHER ENCLOSURE.

ORIGINAL MANUFACTURER'S LABEL.

RECEIVE PROPER USE AND DISPOSAL.

BY THE MANUFACTURER.

OF THE CONTAINER.

BE FOLLOWED,

X Concrete

X Asphalt

X Detergents

GOOD HOUSEKEEPING

DO THE JOB.

X Tar

SITE DESCRIPTION
CONTROLS
THIS PLAN UTILIZES BEST MANAGEMENT PRACTICES TO CONTROL EROSION CAUSED BY STORM WATER RUN OFF.AN EROSION PROTECTION PLAN HAS BEE PREPARED TO INSTRUCT THE CONTRACTOR ON PLACEMENT OF THESE CONTRIT IS THE CONTRACTORS RESPONSIBILITY TO INSTALL AND MAINT
AIN THE CONTROLS PER PLAN AS WELL AS ENSURING THE PLAN IS PROVIDING PROPER PROTECTION AS REQUIRED BY FEDERAL, STATE AND LOCAL LAWS. REFER TO "CONTRACTORS RESPONSIBILITY" FOR A VERBAL DESCRIPTION OF
THE CONTROLS THAT MAY BE IMPLEMENTED.
STORM WATER MANAGEMENT
DURING CONSTRUCTION,STORM WATER DRAINAGE WILL BE PROVIDED BY UTILIZATION OF THE EXISTING DRAINAGE COLLECTION SYSTEM IN THE STREET RIGHT OF WAY OF POLK STREET AND NORTH 19TH AVENUE.THE
EXISTING SYSTEM CONVEYS STORM WATER RUNOFF VIA DRAINAGE PIPES TO ATLANTIC OCEAN. AFTER STORMWATER UTILITIES ARE INSTALLED, STORM WATER DRAINAGE WILL BE PROVIDED BY CATCH BASINS, EXFILTRATION TRENCH AND DRAINAGE WELLS. DURING VARIOUS PHASES OF CONSTRUCTION,
THE CONTRACTOR SHALL UTILIZE STAKED SILT FENCE AND/OR HAY BALE S OR OTHER BEST MANAGEMENT PRACTICES AS NECESSARY TO COMPLY WITH REQUIREMENTS SET FORTH BY LOCAL,STATE AND FEDERAL
REQUIRMENTS.
TIMING OF CONTROLS/MEASURES
IT IS THE CONTRACTOR IS RESPONSIBE FOR THE TIMING OF CONTROLS AND
MEASURES AS REQUIRED TO MEET REQUIREMENTS. CERTIFICATION OF COMPLIANCE WITH
FEDERAL, STATE AND LOCAL REGULATIONS
IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL LAWS RELATED TO STORM WATER MANAGEMENT AND EROSION AND TURBIDITY CONTROLS, THE FOLLOWING
PERMITS HAVE BEEN OBTAINED. * <u>ERP APPLICATION</u>
* BRO COUNTY DPEP
POLLUTION PREVENTION PLAN CERTIFICATION
ICERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN
ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION
SUBMITTED.BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM.OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION THE INFORMATION SUBMITTED IS TO THE
GATHERING THE INFORMATION,THE INFORMATION SUBMITTED IS,TO THE BEST OF MY KNOWLEDGE AND BELIEF,TRUE,ACCURATE,AND COMPLETE.I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE
INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

3. BRUSH BARRIER WITH FILTER FABRIC: BRUSH BARRIER MAY BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WHERE ENOUGH RESIDUE MATERIAL IS AVAILABLE ON SITE.

GENERAL

SEQUENCE OF MAJOR ACTIVITIES:

TIMING OF CONTROLS/MEASURES

THE CONTRACTOR SHALL AT A MINIMUM IMPLEMENT THE CONTRACTOR'S

AND TURBIDITY CONTROL PLAN.IN ADDITION THE CONTRACTOR SHALL UNDERTAKE

ADDITIONAL MEASURES REQUIRED TO BE IN COMPLIANCE WITH APPLICABLE PERMIT

CONDITIONS AND STATE WATER QUALITY STANDARDS.DEPENDING ON THE NATURE

OF MATERIALS AND METHODS OF CONSTRUCTION THE CONTRACTOR MAY BE

SEQUENCE OF MAJOR ACTIVITIES:

INSTALL UNDERGROUND UTILITIES.

COMPLETE BUILDING CONSTRUCTION

WATER MANAGEMENT SYSTEM.

START BUILDING FOUNDATION.

P. DEMO AND CLEAR SITE

MEASURES.

I. INSTALL EROSION AND SEDIMENT CONTROL

COMPLETE FINAL GRADING OPERATIONS.

CONTINUE WITH E&S CONTROL MEASURES.

CONTINUE WITH E&S CONTROL MEASURES.

CONTINUE WITH E&S CONTROL MEASURES.

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, THE SILT FENCES AND HAY BALES WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY PORTIONS OF THE SITE. AS CONSTRUCION

PROCEEDS, THE CONTRACTOR MUST BE DILIGENT TO UN-INSTALL AND

ALL OF THE SILT FENCE OR HAY BAYS OR TAKE OTHER MEASURES NECESSARY TO MAINTAIN THE SYSTEM IN ACCORDANCE WITH ALL

ENDANGERED SPECIES AND CRITICAL HABITAT

IT IS THE CONTRACTORS RESPONSIBILITY TO IMPLEMENT THE EROSION AND

TURBIDITY CONTROLS AS SHOWN ON THE GRADING, DRAINAGE & EROSION

THESE CONTROLS ARE PROPERLY INSTALLED, MAINTAINED AND FUNCTIONING

PROJECT SITE. THE CONTRACTOR WILL ADJUST THE EROSION AND TURBIDITY CONTROLS SHOWN ON THE GRADING, DRAINAGE & EROSION CONTROL PLAN AND

ADD ADDITIONAL CONTROL MEASURES, AS REQUIRED, TO ENSURE THE SITE

MEETS ALL FEDERAL, STATE AND LOCAL EROSION AND TURBIDITY CONTROL

REQUIREMENTS. THE FOLLOWING BEST MANAGEMENT PRACTICES WILL BE

IMPLEMENTED BY THE CONTRACTOR AS REQUIRED BY THE GRADING, DRAIN AGE & EROSION CONTROL PLAN AND AS REQUIRED TO MEET THE EROSION AND

I. HAY BALE BARRIER: HAY BALE BARRIERS CAN BE USED BELOW DISTURBED

DRAINAGE AREA IS NO GREATER THAN 2 ACRES.

AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:

A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.

B, IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING

C. WHERE EFFECTIVENESS IS REQUIRED FOR LESS THAN 3 MONTHS.

D. EVERY EFFORT SHOULD BE MADE TO LIMIT THE USE OF STRAW BALE

BARRIERS CONSTRUCTED IN LIVE STREAMS OR IN SWALES WHERE

THERE IS THE POSSIBILITY OF A WASHOUT.IF NECESSARY, MEASURES

SHALL BE TAKEN TO PROPERLY ANCHOR BALES TO INSURE AGAINST

REFER TO EROSION CONTROL DETAILS FOR CONSTRUCTING THE HAY BALE

BARRIER. ALSO REFER TO THE GRADING, DRAINAGE & EROSION CONTROL

2. FILTER FABRIC BARRIER: FILTER FABRIC BARRIERS CAN BE USED BELOW

DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE

A, WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.

B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING

CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES.

REFER TO THE EROSION CONTROL DETAILS FOR PROPER CONSTRUCTION

TURBIDITY REQUIREMENTS IMPOSED ON THE PROJECT SITE BY THE REGULATORY

PROPERLY TO PREVENT TURBID OR POLLUTED WATER FROM LEAVING THE

CONTROL PLAN, IT IS ALSO THE CONTRACTORS RESPONSIBILITY TO ENSURE

I. ARE THERE ENDANGERED SPECIES ON SITE?

IF YES TO EITHER QUESTION, PLEASE EXPLAIN.

2. ARE THERE CRITICAL HABITAT ON SITE?

AGENCIES.

EROSION AND SEDIMENT CONTROLS

WASHOUT.

FOLLOWING LIMITATIONS:

PLAN FOR PROPER LOCATION

OF THE FILTER FABRIC BARRIER.

STABILIZATION PRACTICES (IF APPLICABLE):

O. COMPLETE CURB AND SIDEWALK CONSTRUCTION

II. REMOVE ACCUMULATED SEDIMENTS FROM STORM

THE SYSTEM INTO OPERATION.

REQUIRED TO ADD FLOCCULANTS TO THE RETENTION SYSTEM PRIOR TO PLACING

REQUIREMENTS OUTLINED BELOW AND THOSE MEASURES SHOWN ON THE EROSION

4. LEVEL SPREADER: A LEVEL SPREADER MAY BE USED WHERE SEDIMENT-FREE STORM RUNOFF IS INTERCEPTED AND DIVERTED AWAY FROM THE GRADED AREAS ONTO UNDISTURBED STABILIZED AREAS.THIS PRACTICE APPLIES ONLY IN THOSE SITUATIONS WHERE THE SPREADER CAN BE CONSTRUCTED ON UNDISTURBED SOIL AND THE AREA BELOW THE LEVEL LIP IS STABILIZED.THE WATER SHOULD NOT BE ALLOWED TO RECONCENTRATE AFTER RELEASE.

5. STOCKPILING MATERIAL: NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE INTO ANY ADJACENT WATER BODY OR STORM WATER COLLECTION

6. EXPOSED AREA LIMITATION: THE SURFACE AREA OF OPEN, RAW ERODIBLE SOIL EXPOSED BY CLEARING AND GRUBBING OPERATIONS OR EXCAVATION AND FILLING OPERATIONS SHALL BE MINIMIZED.

7. INLET PROTECTION: INLETS AND CATCH BASINS WHICH DISCHARGE DIRECTLY OFF-SITE SHALL BE PROTECTED FROM SEDIMENT-LADEN STORM RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT TO THE INLET.

8. DUST CONTROL: AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE RE-EXCAVATED OR DRESSED AND RECEIVE FINAL TREATMENT WITHIN 30 DAYS SHALL BE STABILIZED.

9. TEMPORARY SEEDING AND MULCHING: SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CATEGORY ESTABLISHED IN PARAGRAPH 8 ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF THE SEEDED AREA ADEQUATE TO PREVENT MOVEMENT OF SEED AND MULCH.

IO. TEMPORARY GRASSING: THE SEEDED OR SEEDED AND MULCHED AREA(S) SHALL BE ROLLED AND WATERED OR HYDROMULCHED OR OTHER SUITABLE METHODS IF REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER. TEMPORARY GRASSING SHALL BE THE SAME MIX & AMOUNT REQUIRED FOR PERMANENT GRASSING IN THE CONTRACT SPECIFICATIONS.

II. TEMPORARY REGRASSING : IF, AFTER 14 DAYS FROM SEEDING, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM OF 75 PERCENT GOOD GRASS COVER, THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED SUFFICIENT TO ESTABLISH THE DESIRED VEGETATIVE COVER.

12. MAINTENANCE: ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.

13. PERMANENT EROSION CONTROL: THE EROSION CONTROL FACILITIES OF THE PROJECT SHOULD BE DESIGNED TO MINIMIZE THE IMPACT ON THE

14. PERMANENT SEEDING: ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL, AS A MINIMUM, BE SEEDED. THE SEEDING MIX MUST PROVIDE BOTH LONG-TERM VEGETATION AND RAPID GROWTH SEASONAL VEGETATION.SLOPES STEEPER THAN 4:1 SHALL BE SEEDED AND MULCHED

STRUCTURAL PRACTICES (IF APPLICABLE):

I. TEMPORARY DIVERSION DIKE: TEMPORARY DIVERSION DIKES MAY BE USED TO DIVERT RUNOFF THROUGH A SEDIMENT-TRAPPING FACILITY.

2. TEMPORARY SEDIMENT TRAP: A SEDIMENT TRAP SHALL BE INSTALLED IN A DRAINAGE WAY AT A STORM DRAIN INLET OR AT OTHER POINTS OF DISCHARGE FROM A DISTURBED AREA, THE FOLLOWING SEDIMENT TRAPS MAY BE CONSTRUCTED EITHER

INDEPENDENTLY OR IN CONJUNCTION WITH A TEMPORARY DIVERSION A. BLOCK & GRAVEL SEDIMENT FILTER - THIS PROTECTION IS

APPLICABLE WHERE HEAVY FLOWS AND/OR WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE.

B. GRAVEL SEDIMENT TRAP - THIS PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES & UNPROTECTED

C. DROP INLET SEDIMENT TRAP - THIS PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (S < 5%) AND WHERE SHEET OR OVERLAND FLOWS (Q < 0.5 CFS) ARE TYPICAL.THIS METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS SUCH AS IN STREET OR HIGHWAY MEDIANS.

3. OUTLET PROTECTION: APPLICABLE TO THE OUTLETS OF ALL PIPES AND PAVED CHANNEL SECTIONS WHERE THE FLOW COULD CAUSE EROSION & SEDIMENT PROBLEM TO THE RECEIVING WATER BODY.SILT FENCES & HAY BALES ARE TO BE INSTALLED IMMEDIATELY DOWNSTREAM OF THE DISCHARGING STRUCTURE AS SHOWN ON THE OUTLET PROTECTION DETAIL.

4. SEDIMENT BASIN: (NOT APPLICABLE)

HAZARDOUS PRODUCTS

THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.

* PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT

* ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION.

* IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE

PRODUCT SPECIFIC PRACTICES

THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ONSITE:

ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE.PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED.ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER.ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED AREA.THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE.EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR STATE AND LOCAL REGULATIONS. CONCRETE TRUCKS

CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.

SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND

MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED ON SITE AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP

MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE.EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, LIQUID ABSORBENT (i.e. KITTY LITTER OR EQUAL), SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY

ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

SPILL OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE OF THE SPILL.

THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE.A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.

THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE/SHE WILL DESIGNATE AT LEAST ONE OTHER SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING, THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IF APPLICABLE, IN THE OFFICE TRAILER ONSITE.

MAINTENANCE/INSPECTION PROCEDURES

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES THE FOLLOWING ARE INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS.

NO MORE THAN 5 ACRES OF THE SITE WILL BE DENUDED AT ONE TIME WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.

ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY SITE OPERATION OR SOMEONE APPOINTED BY THE SUPERINTENDENT, AT LEAST ONCE A WEEK AND FOLLOWING ANY STORM EVENT OF 0.25 INCHES OR GREATER.

ALL TURBIDITY CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.

BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.

* SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.

* THE SEDIMENT BASINS WILL BE INSPECTED FOR THE DEPTH OF SEDIMENT, AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 10 PERCENT OF THE DESIGN CAPACITY OR AT THE END OF THE JOB, WHICHEVER COMES FIRST.

* DIVERSION DIKES/SWALES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.

* TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.

* A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION.A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTOR IS ATTACHED.

AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER OR ANY FEDERAL, STATE OR LOCAL AGENCY APPROVING SEDIMENT AND AND EROSION PLANS,OR STORM WATER MANAGEMENT PLANS. THE REPORTS SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED AND THE NOTICE OF TERMINATION IS SUBMITTED THE REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE.

THE REPORTS WILL BE KEPT ON SITE DURING CONSTRUCTION AND

* THE SITE SUPERINTENDENT WILL SELECT UP TO THREE INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE

* PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE. SUPERINTENDENT. THEY WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER.

NON-STORM WATER DISCHARGES

IT IS EXPECTED THAT THE FOLLOWING NON-STORM WATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:

* WATER FROM WATER LINE FLUSHING

* PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).

* UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION). ALL NON-STORM WATER DISCHARGES WILL BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE.

CONTRACTOR'S CERTIFICATION

ICERTIFY UNDER PENALTY OF LAW THAT LUNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

RESPONSIBLE FOR/DUTIES	GENERAL CONTRACTOR	SUB-CONTRACTOR	SUB-COWT RACT OR	SUB-COWT RACT OR	SUB-COMT RACT OR
BUSINESS NAME AND ADDRESS OF CONTRACTOR & ALL SUBS					
SIGNATURE					

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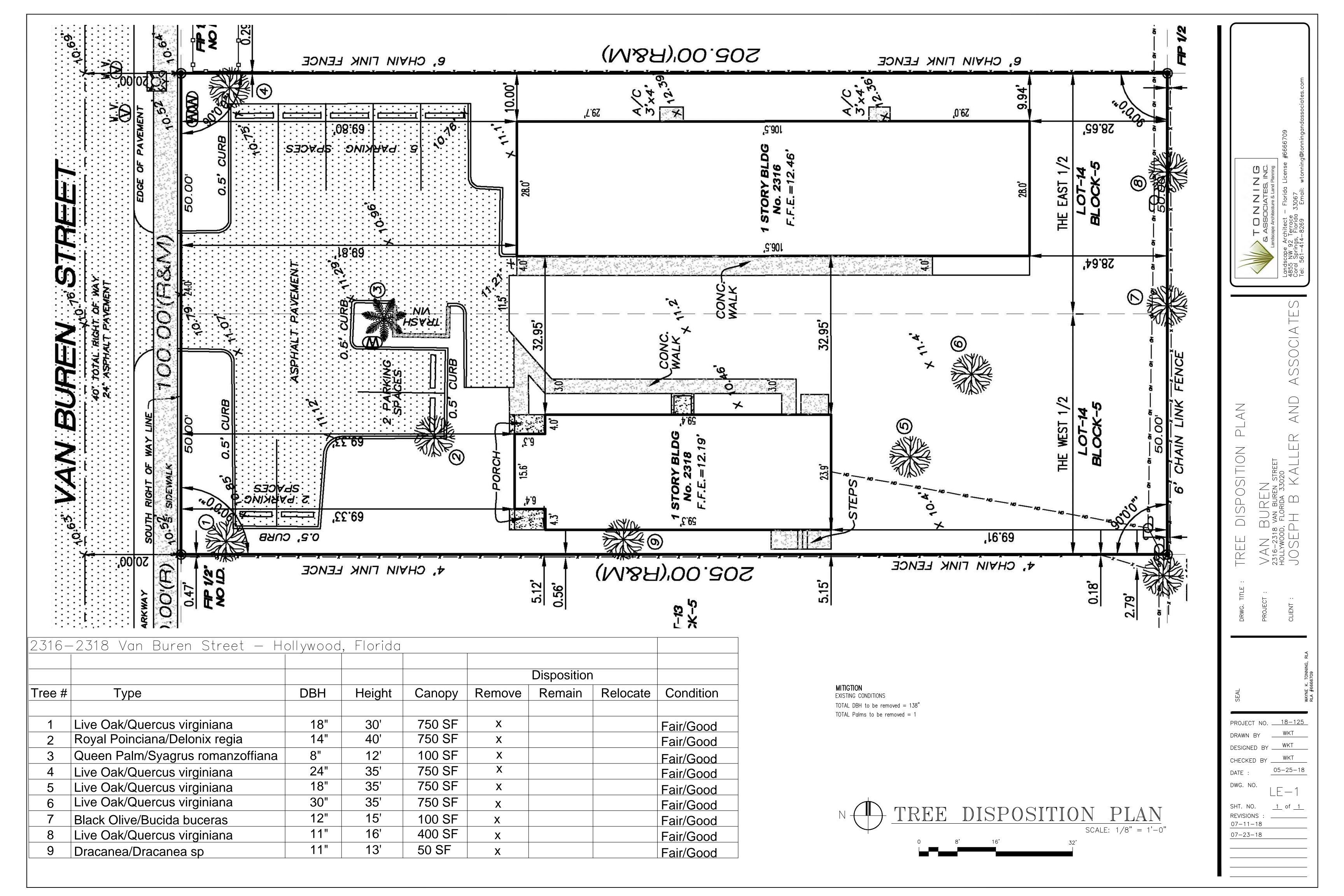
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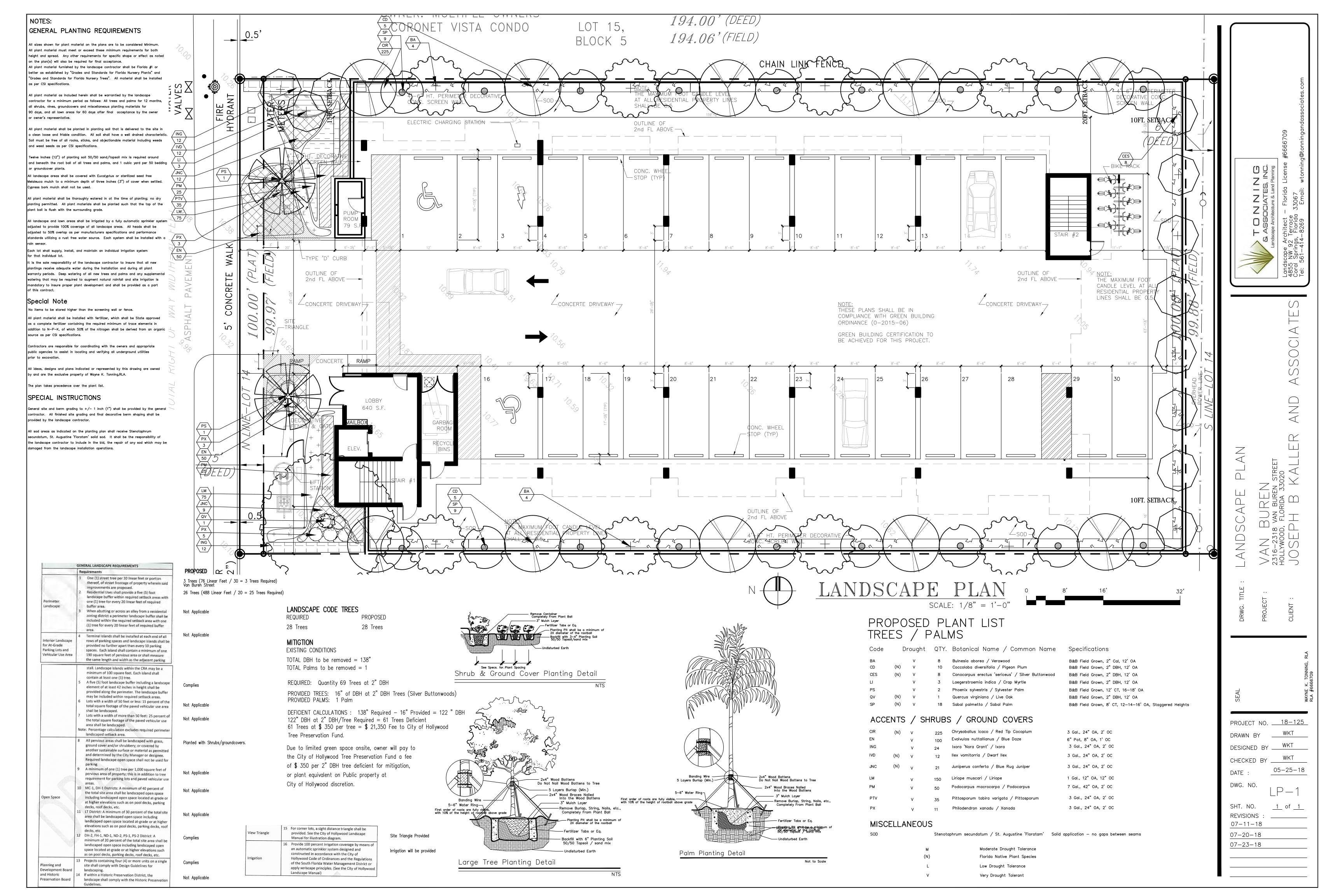
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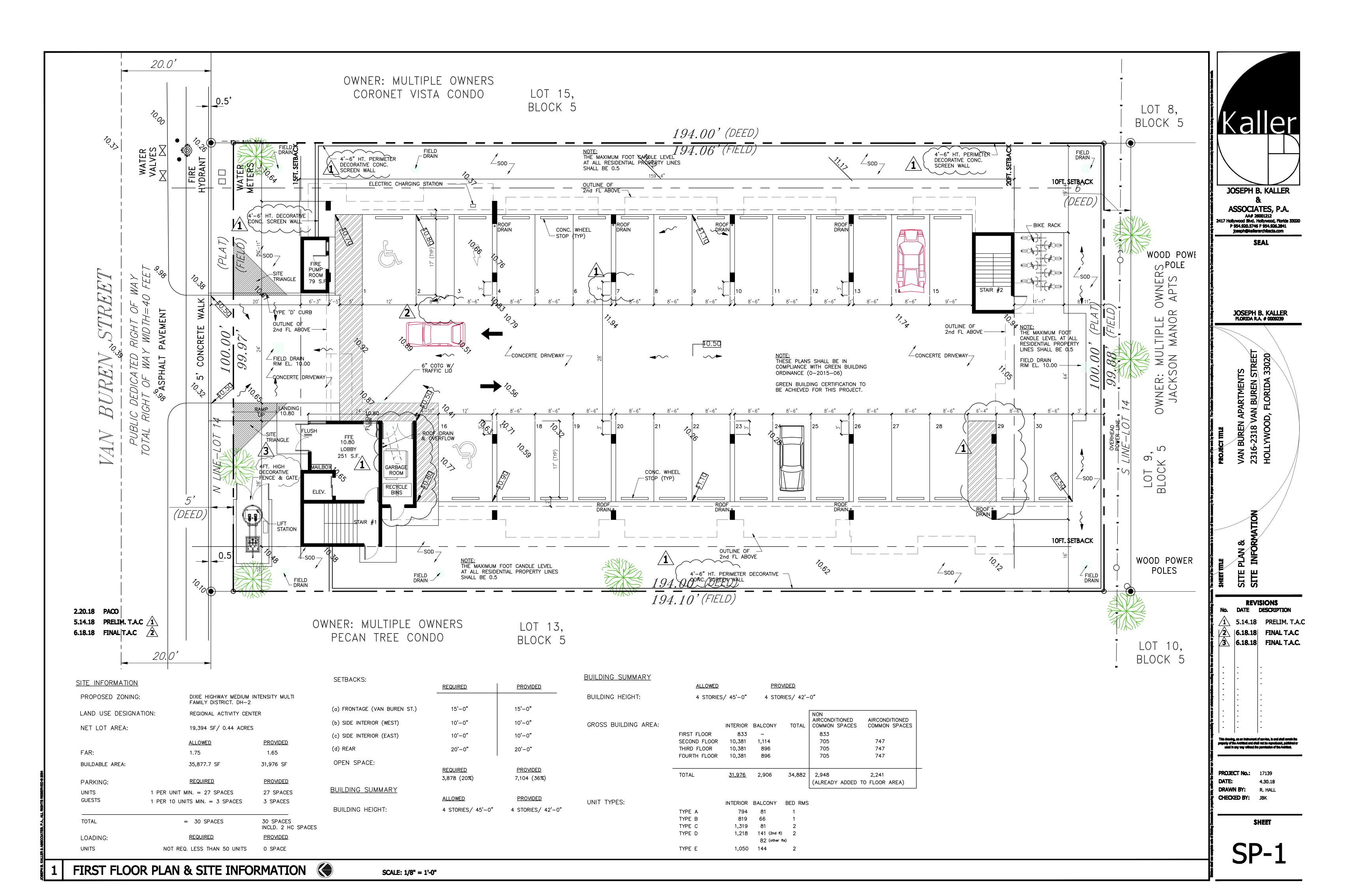
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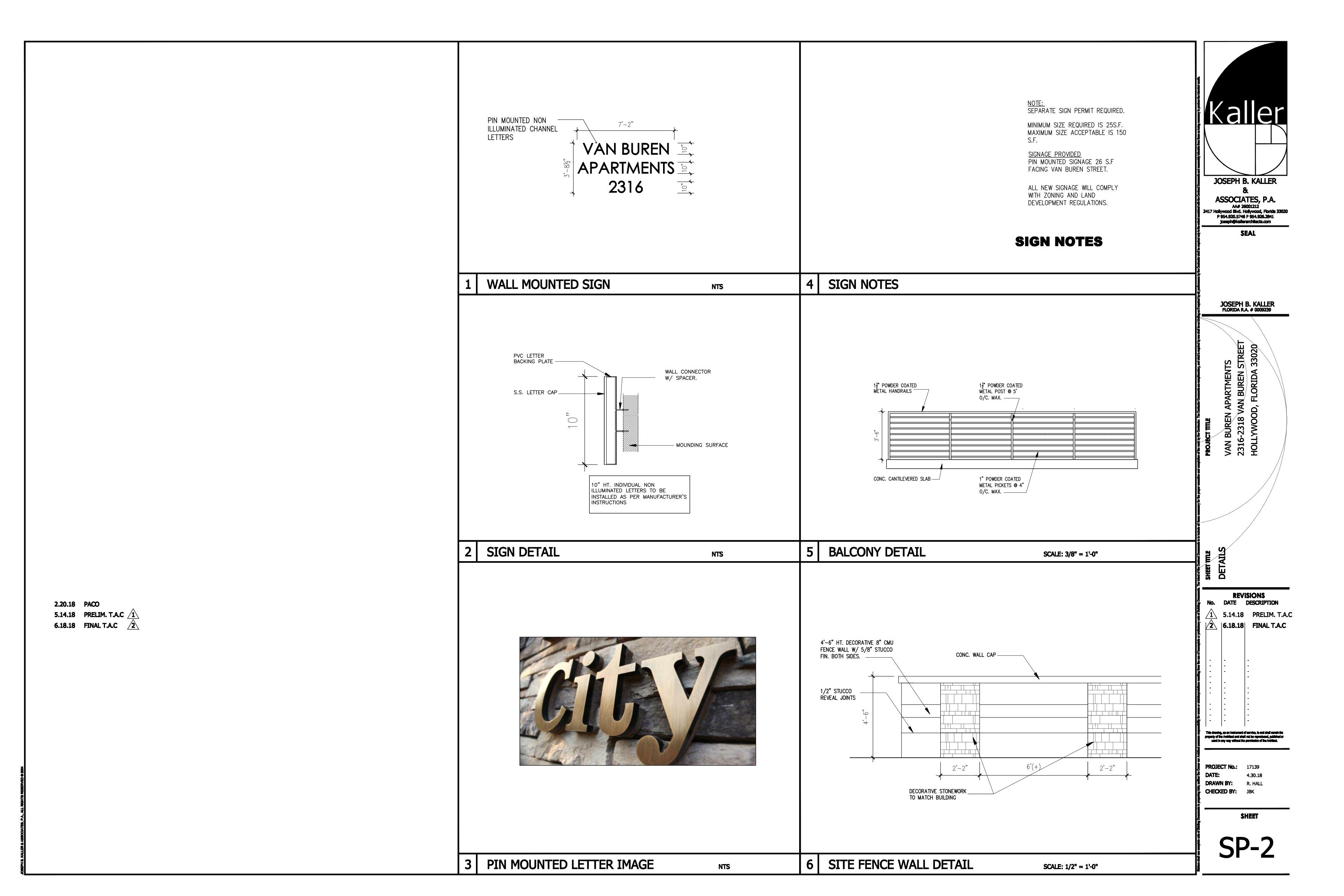
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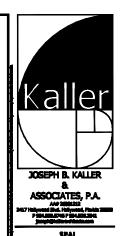








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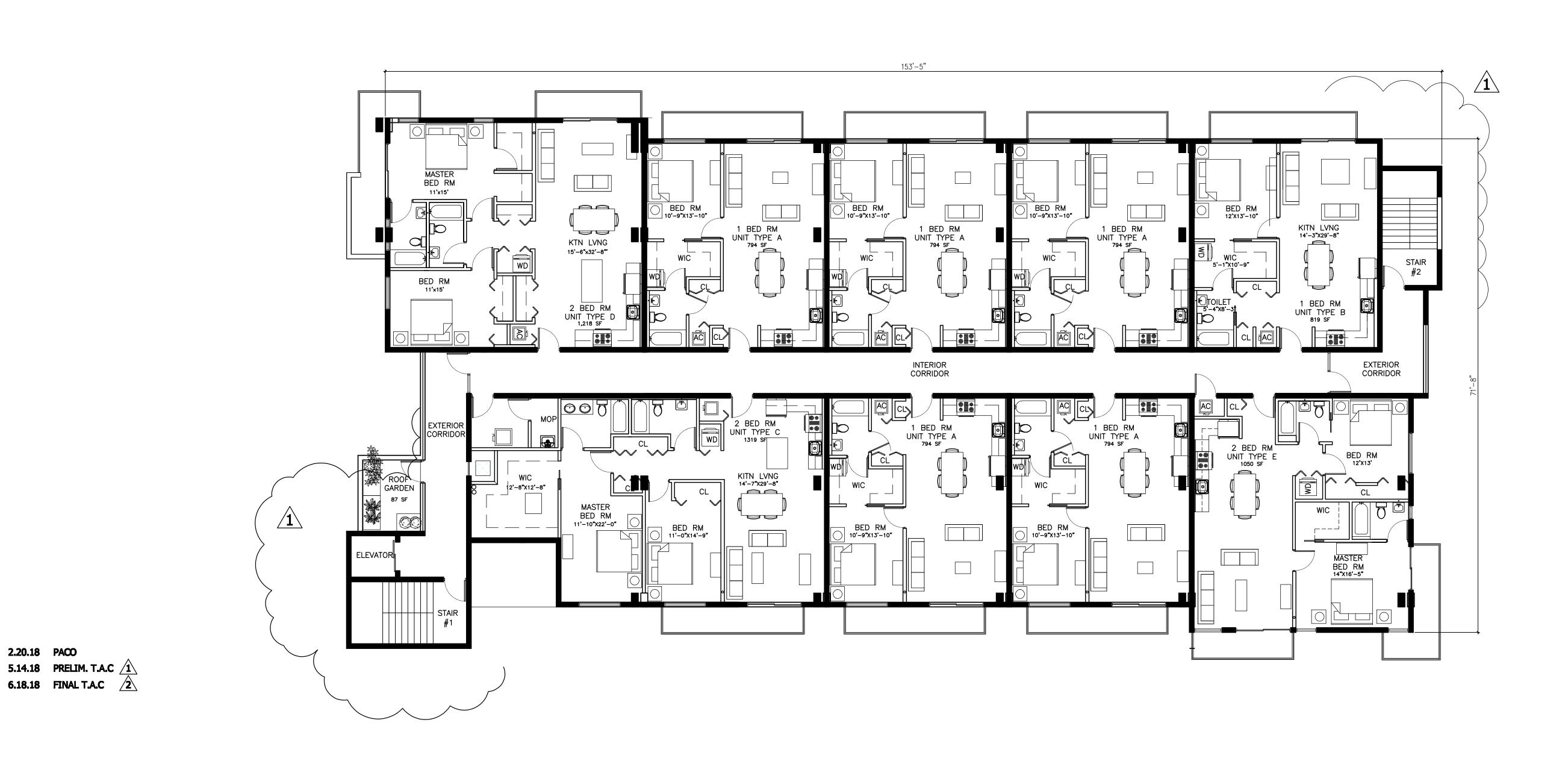
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2.20.18 PACO



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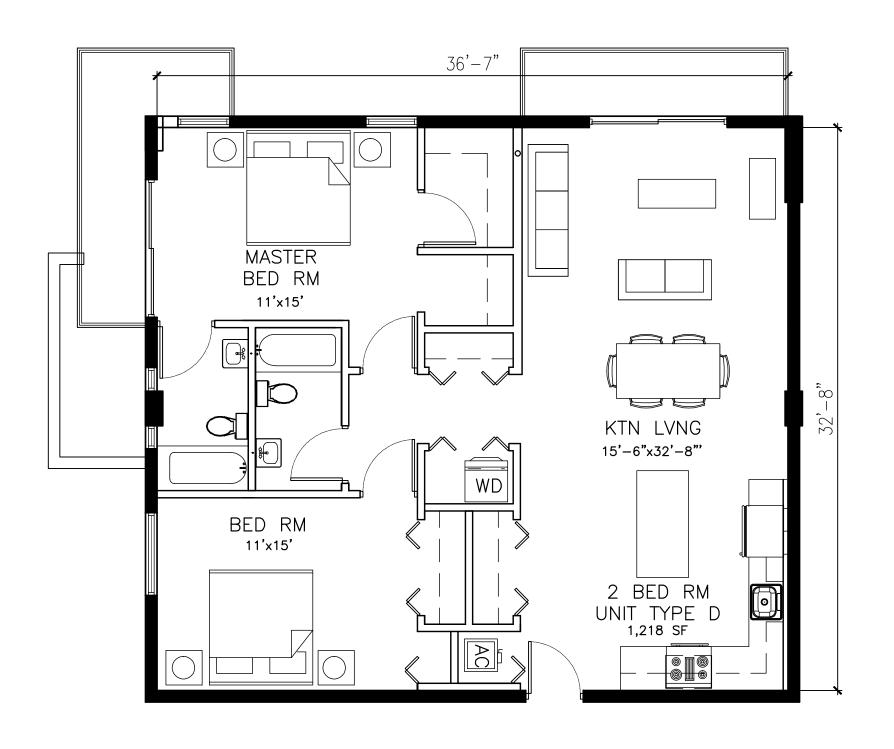
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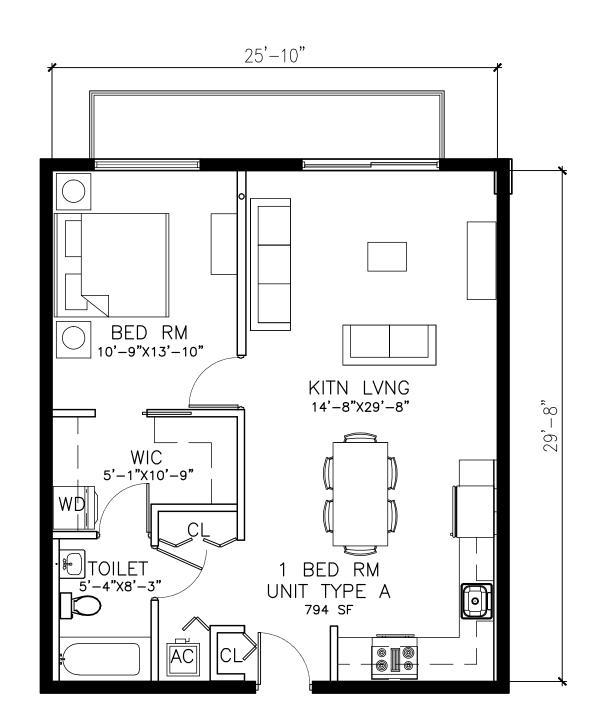
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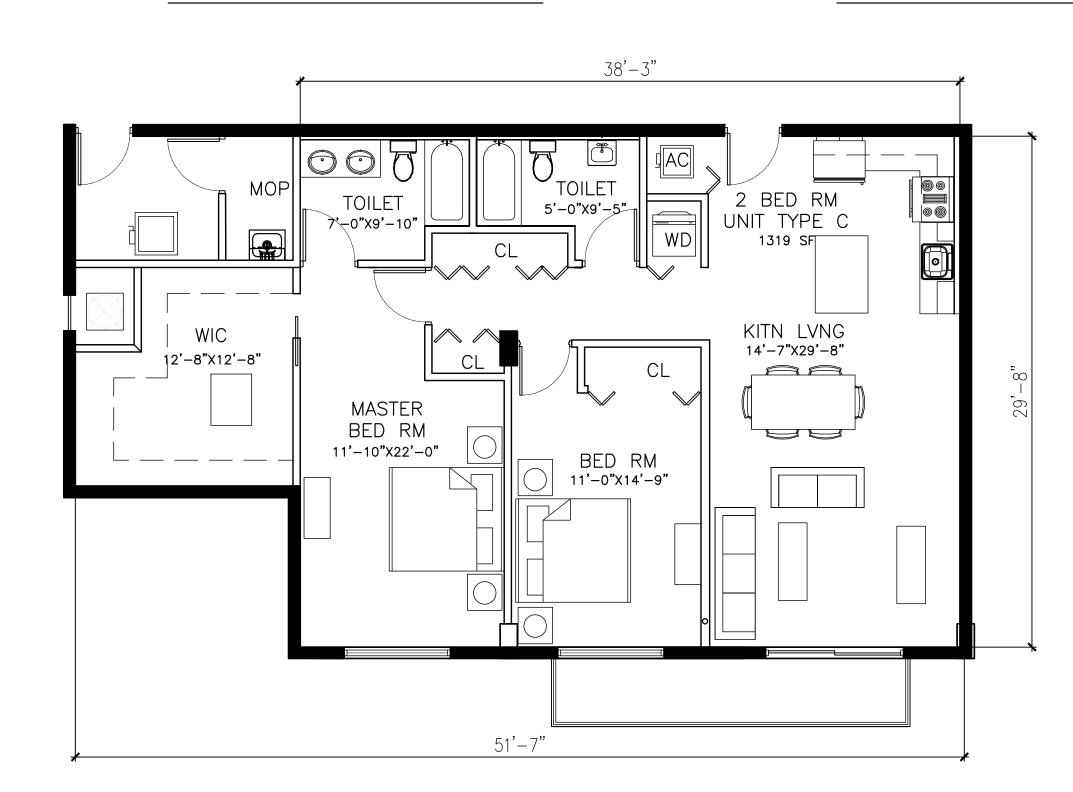
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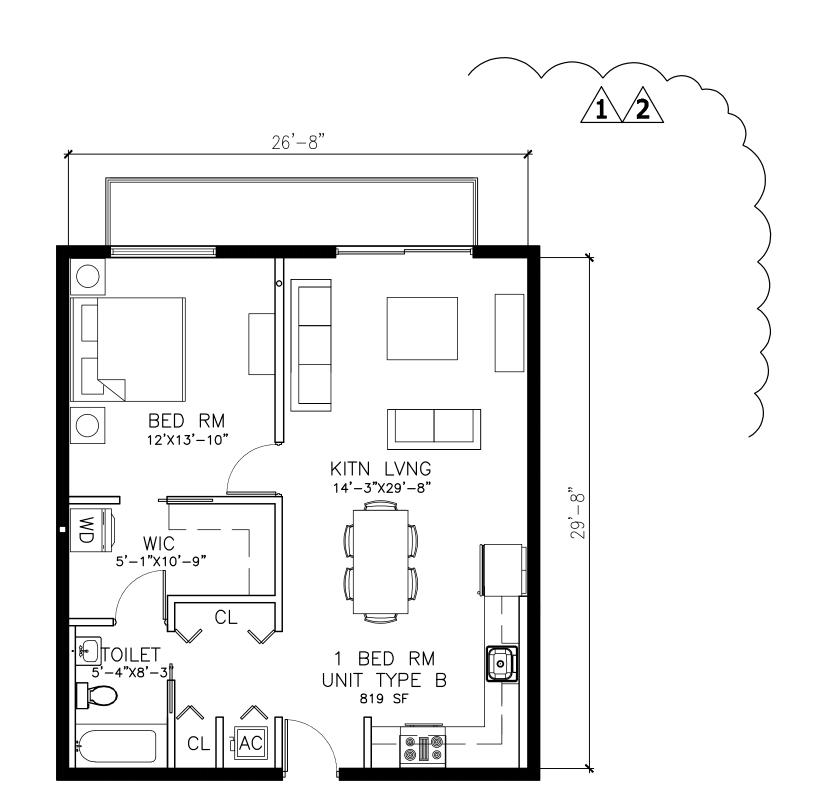


UNIT TYPE D FLOOR PLAN

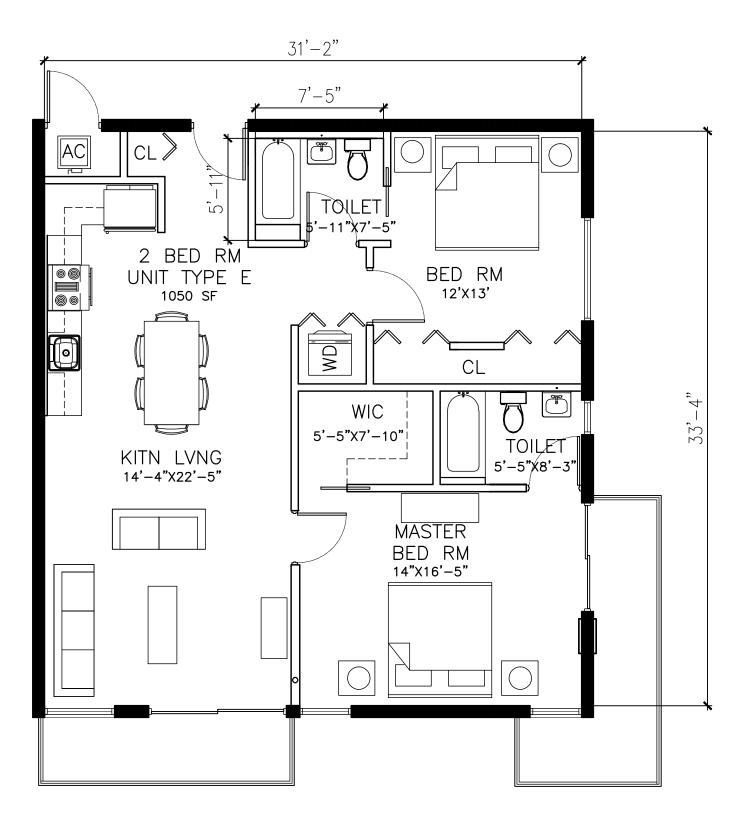
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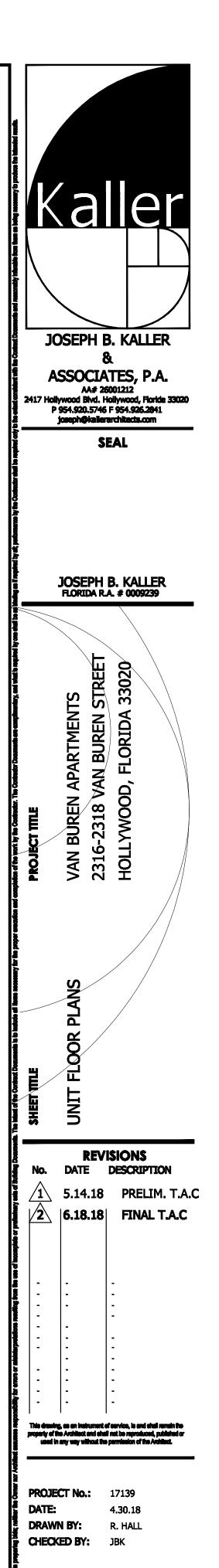
UNIT TYPE C FLOOR PLAN



UNIT TYPE B FLOOR PLAN



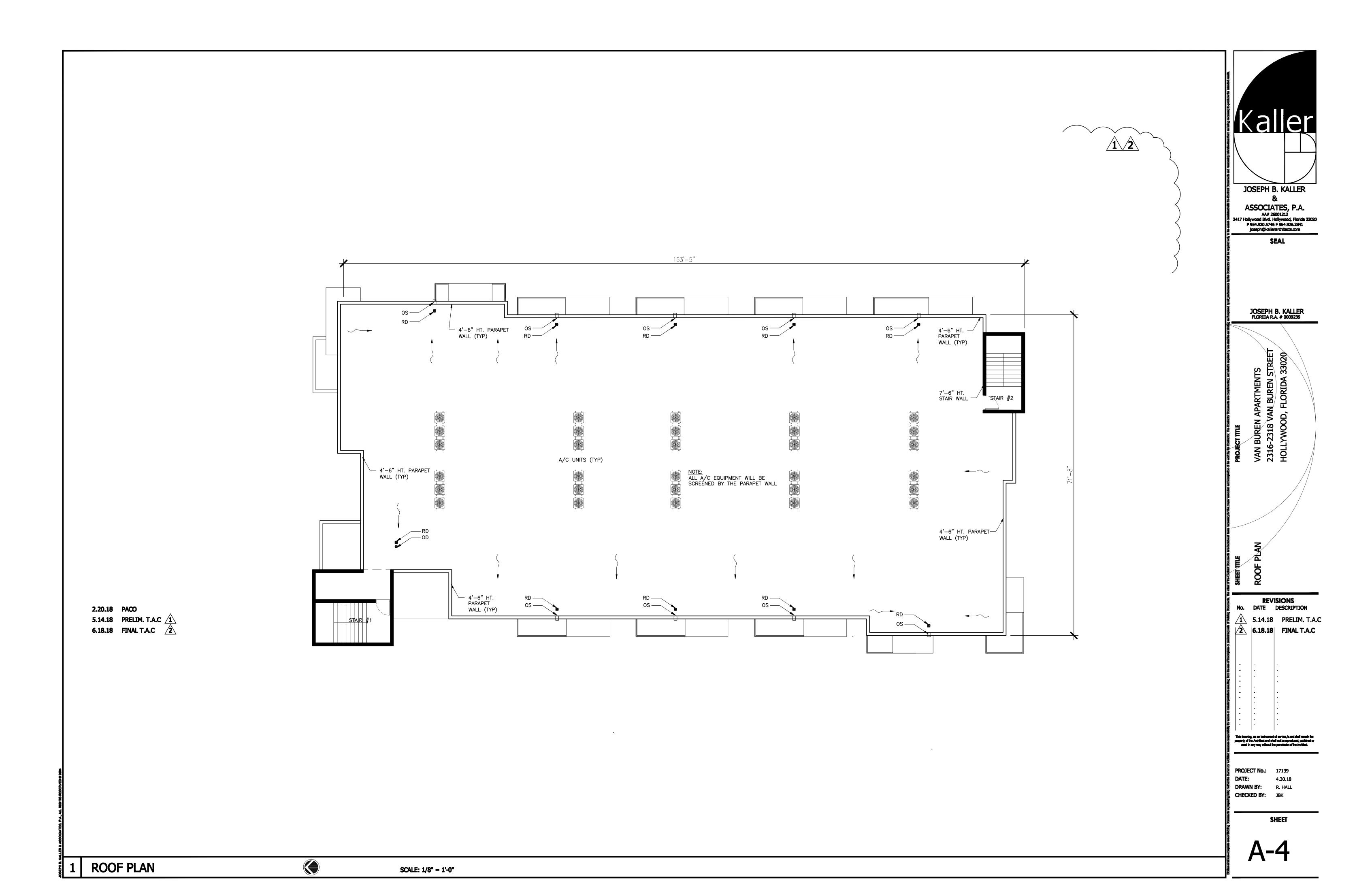
UNIT TYPE E FLOOR PLAN



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6.18.18 FINAL T.A.C **2**







WEST ELEVATION

SCALE: 1/8"= 1'-0"

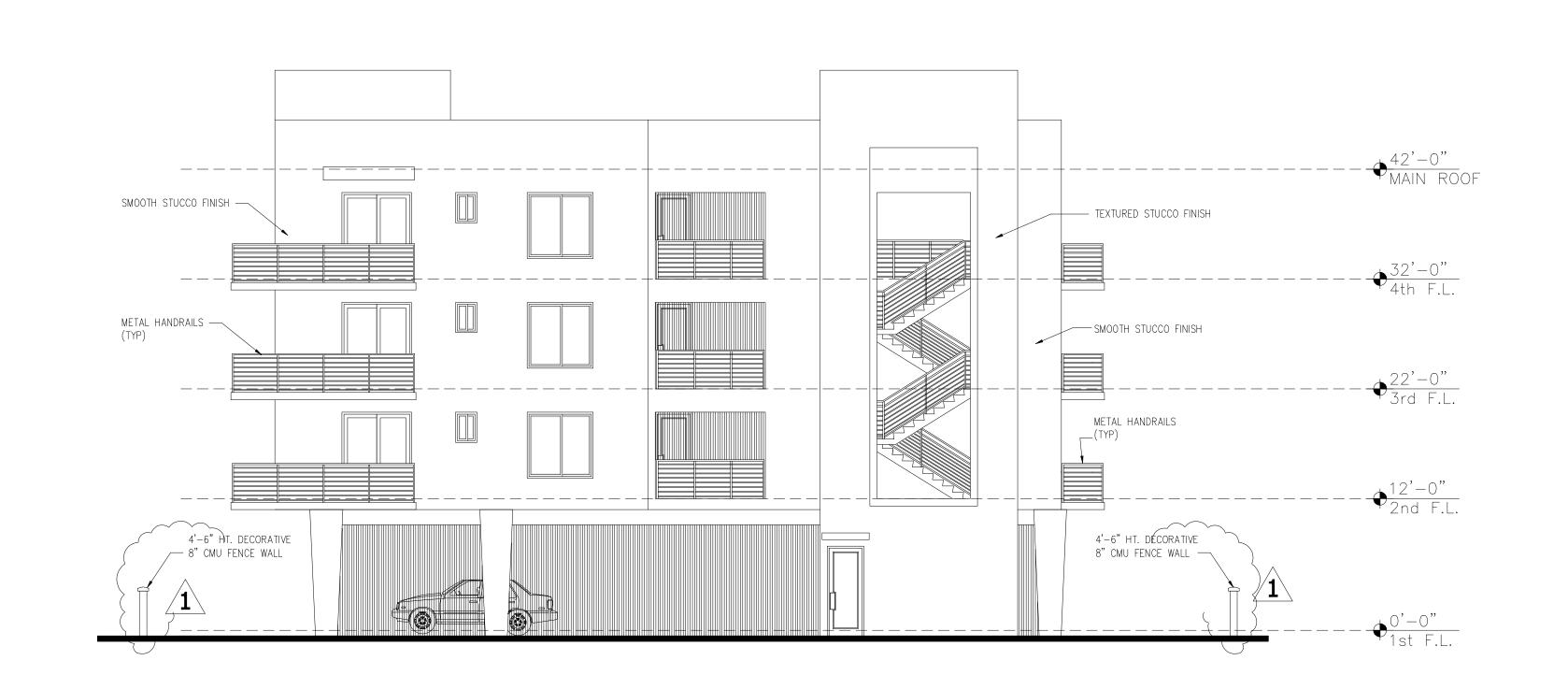
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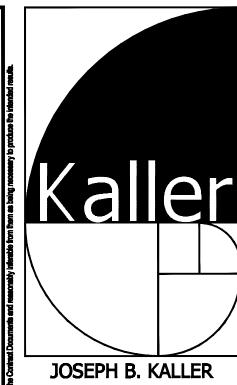


SOUTH ELEVATION SCALE: 1/8"= 1'-0"



EAST ELEVATION

SCALE: 1/8"= 1'-0"



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VAN BUREN APARTMENTS
2316-2318 VAN BUREN STREET

BUILDING ELEVATIONS MEETING DATE: 6.18.18

REVISIONS
No. DATE DESCRIPTION

1 5.14.18 PRELIM. T.A.C 2 6.18.18 FINAL T.A.C

3 6.18.18 FINAL T.A.C.

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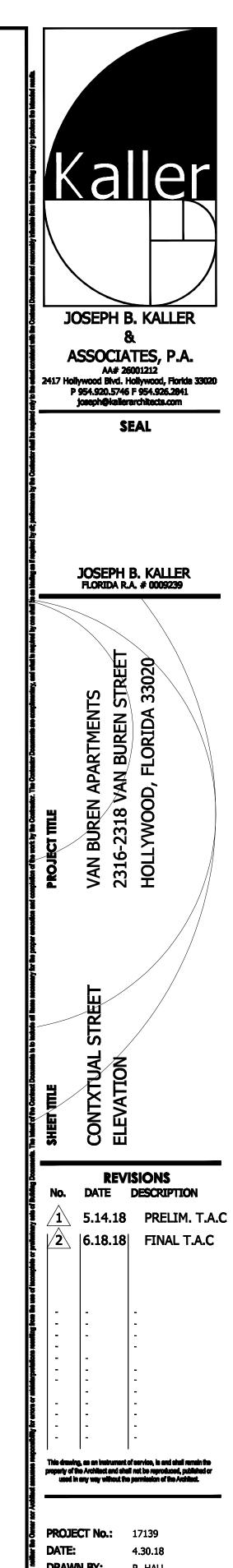
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CONTEXTUAL STREET ELEVATION

SCALE: 3/32" = 1'-0"

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