

601 UNIVERSE BOULEVARD,
JUNO BEACH, FL 33408
CIVIL ENGINEERING PLANS

PREPARED FOR:
LIFESPACE COMMUNITIES
WEST DES MOINES, IA 50266



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CONSULTANTS:

PROJECT TITLE:

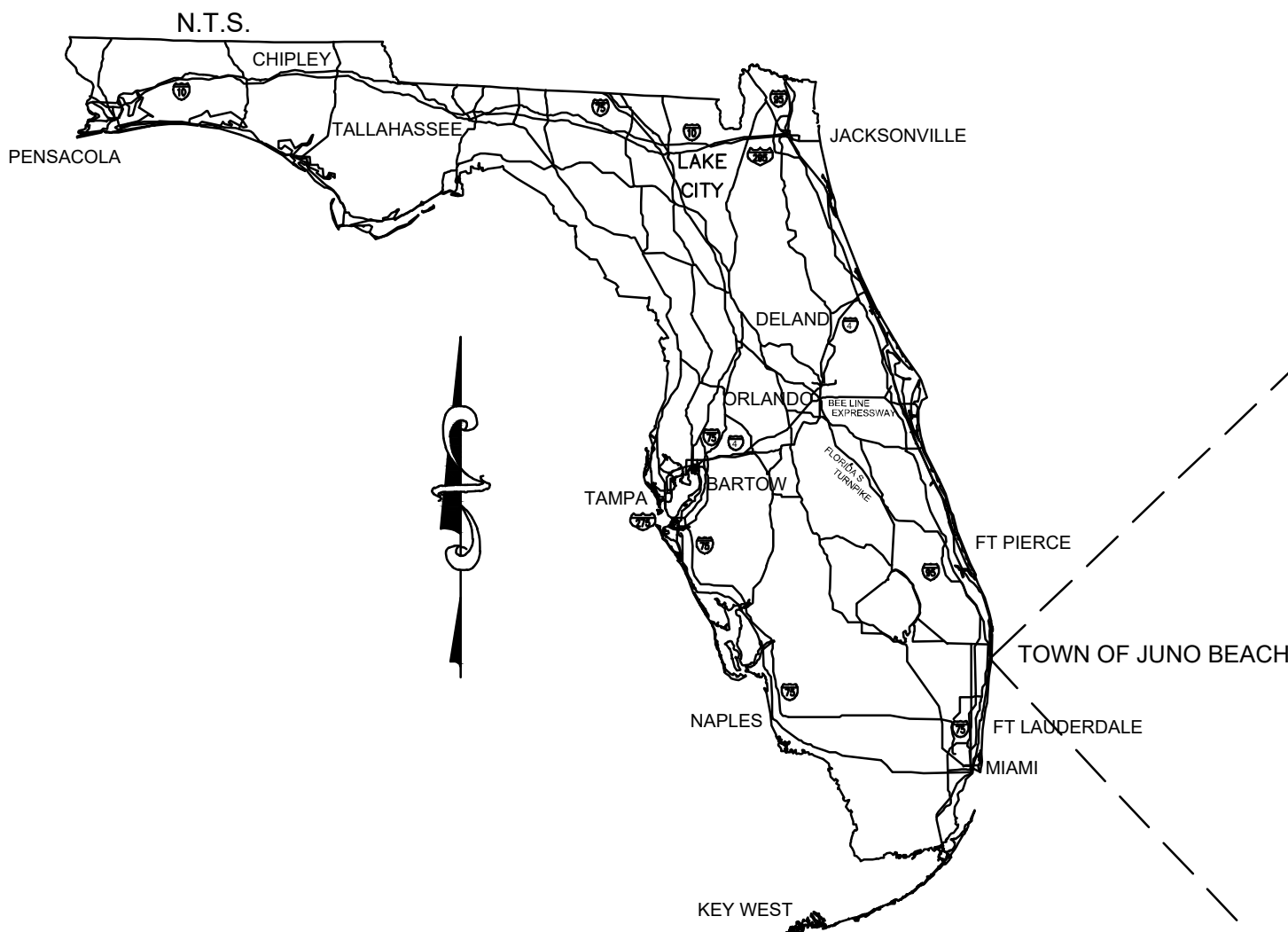
THE WATERFORD
INDEPENDENT LIVING & MEMORY CARE
EXPANSION
601 UNIVERSE BOULEVARD
JUNO BEACH, FLORIDA 33408

ENGINEER OF RECORD
CHRIS J. HOLMES, PE
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ON 2025-12-01

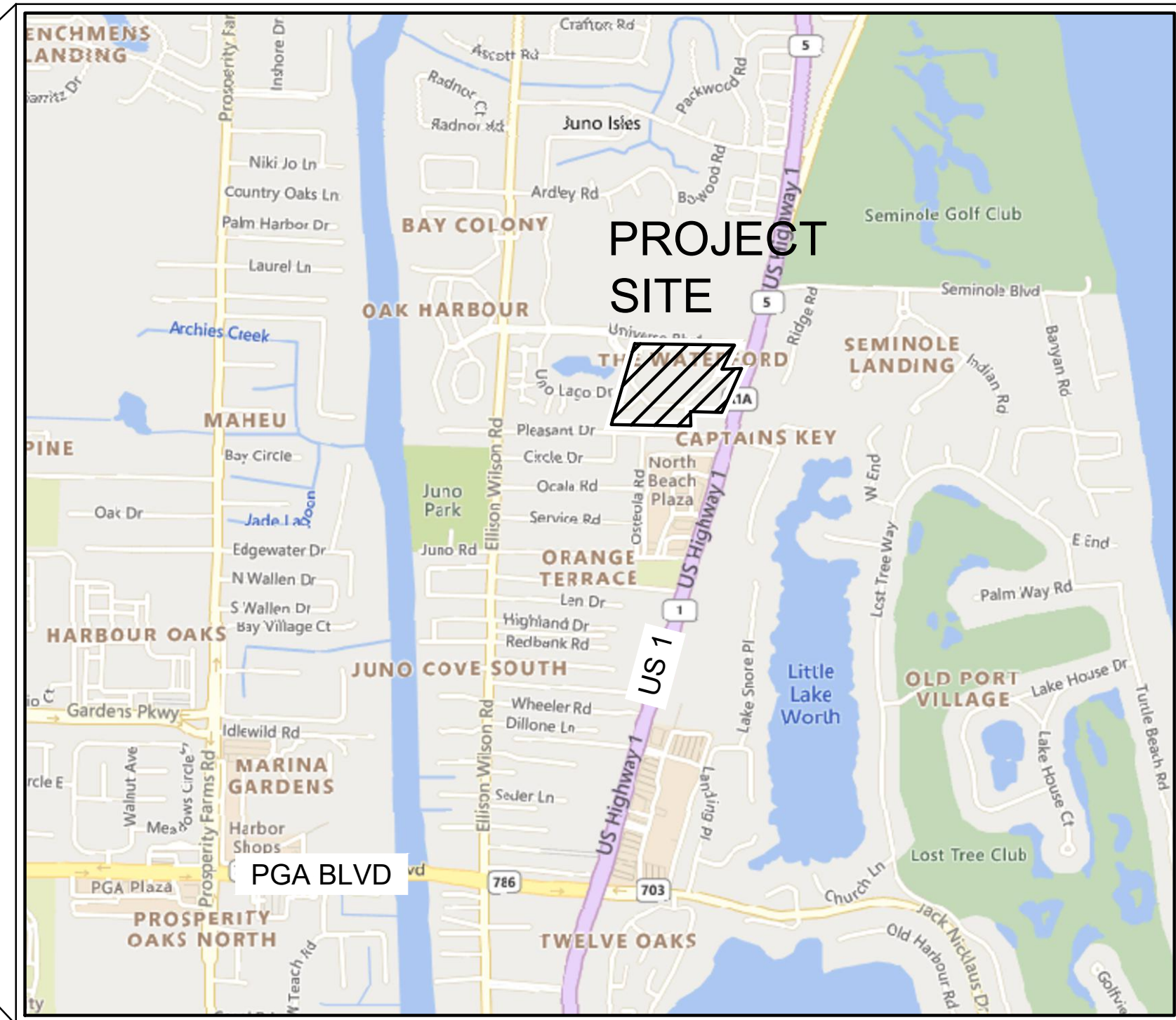
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CIVIL ENGINEERING PLANS

SHEET #:	TOTAL SHEETS
C-001	23



LOCATION MAP



PROJECT LOCATED IN
SECTION 33 / TOWNSHIP 41 SOUTH / RANGE 43 EAST
PALM BEACH COUNTY, FL

PERMIT TRACKING			
PERMITTING AGENCY	PERMIT NAME	PERMIT NUMBER	EXPIRATION DATE
SFWMD	ERP		
PBC HEALTH DEPARTMENT	WATER PERMIT		
PBC HEALTH DEPARTMENT	SEWER PERMIT		
PBC FIRE RESCUE	FIRE REVIEW		
SEACOAST UTILITY AUTHORITY			

VERTICAL DATUM: NORTH AMERICAN VERTICAL
DATUM OF 1988 (NAVD88)

HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983, FLORIDA STATE PLANES, EAST ZONE, U.S. FEET (NAD83)



Sheet Number	Sheet Title
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C-002	GENERAL NOTES
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C-101	SITE DEMOLITION PLAN
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C-300	DRAINAGE PLAN
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C-402	WASTEWATER PROFILES
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C-500	SIGNING AND PAVEMENT MARKING PLAN
C-600	TURN LANE CONSTRUCTION PLAN
C-700	EROSION AND SEDIMENTATION CONTROL DETAILS
C-701	PAVING, GRADING AND DRAINAGE DETAILS
C-702	PAVING, GRADING AND DRAINAGE DETAILS
C-703	PAVING, GRADING AND DRAINAGE DETAILS
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C-710	LIFT STATION DETAILS

GENERAL CONSTRUCTION NOTES

- STANDARDS AND SPECIFICATIONS: ALL MATERIALS, CONSTRUCTION METHODS, WORKSMANSHIP, EQUIPMENT, SERVICES AND TESTING FOR ALL PUBLIC AND PRIVATE IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE GOVERNING TOWN OF JUNE BEACH ORDINANCES, REGULATIONS, REQUIREMENTS, STATUTES, SPECIFICATIONS AND RELATED PERMITS, PLANNING AND PLUMBING CODES, AND THE TOWN OF JUNE BEACH PUBLIC WORKS AND WATER DEPARTMENT REQUIREMENTS, ENDORSEMENTS, AND FIRE DEPARTMENT REGULATIONS SHALL TAKE PRECEDENT.
- EXAMINATION OF PLANS: PRIOR TO COMMENCING ANY CONSTRUCTION, THE CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS. FAILURE ON THE PART OF THE CONTRACTOR TO BECOME FAMILIAR WITH THE STANDARDS AND SPECIFICATIONS PERTAINING TO THE WORK SHALL IN NO WAY RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR PERFORMING THE WORK IN ACCORDANCE WITH ALL SUCH APPLICABLE STANDARDS AND SPECIFICATIONS.
- EXAMINATION OF SITE: THE CONTRACTOR SHALL BE RESPONSIBLE FOR INVESTIGATING AND SATISFYING THEMSELVES AS TO THE CONDITIONS AFFECTING THE WORK, INCLUDING BUT NOT RESTRICTED TO THOSE BEARING UPON TRANSPORTATION, DISPOSAL, HANDLING AND STORAGE OF MATERIALS, AVAILABILITY OF LABOR, AND THE PHYSICAL, GEOLOGICAL, ENGINEERING RECORD ON THE PROJECT. THE SURFACE INFORMATION WILL BE MADE AVAILABLE FOR THE CONTRACTOR'S USE. THE ASSIGNER DISCLAIMS ANY RESPONSIBILITY FOR THE ACCURACY, TRUTH, LOCATION AND EXTENT OF THE SOILS INFORMATION PROVIDED BY OTHERS.
- TOPOGRAPHIC SURVEY: TOPOGRAPHIC SURVEY INFORMATION SHOWN ON THE PLANS IS PROVIDED FOR INFORMATIONAL PURPOSES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE INFORMATION SHOWN IS CORRECT, AND SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY ERRORS, DISCREPANCIES OR OMISSIONS. THE SURVEY INFORMATION IS PROVIDED.
- COMPLIANCE WITH LAWS: THE CONTRACTOR SHALL FULLY COMPLY WITH ALL LOCAL, STATE AND FEDERAL LAWS, INCLUDING ALL CODES, ORDINANCES AND REGULATIONS APPLICABLE TO THIS CONTRACT AND THE WORK TO BE DONE THEREUNDER, WHICH EXIST OR MAY BE ENACTED LATER BY GOVERNMENTAL BODIES HAVING JURISDICTION OR AUTHORITY FOR SUCH ENACTMENT. ALL WORK REQUIRED UNDER THIS CONTRACT SHALL COMPLY WITH ALL REQUIREMENTS OF LAW, REGULATION, PERMIT OR LICENSE. IF THE CONTRACTOR FINDS THE EXISTING WORK OR THE TRAILING PUBLIC WORKS TO BE IN VIOLATION OF ANY SUCH GOVERNING AUTHORITIES, THE CONTRACTOR SHALL FURNISH DUPLICATE COPIES OF SUCH PERMITS TO THE OWNER BEFORE THE WORK COVERED THEREBY IS STARTED. NO WORK WILL BE ALLOWED TO PROCEED BEFORE SUCH PERMITS HAVE BEEN OBTAINED.
- PERMIT CONVENIENCE AND SAFETY: IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO THE NORMAL WORKING HOURS. MATERIALS STORED ON THE WORK SITE SHALL BE PLACED AND THE WORK SHALL AT ALL TIMES BE CONDUCTED, AS FAR AS POSSIBLE, WITHOUT OBSTRUCTION TO THE TRAILING PUBLIC WORKS. ACCESS TO THE TRAILING PUBLIC WORKS SHALL BE MAINTAINED BY THE CONTRACTOR AND THE OWNER AND NOT TO PREVENT FIRE UNIMPETRED ACCESS TO ALL FIRE HYDRANTS, WATER VALVES, GAS VALVES, MANHOLES AND FIRE ALARM OR POLICE CALL BOXES IN THE VICINITY.
- STORM WATER POLLUTION PREVENTION PLAN (SWPPP): THE CONTRACTOR SHALL COMPLY WITH THE CONDITIONS OF THE SWPPP WHILE CONDUCTING THEIR ACTIVITIES ON THE PROJECT.
- PERMITS AND LICENSES: THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND LICENSES NECESSARY FOR THE EXECUTION OF THE WORK AND SHALL FULLY COMPLY WITH ALL THEIR TERMS AND CONDITIONS. WHERE THE CONTRACTOR WORKS UNDER A PERMIT OR LICENSE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE SAME. THE CONTRACTOR SHALL FURNISH DUPLICATE COPIES OF SUCH PERMITS TO THE OWNER BEFORE THE WORK COVERED THEREBY IS STARTED. NO WORK WILL BE ALLOWED TO PROCEED BEFORE SUCH PERMITS HAVE BEEN OBTAINED.
- APPROVED PLANS: THE CONTRACTOR SHALL HAVE AT LEAST ONE SET OF APPROVED PLANS ON-SITE AT ALL TIMES.
- BONDS: PERFORMANCE, PAYMENT AND MAINTENANCE BONDS MAY BE REQUIRED FROM THE CONTRACTOR FOR "PUBLIC" IMPROVEMENTS. IF REQUIRED, THE CONTRACTOR SHALL PROVIDE THE BONDS IN THE FORM AND IN THE AMOUNTS AS REQUIRED BY THE GOVERNING AUTHORITIES, COSTS ASSOCIATED WITH PROVIDING THE BONDS SHALL BE INCLUDED IN THE CONTRACT AMOUNT.
- TESTING: THE TESTING AND CONTROL OF ALL MATERIALS USED IN THE WORK SHALL BE PERFORMED BY AN INDEPENDENT TESTING LABORATORY EMPLOYED AND PAID DIRECTLY BY THE OWNER. IN THE EVENT THE RESULTS OF INITIAL TESTINGS DO NOT COMPLY WITH THE PLANS AND SPECIFICATIONS, SUBSEQUENT TESTS NEED TO BE CONDUCTED TO DETERMINE THE ACCEPTABILITY OF MATERIALS OR CONSTRUCTION SHALL BE AT THE CONTRACTOR'S EXPENSE.
- INSPECTION: THE GOVERNING AUTHORITIES AND/OR THE OWNER WILL PROVIDE INSPECTION OF THE PROPOSED CONSTRUCTION. THE OWNER WILL PAY THE COSTS FOR INSPECTION SERVICES. THE CONTRACTOR SHALL PROVIDE SUFFICIENT NOTICE WELL IN ADVANCE OF PENDING CONSTRUCTION ACTIVITIES TO THE GOVERNING AUTHORITIES AND/OR OWNER FOR SCHEDULING OF INSPECTION SERVICES.
- SHOP DRAWINGS: THE CONTRACTOR SHALL HAVE PREPARED, REVIEW, AND SUBMIT ALL SHOP DRAWINGS, PROJECT DATA AND SAMPLES REQUIRED BY THE GOVERNING AUTHORITIES AND THE PROJECT CONTRACT DOCUMENTS.
- SURVEYING: ALL SURVEYING REQUIRED FOR CONSTRUCTION STAKING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE OWNER SHALL PROVIDE THE PROPERTY CORNERS AND TWO BENCHMARKS FOR USE AS HORIZONTAL AND VERTICAL DATUM. THE CONTRACTOR SHALL EMPLOY A REGISTERED PROFESSIONAL LAND SURVEYOR TO PERFORM ALL ADDITIONAL SURVEY, LAYOUT AND MEASUREMENT WORK NECESSARY FOR THE COMPLETION OF THE PROJECT. THE COSTS ASSOCIATED WITH THE CONSTRUCTION STAKING SHALL BE INCLUDED IN THE CONTRACT AMOUNT.
- PROTECTION OF PROPERTY CORNERS AND BENCHMARKS: THE CONTRACTOR SHALL STAKE ALL PROPERTY CORNER MARKERS AND BENCHMARKS. WHEN ANY SUCH MARKERS OR MONUMENTS ARE IN DANGER OF BEING DISTURBED, THEY SHALL BE PROPERLY REFERENCED AND IF DISTURBED SHALL BE RESET BY A REGISTERED PUBLIC SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.
- EXISTING STRUCTURES: THE PLANS SHOW THE LOCATION OF ALL KNOWN SURFACE AND SUBSURFACE STRUCTURES. HOWEVER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ASSUMING NO RESPONSIBILITY FOR FAILURE TO SHOW ANY OR ALL OF THESE STRUCTURES ON THE PLANS, OR TO SHOW THEM IN THEIR EXACT LOCATION. SUCH FAILURE SHALL NOT BE CONSIDERED SUFFICIENT BASIS FOR CLAIMS FOR ADDITIONAL COMPENSATION FOR EXTRA WORK OR FOR INCREASING THE PAY QUANTITIES IN ANY MANNER WHATSOEVER, UNLESS THE CONTRACTOR HAS BEEN ADVISED AS SUCH BY THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONSTRUCTION OF SPECIAL WORK, FOR WHICH PROVISIONS ARE NOT MADE IN THE PLANS.
- PROTECTION OF EXISTING UTILITIES: SUNSHINE ONE CALL SYSTEM MUST BE CONTACTED (811) AT LEAST 48 HOURS PRIOR TO EXCAVATION OPERATIONS BEING PERFORMED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT SUNSHINE ONE CALL SYSTEM. THE LOCATION OF EXISTING UTILITIES SHOWN ON THE PLANS ARE BASED ON THE BEST RECORDS AND/OR FIELD INFORMATION AVAILABLE AND ARE NOT GUARANTEED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF UTILITIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF ADJACENT AND/OR CONFLICTING UTILITIES SUFFICIENTLY IN ADVANCE OF THEIR ACTIVITIES IN ORDER THAT THEY MAY NEGOTIATE SUCH LOCAL ADJUSTMENTS AS NECESSARY IN THE CONSTRUCTION PROCESS TO PROVIDE ADEQUATE CLEARANCES. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS IN ORDER TO PROTECT ALL EXISTING UTILITIES, SERVICES, AND ADJACENT PROPERTY. IF THE CONTRACTOR DETERMINES THAT ANY UTILITIES ARE IN DANGER OF BEING DISTURBED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING THEM TO THEIR ORIGINAL LOCATION. IF ANY UTILITIES RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED AT HIS EXPENSE, TO AVOID UNNECESSARY INTERFERENCES OR DELAYS, THE CONTRACTOR SHALL COORDINATE ALL UTILITY REMOVALS, REPLACEMENTS AND CONSTRUCTION WITH THE APPROPRIATE GOVERNING AUTHORITIES. THE OWNER WILL NOT BE LIABLE FOR DAMAGES DUE TO DELAY BECAUSE OF THE ABOVE.
- DAMAGE TO EXISTING FACILITIES: ALL EXISTING UTILITIES, PAVEMENT, SIDEWALKS, WALLS, FENCES, ETC. DAMAGED BY THE CONTRACTOR'S ACTIVITIES SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE TO A CONDITION AS GOOD OR BETTER THAN THE CONDITIONS PRIOR TO STARTING THE WORK.
- FIRE AND SAFETY SYSTEMS: THE CONTRACTOR SHALL NOT REMOVE, DISABLE, OR DISRUPT EXISTING FIRE OR LIFE SAFETY SYSTEMS WITHOUT RECEIVING PRIOR WRITTEN PERMISSION FROM THE GOVERNING AUTHORITY.
- TRENCH SAFETY: THE CONTRACTOR IS RESPONSIBLE FOR HAVING A TRENCH SAFETY PLAN PREPARED IN ACCORDANCE WITH OSHA REQUIREMENTS BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF FLORIDA FOR THE IMPLEMENTATION OF TRENCH SAFETY CONTROL MEASURES THAT WILL BE IN EFFECT DURING THE COURSE OF THE PROJECT. THE COSTS FOR PREPARATION OF THE TRENCH SAFETY PLAN SHALL BE INCLUDED IN THE CONTRACT AMOUNT.
- ACCESS ROUTES, STAGING AREAS AND STORAGE AREAS: ALL PRIVATE HAUL ROADS AND ACCESS ROUTES AND THE LOCATION OF ALL STAGING AREAS AND STORAGE AREAS SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND REPAIRING ALL ROADS AND OTHER FACILITIES USED DURING CONSTRUCTION UPON COMPLETION OF THE PROJECT. ALL HAUL ROADS, ACCESS ROUTES AND THE AREAS OF STAGING AND STORAGE AREAS SHALL BE RESTORED TO EQUAL TO OR BETTER THAN THAT AT THE TIME THE CONTRACTOR COMMENCES WORK ON THE PROJECT.
- PARKING OF CONSTRUCTION EQUIPMENT: AT NIGHT AND DURING ALL OTHER PERIODS OF TIME WHEN EQUIPMENT IS NOT BEING ACTIVELY USED FOR THE CONSTRUCTION WORK, THE CONTRACTOR SHALL PARK THE EQUIPMENT AT LOCATIONS WHICH ARE APPROVED BY THE OWNER. DURING THE CONSTRUCTION OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER PARKING REQUIREMENTS OF THE GOVERNING AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER PARKING REQUIREMENTS OF THE GOVERNING AUTHORITIES. THE CONTRACTOR SHALL PROVIDE ADEQUATE BARRICADES, MARKERS AND LIGHTS TO PROTECT THE OWNER, THE GOVERNING AUTHORITIES, THE PUBLIC AND THE OTHER WORK. ALL BARRICADES, LIGHTS AND MARKERS MUST MEET THE REQUIREMENTS OF THE GOVERNING AUTHORITIES' REGULATIONS.
- WATER FOR CONSTRUCTION: THE CONTRACTOR SHALL MAKE THE NECESSARY ARRANGEMENTS FOR PURCHASING WATER FOR CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COSTS OF THE PROJECT. COSTS ASSOCIATED WITH THIS SERVICE SHALL BE INCLUDED IN THE CONTRACT AMOUNT.
- TEMPORARY ELECTRIC AND COMMUNICATIONS FOR CONSTRUCTION: THE CONTRACTOR SHALL MAKE THE NECESSARY ARRANGEMENTS FOR INSTALLATION AND PURCHASING OF TEMPORARY ELECTRIC AND COMMUNICATIONS SERVICES FROM FLORIDA POWER AND LIGHT FOR THEIR USE ON THE PROJECT. COSTS ASSOCIATED WITH PURCHASING THESE SERVICES SHALL BE INCLUDED IN THE CONTRACT AMOUNT.
- FENCES: ALL FENCES ENCOUNTERED AND REMOVED DURING CONSTRUCTION, EXCEPT THOSE DESIGNATED TO BE REMOVED BY THE LOCAL GOVERNMENT, SHALL BE RESTORED TO ORIGINAL CONDITION AND LOCATION UPON COMPLETION OF THE PROJECT, WHERE WIRE FENCING, EITHER WIRE MESH OR BARBED WIRE, IS NOT TO BE CROSSED, THE CONTRACTOR SHALL SET CROSS-BARRED POSTS ON EITHER SIDE OF THE CROSSING. TEMPORARY FENCING SHALL BE ERRECTED IN PLACE OF THE FENCING REMOVED WHENEVER THE WORK IS NOT IN PROGRESS AND WHEN THE SITE IS VACATED OVERNIGHT AND/OR AT ALL TIMES TO PREVENT PERSONS AND/OR LIVESTOCK FROM ENTERING THE CONSTRUCTION AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL, TREATMENT, CLOSURES AND REPLACEMENT SHALL BE INCLUDED IN THE CONTRACT AMOUNT.
- COORDINATION WITH OTHERS: IN THE EVENT THAT OTHER CONTRACTORS ARE DOING WORK IN THE SAME AREA SIMULTANEOUSLY WITH THE PROJECT, THE CONTRACTOR SHALL COORDINATE THEIR PROPOSED CONSTRUCTION

WITH THAT OF THE OTHER CONTRACTORS

38. CONDITION OF SITE DURING CONSTRUCTION: THE CONTRACTOR SHALL KEEP THE SITE OF THE WORK AND ADJACENT PREMISES AS FREE FROM MATERIAL, DEBRIS AND RUBBISH AS IS PRACTICABLE. THE CONTRACTOR SHALL REMOVE MATERIAL, DEBRIS AND RUBBISH FROM ANY PORTION OF THE SITE IF, IN THE OPINION OF THE OWNER, IT MAY BE NECESSARY TO MAINTAIN ACCESS, OR TO PREVENT OBSTACLES OR OBSTRUCTIONS.
 39. EXISTING ROADWAYS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE CLEANLINESS OF EXISTING PAVED ROADS. COSTS ASSOCIATED WITH MAINTAINING THE CLEANLINESS OF EXISTING ROADS SHALL BE INCLUDED IN THE CONTRACT AMOUNT.
 40. DUST CONTROL: THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO CONTROL DUST ON THE PROJECT SITE BY SPRINKLING OF WATER, OR ANY OTHER METHODS APPROVED BY THE GOVERNING AGENCY. COSTS ASSOCIATED WITH DUST CONTROL SHALL BE INCLUDED IN THE CONTRACT AMOUNT.
 41. CLEAN UP FOR FINAL ACCEPTANCE: THE CONTRACTOR SHALL MAKE A FINAL CLEAN UP OF ALL PARTS OF THE WORK PRIOR TO ACCEPTANCE BY THE OWNER. THIS CLEAN UP SHALL INCLUDE REMOVAL OF ALL OBJECTIONABLE MATERIALS AND, IN GENERAL, PREPARING THE SITE OF THE WORK IN AN ORDERLY MANNER OF APPEARANCE.
 42. REMOVAL OF DEFECTIVE AND UNAUTHORIZED WORK: ALL WORK, WHICH HAS BEEN REJECTED OR CONDEMNED, SHALL BE REPAIRED, OR IF IT CANNOT BE REPAIRED SATISFACTORILY, IT SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE. DEFECTIVE MATERIALS SHALL BE IMMEDIATELY REMOVED FROM THE WORK SITE. WORK DONE BEYOND THE LINE OR NOT IN CONFORMITY WITH THE GRADING SHOWN ON THE DRAWINGS OR AS PROVIDED, WORK DONE WITHOUT REQUIRED INSPECTION, OR ANY EXTRA OR UNCLASSIFIED WORK DONE WITHOUT WRITTEN AUTHORITY AND PRIOR AGREEMENT IN WRITING AS TO PRICES, SHALL BE AT THE CONTRACTOR'S RISK, AND WILL BE CONSIDERED UNAUTHORIZED, AND AT THE OPTION OF THE OWNER MAY NO LONGER BE USED. SUCH WORK SHALL BE ORDERED REMOVED AT THE CONTRACTOR'S EXPENSE. UPON FAILURE OF THE CONTRACTOR TO REPAIR SATISFACTORILY OR TO REMOVE AND REPLACE, IF SO DIRECTED, REJECTED, UNAUTHORIZED OR CONDEMNED WORK OR MATERIALS IMMEDIATELY AFTER RECEIVING NOTICE FROM THE OWNER, THE OWNER WILL, AFTER GIVING WRITTEN NOTICE TO THE CONTRACTOR, HAVE THE AUTHORITY TO REMOVE SUCH WORK OR MATERIALS AND BE RESPONSIBLE FOR THE COST THEREOF. UNAUTHORIZED WORK TO BE REMOVED AND TO DEDUCT THE COST THEREOF ANY MONIES DUE TO OR TO BECOME DUE THE CONTRACTOR.
 43. DISPOSITION AND DISPOSAL OF EXCESS AND UNSUITABLE MATERIALS: ALL MATERIALS TO BE REMOVED FROM THE SITE INCLUDING BUT NOT LIMITED TO EXCESS MATERIAL AND UNSUITABLE MATERIALS SUCH AS CONCRETE ASPHALT, LARGE ROCKS, REFUSE, AND OTHER DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE PROJECT. CONTRACTOR SHALL ALSO COMPLY WITH ALL APPLICABLE LAWS GOVERNING SPILLAGE OF DEBRIS WHILE TRANSPORTING TO A DISPOSAL SITE. COSTS ASSOCIATED WITH THE DISPOSAL OF EXCESS AND UNSUITABLE MATERIALS SHALL BE INCLUDED IN THE CONTRACT AMOUNT.
 44. RECORD DRAWINGS: THE CONTRACTOR SHALL MAINTAIN AN ACCURATE RECORD OF THE INSTALLATION OF ALL MATERIALS AND SYSTEMS COVERED BY THE PROJECT CONTRACT DOCUMENTS. THE COMPLETED SET OF "RECORD DRAWINGS" SHALL BE DELIVERED TO THE OWNER AND/OR ENGINEER BEFORE RECEIVING FINAL PAYMENT.
 45. TRAFFIC CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS FOR ACCESS TO AND FROM THE SITE.
 46. CONTRACTOR TO COORDINATE FINAL LOCATION OF ELECTRIC, TELEPHONE, AND GAS SERVICE WITH EACH RESPECTIVE UTILITY COMPANY, AND SHALL INCLUDE ALL ASSOCIATED COSTS IN BID.
 47. CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OR RELOCATION OF ON-SITE POWER POLES AS REQUIRED TO COMPLETE THE WORK.
 48. IN THE EVENT THAT EXISTING UTILITIES SUCH AS WATER, GAS, TELEPHONE, ELECTRIC, ETC., MUST BE TAKEN OUT OF SERVICE TO FACILITATE CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE TEMPORARY UTILITIES TO THE SATISFACTION OF THE OWNER.
 49. THE CONTRACTOR SHALL USE EXTREME CARE WHEN WORKING IN AREAS ADJACENT TO GAS LINES, ELECTRIC CABLE, FIBER OPTIC CABLE AND UNDERGROUND TELEPHONE CABLE.
 50. WHERE EXISTING UTILITIES OR SERVICE LINES ARE CUT, BROKEN OR DAMAGED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER OF THE RESPECTIVE UTILITY. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING OR REPAIRING THE UTILITIES OR SERVICE LINES WITH THE SAME TYPE OF ORIGINAL MATERIAL, AND TO OBTAIN THE NECESSARY PERMITS AND APPROVALS FROM THE RESPECTIVE UTILITY. THE CONTRACTOR SHALL ALSO NOTIFY THE ENGINEER OF ANY CONFLICTS IN GRADES AND ALIGNMENT.
- ## DIMENSION CONTROL NOTES
1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND VERIFY THE BOUNDARY MONUMENTATION AND THE PROJECT BENCHMARKS PRIOR TO COMMENCING CONSTRUCTION. THE BOUNDARY MONUMENTATION SHALL BE USED AS HORIZONTAL PROJECT CONTROL AND SHALL BE PROTECTED BY THE CONTRACTOR DURING ALL PHASES OF CONSTRUCTION.
 2. ALL DIMENSIONS AND COORDINATES ARE TO FACE OF CURB, EDGE OF PAVEMENT, FACE OF BUILDING, OR FACE OF LINE UNLESS NOTED OTHERWISE. ALL CIRCULAR RADII SHALL BE 3.0' MINIMUM UNLESS NOTED OTHERWISE.
 3. CONTRACTOR SHALL REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR EXACT LOCATION AND DIMENSIONS OF ARCHITECTURAL OR STRUCTURAL FEATURES.

DIMENSION CONTROL NOTES

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND VERIFY THE BOUNDARY MONUMENTATION AN THE PROJECT BENCHMARKS PRIOR TO COMMENCING CONSTRUCTION. THE BOUNDARY MONUMENTATION SHALL BE USED AS THE HORIZONTAL PROJECT CONTROL AND SHALL BE PROTECTED BY THE CONTRACTOR DURING ALL PROJECT CONSTRUCTION.
2. ALL DIMENSIONS AND COORDINATES ARE TO FACE OF CURB, EDGE OF PAVEMENT, FACE OF BUILDING, OR PROPERTY LINE UNLESS NOTED OTHERWISE. ALL CURB RADII SHALL BE 3.0' MINIMUM UNLESS NOTED OTHERWISE.
3. CONTRACTOR SHALL REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR EXACT LOCATION AND DIMENSIONS OF ARCHITECTURAL OR STRUCTURAL FEATURES.

DEMOLITION NOTES

1. ALL WORK SHALL CONFORM TO LOCAL, STATE, AND FEDERAL STANDARDS AND SPECIFICATIONS.
2. ALL DEMOLITION AND EXCAVATED MATERIALS SHALL BE PROPERLY DISPOSED OFF SITE IN ACCORDANCE WITH LOCAL STATE AND FEDERAL REGULATIONS.
3. EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO COMMENCING DEMOLITION OPERATIONS.

PAVING NOTES

1. STANDARDS AND SPECIFICATIONS: ALL MATERIALS, CONSTRUCTION METHODS, WORKMANSHIP, EQUIPMENT, SERVICES AND TESTING FOR ALL IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE PROJECT DOCUMENTS AND ALL GOVERNING AUTHORITIES' REQUIREMENTS. IN THE EVENT OF A CONFLICT BETWEEN THE PROJECT DOCUMENTS AND THE GOVERNING AUTHORITIES' REQUIREMENTS, THE MORE STRINGENT SHALL APPLY.
2. GEOTECHNICAL REPORT: SUBGRADE PREPARATION AND PAVEMENT STRENGTH AND THICKNESS SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT AND SUPPLEMENTS AND/OR AMENDMENTS THERETO.
3. PAVEMENT WARRANTY: THE CONTRACTOR SHALL PROVIDE A TWO (2) YEAR UNCONDITIONAL MAINTENANCE FREEDOM WARRANTY ON ALL PAVEMENT CONSTRUCTION.
4. PAVEMENT PREPARATION: PRIOR TO PREPARATION OF THE SUBGRADE, THE SUBGRADE SHALL BE PROOF-ROLLED WITH HEAVY PNEUMATIC EQUIPMENT. ANY SOFT OR PUMPING AREAS SHALL BE EXCAVATED TO FIRM SUBGRADE AND BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
5. PAVEMENT SUBGRADE PREPARATION: PAVEMENT SUBGRADE SHALL BE PREPARED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
6. SAND CUSHION PROVIDED: THE USE OF "LEVEL UP" SAND UNDER PAVEMENT WILL NOT BE ACCEPTED.
7. CONCRETE PAVEMENT DESIGN: ALL ON SITE CONCRETE PAVEMENTS SHALL BE THE THICKNESS, COMPRESSIVE STRENGTH AND REINFORCED AS SPECIFIED ON THE PLANS AND DETAILS. HAND PLACED CONCRETE SHALL HAVE A WATER-CEMENT RATIO TO PRODUCE A MINIMUM OF 3 TO 1 MAXIMUM OF 6 INCH SLUMP AND CONTAIN PERCENT-ENTRAINED AIR RANGING FROM 3 TO 6.
8. WEATHER CONDITIONS FOR CONCRETE PLACEMENT: CONCRETE SHALL NOT BE PLACED WHEN THE TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT AND FALLING; BUT MAY BE PLACED WHEN THE TEMPERATURE IS ABOVE 36 DEGREES FAHRENHEIT. TEMPERATURE READING SHALL BE TAKEN IN THE SHADE AWAY FROM ARTIFICIAL HEAT. DO NOT PLACE CONCRETE WHILE IT IS RAINING OR RAIN IS IMMINENT.
9. CONCRETE PAVEMENT CURING: CONCRETE SHALL BE BROOM FINISHED AND CURED FOR A MINIMUM OF 72 HOURS.
10. PAVEMENT JOINTING:
 - a. JOINT LAYOUT: CONTRACTOR SHALL PREPARE A JOINT LAYOUT AND PROVIDE IT TO THE ENGINEER FOR REVIEW. THE JOINT LAYOUT SHALL BE PROVIDED A MINIMUM OF ONE (1) WEEK PRIOR TO PLACING PAVEMENT.

CONTRACTION JOINT SPACING: 12" ON CENTER SPACED, 14" LONG, 3/4" DIAMETER DOWELS SHALL HAVE A MAXIMUM JOINT SPACING OF LESS THAN 30 TIMES THE THICKNESS OF THE CONCRETE PAVEMENT OR 15 FEET, WHICHEVER IS SMALLER (PER THE GEOTECH REPORT).

3. SAW CUTTING: SAW CUTTING SHALL BE DONE WITHIN 8 HOURS OF POUR OR AS SOON AS CONCRETE CAN SUPPORT WEIGHT. ALL SAWED JOINTS ARE TO BE TRUE IN ALIGNMENT AND SHALL CONTINUE THROUGH THE CURB. RADIAL JOINTS SHALL BE NO SHORTER THAN 18 INCHES.
4. JOINT SEALING: ALL CONSTRUCTION JOINTS SHALL BE SAWN, CLEARED OF DEBRIS, DIRT, DUST, SCALE, CURING COMPOUND AND CONCRETE, BLOWN BY AND IMMEDIATELY SEALED. SEALANT MATERIAL SHALL BE SLOTTED OR SONASTIC-SL2 MULTICOMPONENT, SELF-LEVELING, ELASTOMERIC POLYURETHANE OR EQUIVALENT. SEALANT COLOR SHALL MATCH PAVEMENT. THE CONTRACTOR SHALL SUBMIT SEALANT SPECIFICATIONS/COLOR TO THE ENGINEER FOR REVIEW PRIOR TO PLACEMENT.
13. PAVEMENT REMOVAL: BREAKOUTS FOR REMOVAL OF EXISTING PAVEMENT AND CURBS SHALL BE MADE BY FULL DEPTH SAW CUT WHEN ADJACENT TO PROPOSED PAVEMENT AND/OR CURBS.
14. CONNECTION TO EXISTING PAVEMENT: PROPOSED PAVEMENT AND/OR CURBS SHALL MATCH THE ELEVATION OF EXISTING PAVEMENT AND/OR CURBS.
15. PAVEMENT MARKINGS:
 - a. PAVEMENT MARKINGS SHALL BE PROVIDED IN ACCORDANCE WITH THE FOOT "UNIFORM TRAFFIC MANUAL FOR PAVEMENT MARKINGS AND PALM BEACH COUNTY TYP-24 (PALM BEACH COUNTY TYPICALS FOR PAVEMENT MARKINGS, SIGNING & GEOMETRICS)".
 - b. FIRE LINES SHALL BE STRIPED IN ACCORDANCE WITH THE GOVERNING AUTHORITIES' LOCAL CODES.
 - c. ALL ACCESSIBLE PAVEMENT MARKINGS SHALL COMPLY WITH ADAA STANDARDS AND STATE AND LOCAL CODES.
 - d. PARKING SPACE STRIPES, ACCESSIBLE SPACES, PEDESTRIAN STRIPING, DIRECTIONAL ARROWS AND LETTERING SHALL BE SOLID WHITE, UNLESS A SPECIFIC COLOR IS REQUIRED BY LOCAL CODE. TWO (2) COATS OF VOC COMPLIANT, LOCAL DOT APPROVED, UNDILUTED, SOLVENT BASED OR LATEX TRAFFIC PAINT SHALL BE APPLIED EVERY 7 DAYS UNTIL THE STORE OPERATES. THE STORE OPERATOR SHALL BE CAUTIOUS STRAIGHT AND APPLIED UNIFORMLY ACROSS THE WIDTH OF THE LINE FOR A MINIMUM TALL DRY FILM THICKNESS OF 15 MILS.
16. CONDUIT: CONTRACTOR SHALL REFER TO THE SITE MEP PLAN AND LANDSCAPE IRRIGATION PLAN FOR CONDUIT TO BE INSTALLED UNDER PAVEMENT PRIOR TO COMMENCING PAVEMENT SUBGRADE PREPARATION.

WATER AND SANITARY SEWER NOTES

1. THE CONTRACTOR SHALL INSTALL WATER AND SEWER LINES SO AS TO AVOID CONFLICTS WITH OTHER UTILITIES. WATER AND SANITARY SEWER SEPARATIONS SHALL BE MAINTAINED PER SEACOST UTILITY AUTHORITY REGULATIONS.
2. THE CONTRACTOR SHALL INSTALL ALL GRAVITY LINES (SANITARY SEWER, STORM SEWER AND FRENCH DRAINS) BEFORE INSTALLATION OF WATER LINES AND APPURTENANCES.
3. IF GROUNDWATER IS ENCOUNTERED WHEN LAYING UTILITY LINES, 3/4" WASHED ROCK MUST BE PLACED 6" BELOW AND 6" ABOVE THE UTILITY LINE.
4. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICT AND TO AVOID PROPER DEPTHS ARE ACHIEVED. CONTRACTOR SHALL ADHERE TO THE REQUIREMENTS OF SEACOST UTILITY AUTHORITY.
5. THE CONTRACTOR SHALL COORDINATE INSPECTION AND TESTING ON ALL WATER AND SEWER UTILITIES WITH THE ENGINEER AND SEACOST UTILITY AUTHORITY.
6. ALL FIRE PROTECTION WORK MUST BE PERMITTED AND APPROVED BY THE APPLICABLE PALM BEACH COUNTY FIRE AND RESCUE..
7. CONTRACTOR IS RESPONSIBLE FOR ADJUSTING ALL VALVE BOXES, HYDRANTS, SEWER CLEAN OUTS AND MANHOLE RIMS TO FINAL GRADE.
8. PRIOR TO COMMENCING CONSTRUCTION, CONTRACTOR SHALL REFERENCE MEP PLANS FOR ACTUAL BUILDING SERVICE STUB-OUT LOCATIONS.
9. ALL WATER LINES SHALL COMPLY WITH THE SEACOST UTILITY AUTHORITY REGULATIONS. WATER PIPE MATERIALS TO BE USED ON THIS PROJECT, UNLESS NOTED OTHERWISE, ARE PVC, CLASS 150, DR-18, AWWA C900.
10. CORPORATION STOPS SHOULD BE TESTED FOR LEAKAGE AND FULL FLOW WHEN SYSTEM IS PRESSURE TESTED.
11. WATER AND SANITARY SEWER LINES SHALL BE INSTALLED AS SHOWN ON THE PLANS. HOWEVER, FIELD ADJUSTMENTS APPROVED BY THE ENGINEER AND SEACOST UTILITY AUTHORITY MAY BE MADE TO LESSEN DEPTH TO THE ROAD PAVEMENT OR WHEN OTHER UTILITY LOCATIONS, TREES, OR STRUCTURES WARRANT SUCH AN ADJUSTMENT.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISINFECTION, CHLORINATION AND FLUSHING REQUIREMENTS. THIS SHALL INCLUDE PROVIDING TEMPORARY ISOLATION VALVES, PLUGS, INJECTION PORTS, FLUSHING VALVES TOOLS AND EQUIPMENT NECESSARY TO COMPLETE THE TASK. THE CONTRACTOR SHALL CONTACT THE WATER UTILITY 48 HOURS PRIOR TO FLUSHING OF WATER LINES.
13. ALL WATER LINE FITTINGS ARE TO BE DUCTILE IRON MECHANICAL JOINTS.
14. HORIZONTAL BLOCKING HAS BEEN OMITTED FOR CLARITY. HOWEVER, BLOCKING SHALL BE CONSTRUCTED PER TOWN OF JUNO BEACH STANDARDS AND MUST BE IN ACCORDANCE WITH APPLICABLE CITY OF JEA DETAILS. CONCRETE BLOCKING SHALL BE PLACED AT ALL VALVES, BENDS, TEES AND PLUGS. DO NOT COVER BELLS OR FLANGES WITH CONCRETE. ANY EXISTING THURST BLOCKS OR RESTRAINTS SHALL BE REMOVED BY THE UTILTY CONTRACTOR TO ALLOW HIS WORK TO PROCEED. THE REPLACEMENT, WHERE REQUIRED, SHALL BE AT THE CONTRACTOR'S EXPENSE.

STRIPPING AND GRADING OPERATIONS. REFER TO THE EROSION CONTROL PLAN FOR THE SEQUENCE OF EROSION CONTROL DEVICES TO BE INSTALLED.

3. PROPOSED GRADES: THE PROPOSED ELEVATIONS AND CONTOURS SHOWN ARE TO FINISHED GRADE. THE PROPOSED CONTOURS ARE APPROXIMATE. THE PROPOSED SLOPE ELEVATIONS AND GRADIENTS ARE TO BE USED IN THE EVENT OF ANY DISCREPANCY WITH THE PROPOSED CONTOURS. MINOR ADJUSTMENT TO FINISH GRADE TO ACHIEVE A SLOPE OF 2% OR LESS IS ACCEPTABLE.
4. ALL PROPOSED GRADES SHALL BE INSTALLED SUCH THAT TOP OF SOI IS LEVEL OR BELOW TOP OF ADJACENT PAVING AT PROJECT COMPLETION.
7. ACCESSIBLE ROUTES/PARKING: SIDEWALKS AND CROSSWALKS ALONG ACCESSIBLE ROUTES SHALL BE IN ACCORDANCE WITH FBC AND ADA STANDARDS WITH A MAXIMUM RUNNING SLOPE OF 5% AND A MAXIMUM CROSS SLOPE OF 2%. ACCESSIBLE PARKING SPACES SHALL HAVE A MAXIMUM SLOPE OF 2% IN ALL DIRECTIONS.
8. GRADES BETWEEN BUILDING AND CURB: REFER TO THE ARCHITECT PLANS FOR DETAILED GRADING INFORMATION BETWEEN THE BUILDING AND CURB.
9. STRIPPING AND DEBRIS REMOVAL: THE BUILDING PAD(S), AREAS TO BE PAVED, AND ALL AREAS THAT ARE TO RECEIVE FILL MATERIAL SHALL BE STRIPPED OF VEGETATION, TREES, ROOTS, STUMPS, DEBRIS AND OTHER OBSTACLES. MATERIAL TO BE STRIPPED SHALL BE STOCKPILED IN A LOCATION ON THE SURFACE OF THE SITE CONTAINING ORGANIC MATERIAL. ALL TREES, INCLUDING STUMPS AND ROOT SYSTEMS, VEGETATION, DEBRIS AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OFF SITE. STRIPPED TOPSOIL SHALL BE STOCKPILED IN A LOCATION ON THE SITE APPROVED BY THE DEVELOPER.
10. PROF-ROLLING: AFTER COMPLETION OF THE NECESSARY STRIPPING, CLEARING AND EXCAVATION AND PRIOR TO PLACING ANY REQUIRED FILL, THE EXPOSED SUBGRADE SHALL BE EVALUATED BY PROF-ROLLING WITH A GEOTECHNICAL ENGINEER OR DESIGNATED REPRESENTATIVE. THE EVALUATION SHOULD APPROXIMATELY 1 TONS TO CHECK FOR POCKETS OF SOFT OR LOOSE MATERIAL. THE PROOF-ROLLING PROCEDURES SHOULD BE OBSERVED BY THE GEOTECHNICAL ENGINEER OR DESIGNATED REPRESENTATIVE. ANY UNDESIRABLE MATERIAL EXPOSED FROM PROF-ROLLING SHALL BE REMOVED. PRIOR TO THE PLACEMENT OF ANY FILL, THE EXPOSED SUBGRADE SHOULD BE SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES AND RECOMPACTED.
11. CONTROLLED FILL: ALL SOILS USED FOR CONTROLLED FILL SHALL BE FREE OF ROOTS, VEGETATION, AND OTHER OBSTACLES. IN THE UNIFORM LIFT METHOD, THE MATERIAL SHALL BE PLACED IN UNIFORM LIFTS, WITH EACH LIFT COMPACTED TO THE MINIMUM DRY DENSITY WITHIN THE COMPACTION SOIL MOISTURE RANGES RECOMMENDED. THE LOOSE LIFT DEPTH SHALL NOT EXCEED 8". EACH LAYER SHALL BE PROPERLY PLACED, MIXED, SPREAD AND COMPACTED IN ACCORDANCE WITH THE FILL COMPACTION SECTION.
12. FILL COMPACTION: FILL COMPACTION SHALL BE PERFORMED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
13. BUILDING PADS: THE BUILDING PADS SHALL BE PERFORMED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
14. LANDSCAPE AREAS: REFER TO THE LANDSCAPE PLAN FOR SOIL REQUIREMENTS IN LANDSCAPE AREAS.
15. TESTING: TESTING SHALL BE PERFORMED BY A QUALIFIED TESTING LABORATORY, EMPLOYED AND PAID DIRECTLY BY THE OWNER. TESTING SHALL BE PERFORMED, AT A MINIMUM, IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT. IN THE EVENT THE RESULTS OF THE INITIAL TESTING DO NOT COMPLY WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT, ADDITIONAL TESTING IS NECESSARY TO DETERMINE THE ACCEPTABILITY OF CONSTRUCTION SHALL BE AT THE CONTRACTOR'S EXPENSE.

EROSION & SEDIMENTATION CONTROL NOTES:

1. THE CONTRACTOR SHALL PREPARE A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH THE FDEP NPDES PERMIT REQUIREMENTS. EROSION CONTROL MEASURE SHALL FOLLOW THE SWPPP. ANY CHANGE TO THE SWPPP SHALL SUPERSEDE THE EROSION AND SEDIMENTATION CONTROL PLAN. THE SWPPP IS TO BE KEPT ON THE SITE WITH THE OTHER PERMIT DOCUMENTS AS NECESSARY FOR COMPLIANCE WITH THE NATURAL POLLUTANT DISCHARGE ELIMINATION SYSTEM NPDES GENERAL PERMIT.
2. PRIOR TO COMMENCING ANY CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE AND NECESSARY PERIMETER CONTROLS SHALL BE INSTALLED.
3. THE STABILIZED CONSTRUCTION ENTRANCE HAS BEEN SHOWN ARBITRARILY. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY (IN COMPLIANCE WITH ALL MUNICIPAL REGULATIONS) TO DETERMINE THE LOCATION(S) OF PROPOSED DRIVEWAYS WITHIN THE SITE. HOWEVER, WITH ALL ENTRANCES AT ALL TIMES SHALL BE PREPARED IN ACCORDANCE WITH THE STABILIZED CONSTRUCTION ENTRANCE DETAILS (SEE EROSION CONTROL DETAILS) AND CONTINUOUSLY MAINTAINED UNTIL FINAL PAVING IS ESTABLISHED.
4. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION, ROUTINE INSPECTION AND/OR MAINTENANCE OF EROSION CONTROL DEVICES.
5. THE EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL ACCEPTABLE VEGETATION COVERAGE HAS BEEN ACHIEVED.
6. ANY ADDITIONAL EROSION CONTROL MEASURES REQUIRED TO COMPLY WITH THE SWPPP STORMWATER POLLUTION REGULATIONS SHALL BE IMPLEMENTED BY THE CONTRACTOR, AT THEIR EXPENSE.
7. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE CEASED FOR AT LEAST FOURTEEN DAYS SHALL BE TEMPORARILY SEEDED AND WATERED. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED SHALL BE PERMANENTLY SEEDDED/SODDED WITHIN SEVEN DAYS IN ACCORDANCE WITH THE PLANS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING SEEDDED/SODDED AREAS AS NECESSARY UNTIL 70% VEGETATION IS ESTABLISHED, IN ACCORDANCE WITH THE PLANS.
9. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EROSION CONTROL MEASURES ONCE FINAL GROUND STABILIZATION IS ACHIEVED AND THE PROJECT IS COMPLETED.

STORM DRAINAGE NOTES

1. LOCATION OF EXISTING UTILITIES: THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION AND SHALL NOTIFY THE PROJECT DESIGN MANAGER AND ENGINEER OF ANY CONFLICTS DISCOVERED. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING UTILITIES (SHOWN OR NOT SHOWN) WITHIN THE AREA OF CONSTRUCTION.
2. LOCATION OF PROPOSED DRAINAGE IMPROVEMENTS: THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS SHOWN, INCLUDING THE HORIZONTAL AND VERTICAL LOCATION OF CURB INLETS AND GATE INLETS AND ALL UTILITIES CROSSING THE STORM SEWER.
3. STORM DRAIN PIPE: UNLESS OTHERWISE NOTED IN THE PLANS, ALL PIPE FOR PUBLIC STORM DRAIN IMPROVEMENTS SHALL BE 36" SCHEDULE 40 OR HIGHER DENSITY POLYETHYLENE PIPE (HDPE), N-12.
4. EMBEDMENT: EMBEDMENT FOR STORM DRAINAGE PIPE, PUBLIC AND PRIVATE, SHALL BE IN ACCORDANCE WITH THE GOVERNING AUTHORITIES' STANDARD DETAILS.
5. GROUTING: ALL PIPE ENTERING PUBLIC STORM DRAIN STRUCTURES SHALL BE GROUTED TO ASSURE WATER TIGHT CONNECTIONS.
6. CONCRETE COLLARS: CONCRETE COLLARS SHALL BE INSTALLED AT ALL CHANGES IN CONDUIT SIZE AND AT ALL JOINTS THAT ARE PULLED IN EXCESS OF THAT RECOMMENDED BY THE CONDUIT MANUFACTURER.
7. ROOF DRAINS: THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF ROOF DRAIN LATERALS WITH THE PLANNING AND DESIGN DEPARTMENT OF THE COUNTY OF LOS ANGELES.
8. STORM DRAINAGE STRUCTURES: STORM DRAINAGE STRUCTURES (INLETS, JUNCTION BOXES, ETC.) ON PUBLIC LINES ARE TO BE CONSTRUCTED IN ACCORDANCE WITH GOVERNING AUTHORITIES' STANDARD DETAILS. UNLESS OTHERWISE NOTED, STRUCTURES ON PRIVATE LINES ARE TO BE PRECAST STRUCTURES MANUFACTURED BY APPROVED PROVIDER, OR APPROVED EQUIVALENT.
9. ADJUSTMENT OF STRUCTURES: ALL STORM DRAIN STRUCTURES INCLUDING MANHOLES, INLETS AND CLEANOUTS MUST BE ADJUSTED TO PROVIDE THE EXACT GRADE THE CONTRACTOR TO MATCH THE FINISHED GRADE.
10. CURB INLETS: CURB INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE GOVERNING AUTHORITIES' STANDARD DETAILS.
11. GATE INLETS: GATE INLETS SHALL BE PER APPROVED PROVIDER OR APPROVED EQUIVALENT.

GRADING NOTES

1. GEOTECHNICAL REPORT: SITE PREPARATION, GRADING, FILL COMPACTION, AND BUILDING PAD PREPARATION SHALL BE PERFORMED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT BY ALTRERA ENGINEERING & CONSULTING IN THE EVENT OF A CONFLICT BETWEEN THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT AND THE NOTES ON THE GRADING PLAN, THE GEOTECHNICAL REPORT SHALL GOVERN.
2. EXISTING CONDITIONS: PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTING CONDITIONS, INCLUDING GRADES AND DIMENSIONS. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES.
3. UNSTABLE AREAS: PRIOR TO COMMENCING CLEARING, GRADING OR SITE CONSTRUCTION, THE CONTRACTOR SHALL MEET WITH THE DEVELOPER, AND/OR ENGINEER TO IDENTIFY THE SITE TO ASCERTAIN THE AREA(S) OF THE PROJECT SITE THAT ARE TO BE PROTECTED AND PRESERVED.
4. EROSION CONTROL: EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO COMMENCING CLEARING,

ABBREVIATIONS

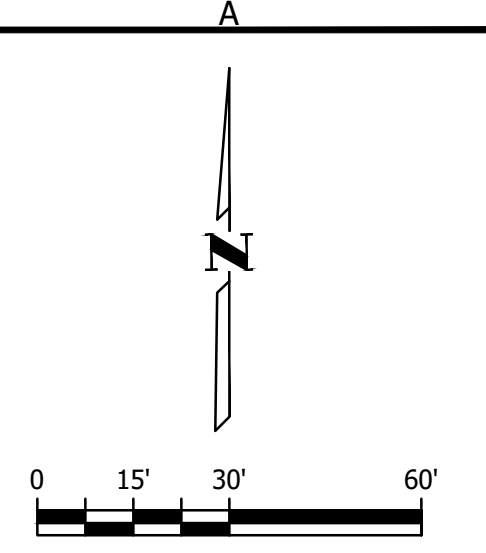
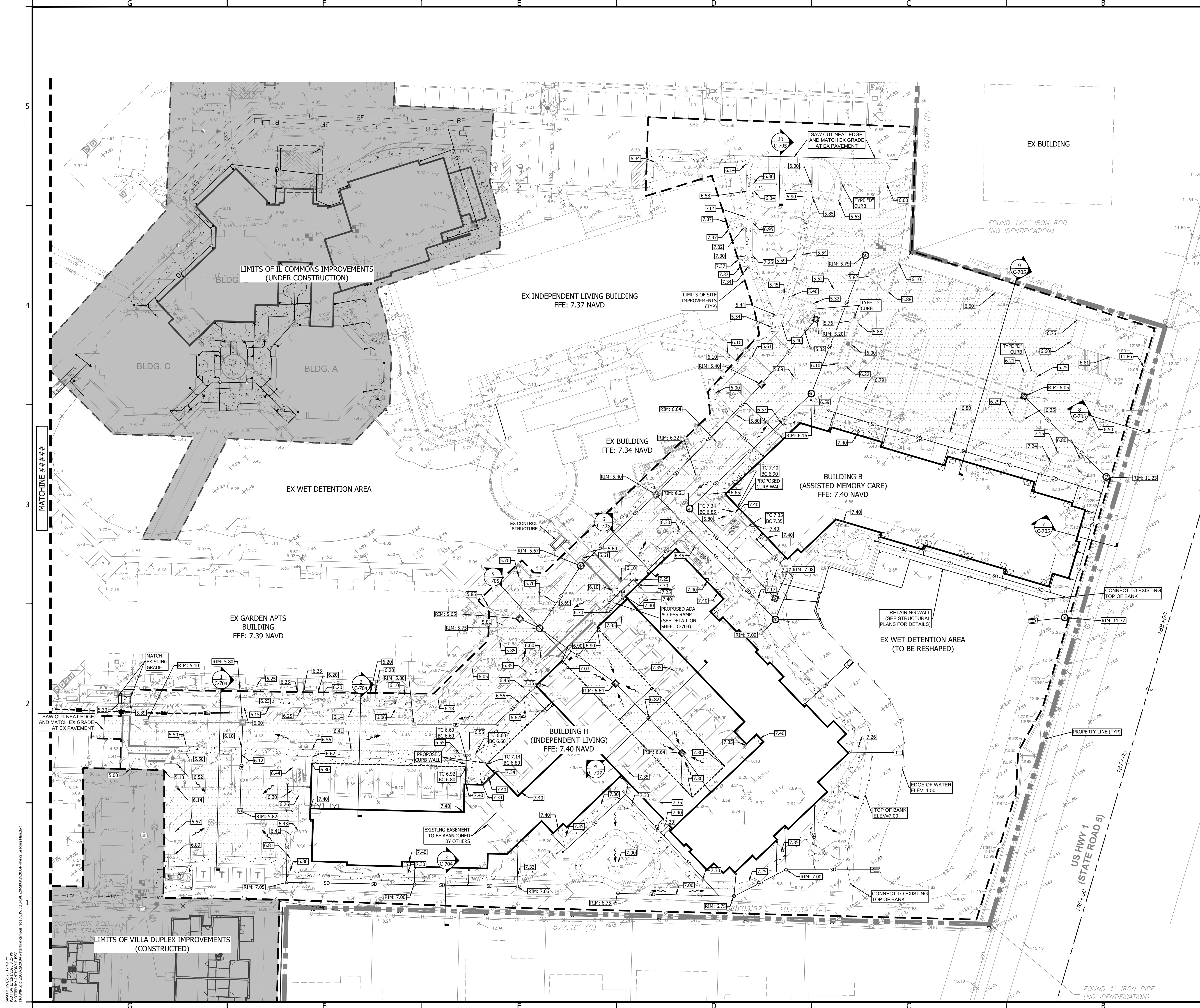
FPF	BACKFLOW PREVENTER
BLDG	BUILDING
BOT	BOTTOM OF PIPE
BV	BUTTERFLY VALVE
CAP	CORRUGATED ALUMINUM PIPE
CO	CLEANOUT
CS	CURB RAMP
DBO	CONTROL STRUCTURE
DCDA	DESIGNED BY OTHERS
DIP	DOUBLE CHECK DETECTOR ASSEMBLY
EL	DUCTILE IRON PIPE
EX	ELEVATION
FDC	EXISTING
FF	FIRE DEPARTMENT CONNECTION
FH	FINISHED FLOOR
FL	FIRE HYDRANT
FM	FLANGE
GR	FORCE MAIN
GV	GRATE ELEVATION
HC	GATE VALVE
HDPE	HANDICAP ACCESSIBLE RAMP
HP	HIGH DENSITY POLYETHYLENE PIPE
I	HIGH POINT
INV	INLET
LME	INVERT
LME	LAKE MAINTENANCE EASEMENT
NAD	SAMPLE POINT
NGVD	NORTH AMERICAN DATUM
DATUM	NATIONAL GEODETIC VERTICAL
NAVD	NATIONAL GEODETIC VERTICAL DATUM
PBC	NORTH AMERICAN VERTICAL DATUM
PBCHD	PALM BEACH COUNTY
PBCWUD	PBCEALTH DEPARTMENT
PVC	PBC WATER UTILITIES DEPARTMENT
P/L	POLYVINYL CHLORIDE
RCP	PROPERTY LINE
RED	REINFORCED CONCRETE PIPE
R/W	REDUCER
RPZ	RIGHT OF WAY
SW	REDUCED PRESSURE ZONE
SAN	SEW
SF	SANITARY SEWER
STM	SAMPLE POINT
STW	STORM SEWER
TOB	STORM SEWER
TOP	SIDEWALK
TYP	TOP OF BANK
UE	TOP, TOP OF PIPE
YD	TYPICAL
WM	UTILITY EASEMENT
YD	YARD DRAIN
WM	WATER MAIN

THE WATERFORD
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601 UNIVERSE BOULEVARD
JUNO BEACH, FLORIDA 33408

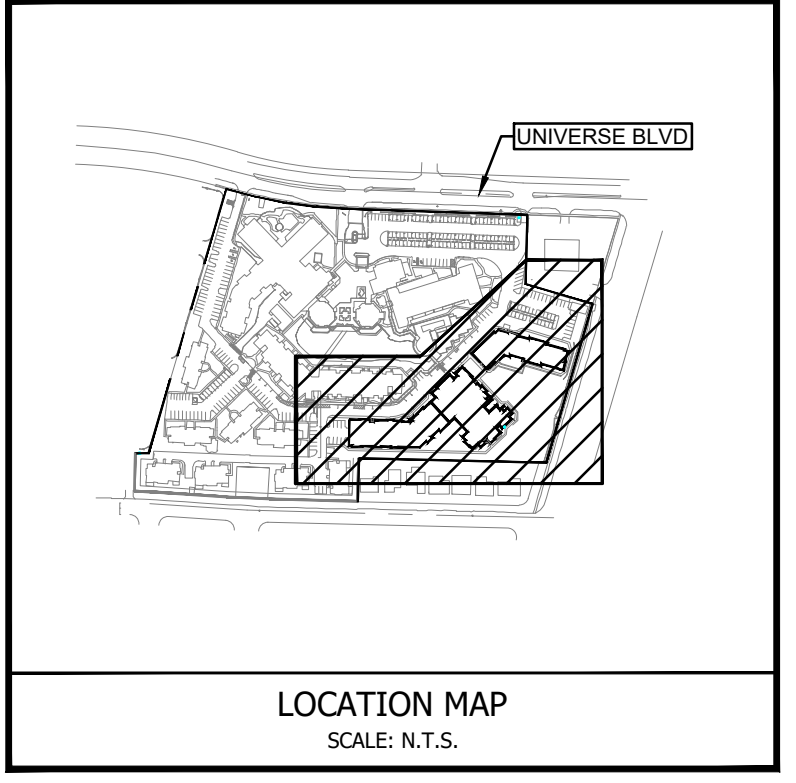
GENERAL NOTES

SHEET
C-002

2920.04



LEGEND	
---X---	LIMITS OF IMPROVEMENTS
---	EXISTING GRADE ELEVATION
---	PROPOSED GRADE ELEVATION
---	ASPHALT PAVEMENT
---	CONCRETE
---	STORM DRAIN LINE
---	WATER LINE
---	WASTEWATER LINE
---	EX WATER LINE
---	EX WASTEWATER LINE
---	EX FORCE MAIN
---	EX DRAINAGE LINE
---	EX OVERHEAD ELECTRIC
---	EX BURIED ELECTRIC
---	EX BURIED FIBER OPTICS
---	EX GAS LINE
---	STORM DRAIN INLET
---	STORM DRAIN MANHOLE
---	YARD DRAIN
---	FLOW ARROW

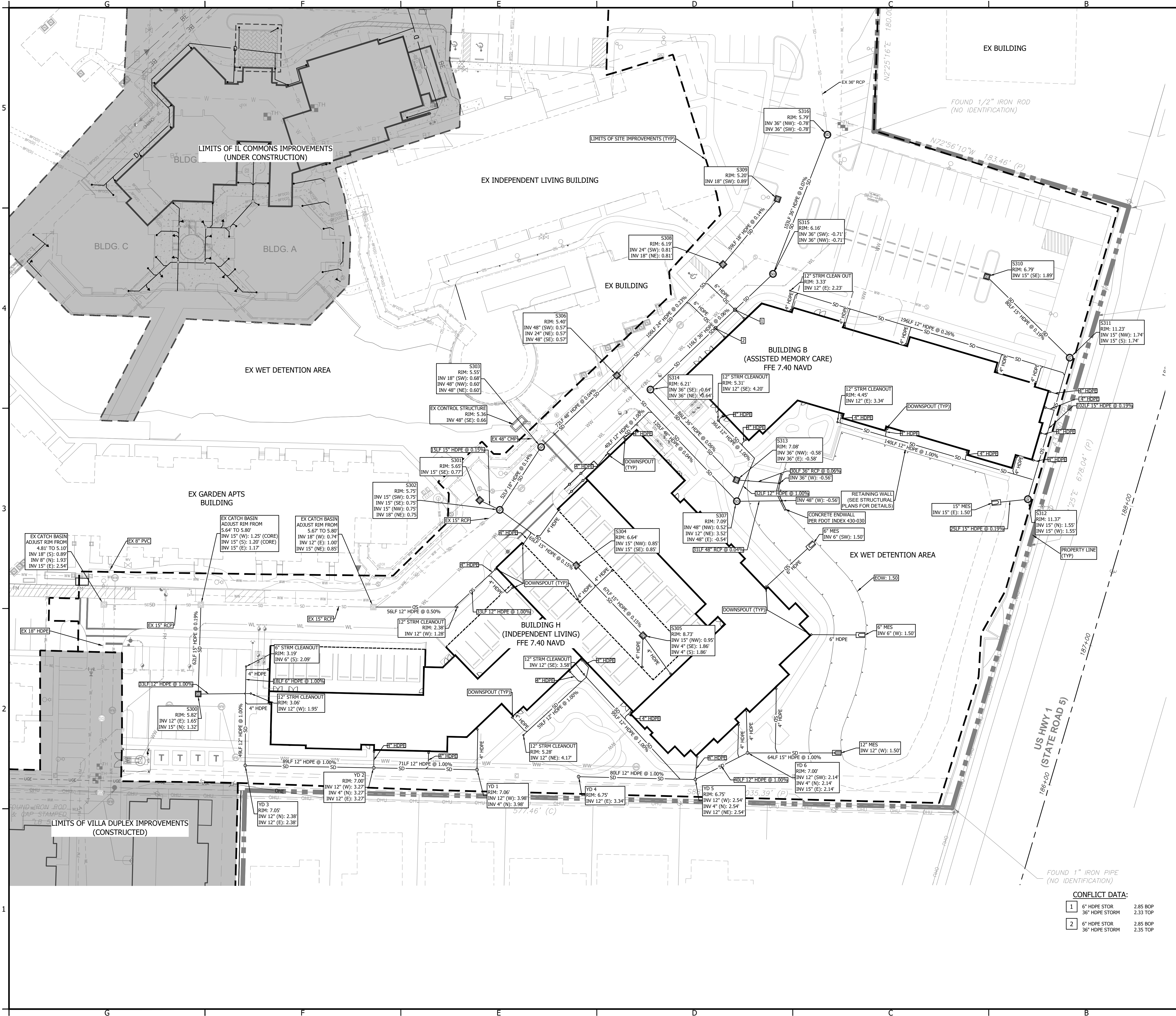


GRADING NOTES:

- ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). NAVD 88 = NGVD 29 - 1.51
- CONTRACTOR SHALL FORM SIDEWALKS AND VERIFY SLOPES PRIOR TO POURING CONCRETE. CONTRACTOR SHALL ENSURE THAT CROSS SLOPES ARE NO GREATER THAN 2% ALONG THE ACCESSIBLE ROUTE AND RUNNING SLOPE IS NO GREATER THAN 5%, UNLESS THE RUNNING SLOPE MATCHES THE EXISTING STREET SLOPE. IF ANY DISCREPANCY ARISES, CONTRACTOR SHALL CONTACT ENGINEER FOR SOLUTION.

THE WATERFORD INDEPENDENT LIVING & MEMORY CARE EXPANSION 601 UNIVERSE BOULEVARD JUNO BEACH, FLORIDA 33408		PAVING AND GRADING PLAN	
SHEET C-200		2920.04	
WGL WGInc.com		CERT NO. 6001 151.687.2220	
CHRIS J. HOLMES LICENSE No 66344 STATE OF FLORIDA PROFESSIONAL ENGINEER		DATE BY	

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LEGEND

LIMITS OF IMPROVEMENTS

EASEMENT / SETBACK

PROPOSED CONTOUR

EXISTING CONTOUR

FENCE

SPOT ELEVATION CALLOUT

FINISHED FLOOR

MATCH EXISTING

RIM

ASPHALT

MILL AND RESURFACE

CONCRETE

SD

STORM DRAIN LINE

WL

WATER LINE

WW

WASTEWATER LINE

EX WL

EX WASTEWATER LINE

FM

EX FORCE MAIN

SD

EX DRAINAGE LINE

OHE

EX OVERHEAD ELECTRIC

BEF(O)

EX BURIED ELECTRIC

BF(O)

EX FIBER OPTICS

EX GAS LINE

SD

STORM DRAIN INLET

SD

STORM DRAIN MANHOLE

DOWNPOUT (TYP)

UNIVERSE BLVD.

US HWY 1 (SR 5)

SCALE: N.T.S.

LOCATION MAP

STRUCTURE NAME	STRUCTURE DETAILS
S300	DBI TYPE (TYPE C) USF 4155-6210 FDOT INDEX 425-052
S301	DBI TYPE (TYPE C) USF 4155-6210 FDOT INDEX 425-052
S302	MANHOLE 48"
S303	STORM MANHOLE USF 170-E FDOT INDEX 425-001
S304	DBI TYPE (TYPE C) USF 4155-6210 FDOT INDEX 425-052
S305	DBI TYPE (TYPE C) USF 4155-6210 FDOT INDEX 425-052
S306	DBI TYPE (TYPE C) USF 4155-6210 FDOT INDEX 425-052
S307	STORM MANHOLE USF 170-E FDOT INDEX 425-001
S308	DBI TYPE (TYPE C) USF 4155-6210 FDOT INDEX 425-052
S309	DBI TYPE (TYPE C) USF 4155-6210 FDOT INDEX 425-052
S310	DBI TYPE (TYPE C) USF 4155-6210 FDOT INDEX 425-052
S311	STORM MANHOLE USF 170-E FDOT INDEX 425-001
S312	STORM MANHOLE USF 170-E FDOT INDEX 425-001
S313	CONTROL STRUCTURE (SEE SHEET C-701 FOR DETAIL)
S314	STORM MANHOLE USF 170-E FDOT INDEX 425-001
S315	STORM MANHOLE USF 170-E FDOT INDEX 425-001
S316	STORM MANHOLE USF 170-E FDOT INDEX 425-001

NOTES:

- ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). NAVD 88 = NGVD 29 - 1.51
- RIM ELEVATIONS ARE BASED ON PROPOSED FINISH GRADES. ADJUSTMENTS MAY BE NECESSARY DUE TO FIELD CONDITIONS. ADJUSTMENTS ARE TO BE MADE BY THE CONTRACTOR WHEN THE BASE COURSE IS IN PLACE OR THE GRADING IS COMPLETE. COST OF ADJUSTING RIMS IS TO BE INCLUDED IN THE BASE BID.
- ALL ITEMS ARE TO BE FURNISHED & INSTALLED BY THE CONTRACTOR. REFERENCE CONSTRUCTION DETAILS SHEETS FOR ADDITIONAL INFORMATION.
- ON ALL GRAVITY LINES, CONTRACTOR MUST START AT DOWNSTREAM END AND PROCEED UPSTREAM TAKING CARE TO EXPOSE ALL EXISTING UTILITIES AND STRUCTURES WHICH MAY CONFLICT WITH THE PROPOSED LINE. ANY OTHER SEQUENCE OF CONSTRUCTION WILL BE AT THE CONTRACTORS RISK.
- CONTRACTOR SHALL EXPOSE ALL EXISTING UTILITIES CROSSING PROPOSED GRAVITY LINES AND ENSURE THERE WILL BE NO CONFLICTS PRIOR TO BEGINNING CONSTRUCTION. ADDITIONALLY, CONTRACTOR TO PLAN UTILITY LINE INSTALLATIONS IN A MANNER TO AVOID CONFLICTS WITH PROPOSED GRAVITY LINES.
- REFER TO SHEET C-400 FOR CONFLICT INFORMATION WHERE STORM PIPES CROSS WATER AND SEWER LINES.

CERT NO. 6091

2035 VISTA PARKWAY, WEST PALM BEACH, FLORIDA 33411

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wginc.com

CHRISTOPHER J. HOLMES

FLORIDA

PROFESSIONAL ENGINEER

No 66344

STATE OF

THE WATERFORD

INDEPENDENT LIVING & MEMORY CARE EXPANSION

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JUNO BEACH, FLORIDA 33408

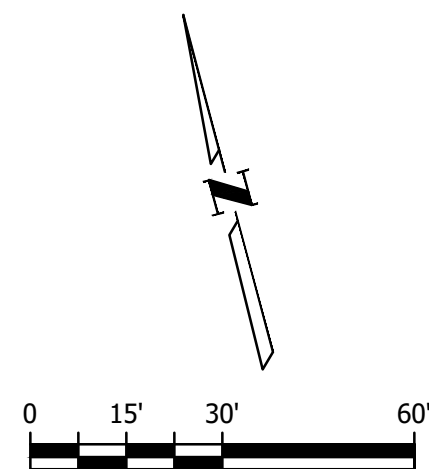
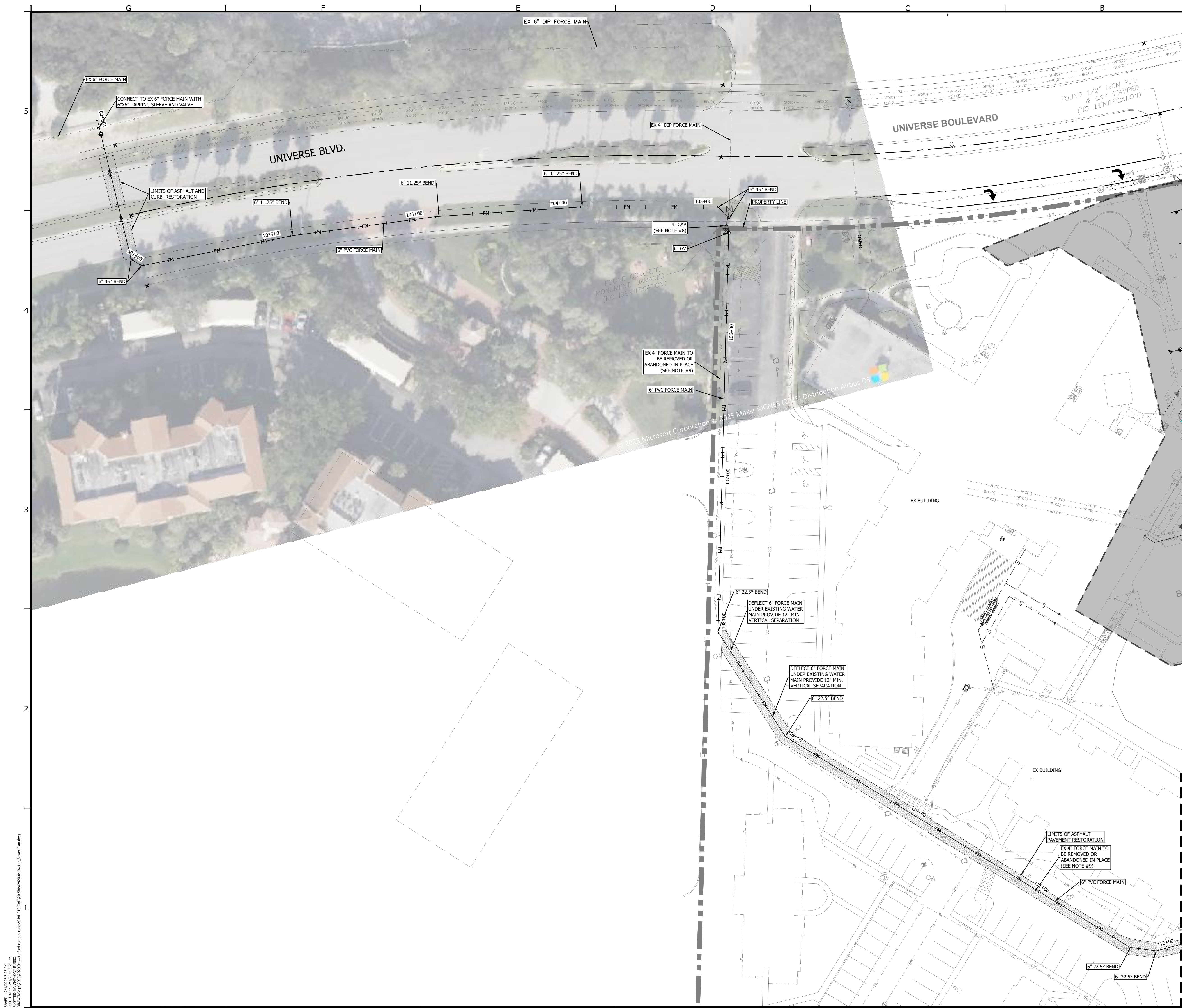
DRAINAGE PLAN

SHEET

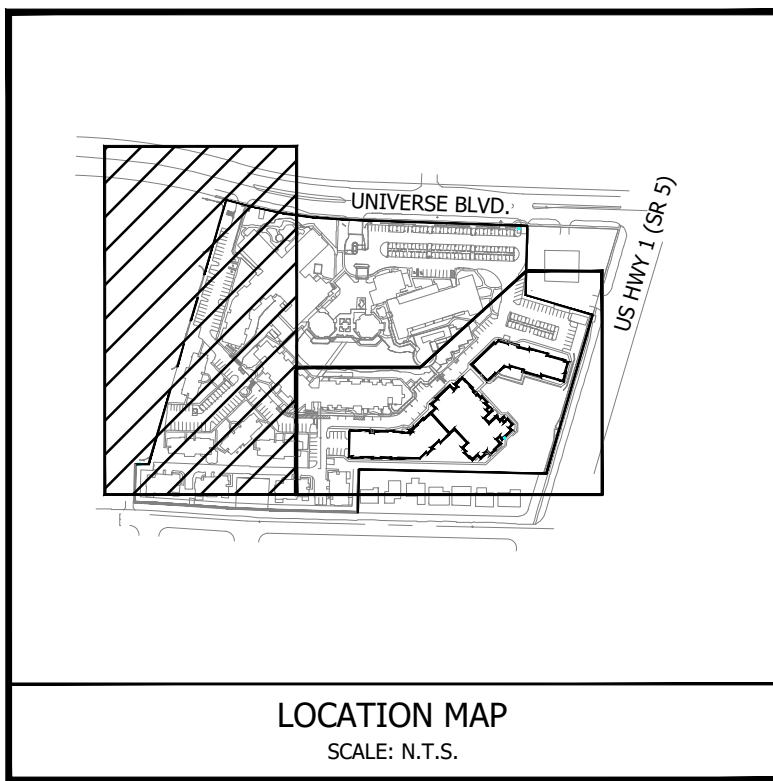
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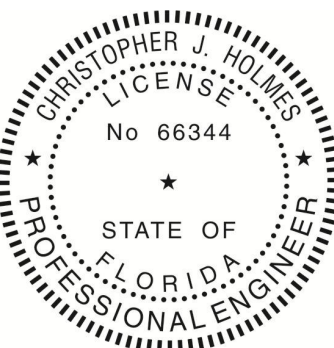
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PLOTTED BY: ANTHONY RUSSO
DRAWING: 151687.2220 Waterford campus water/sewer expansion

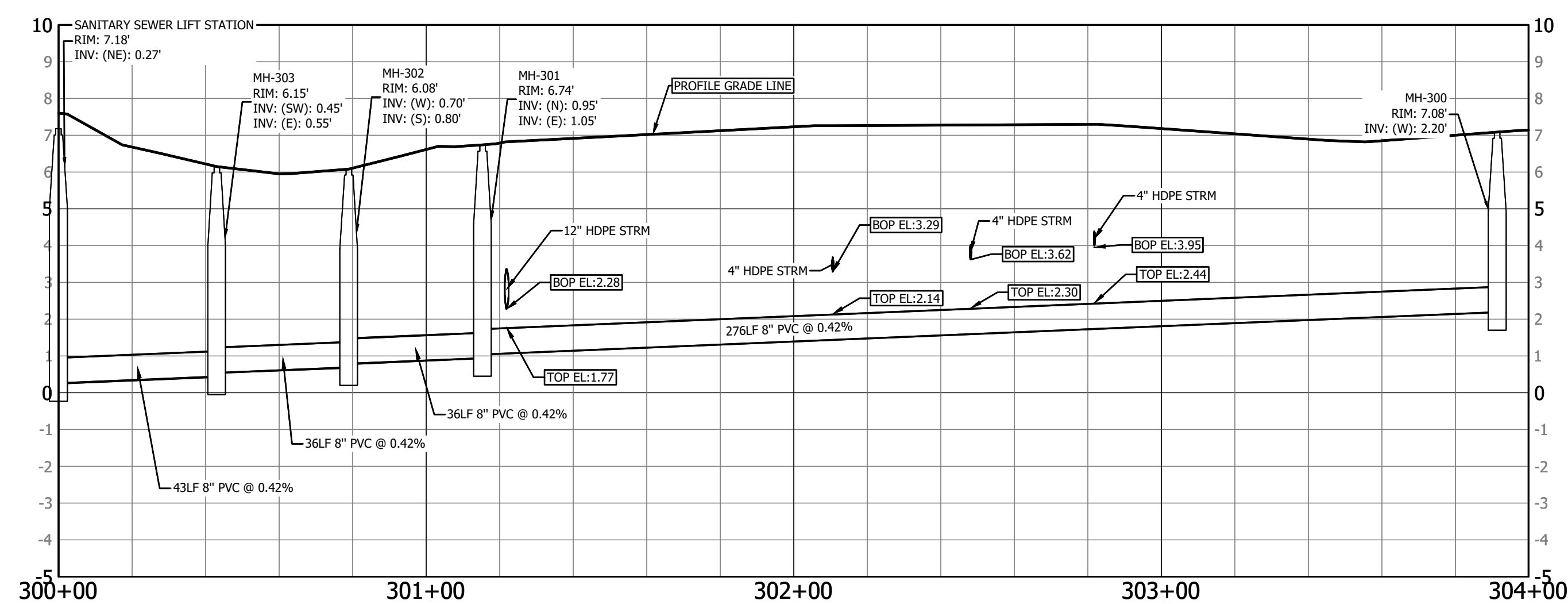
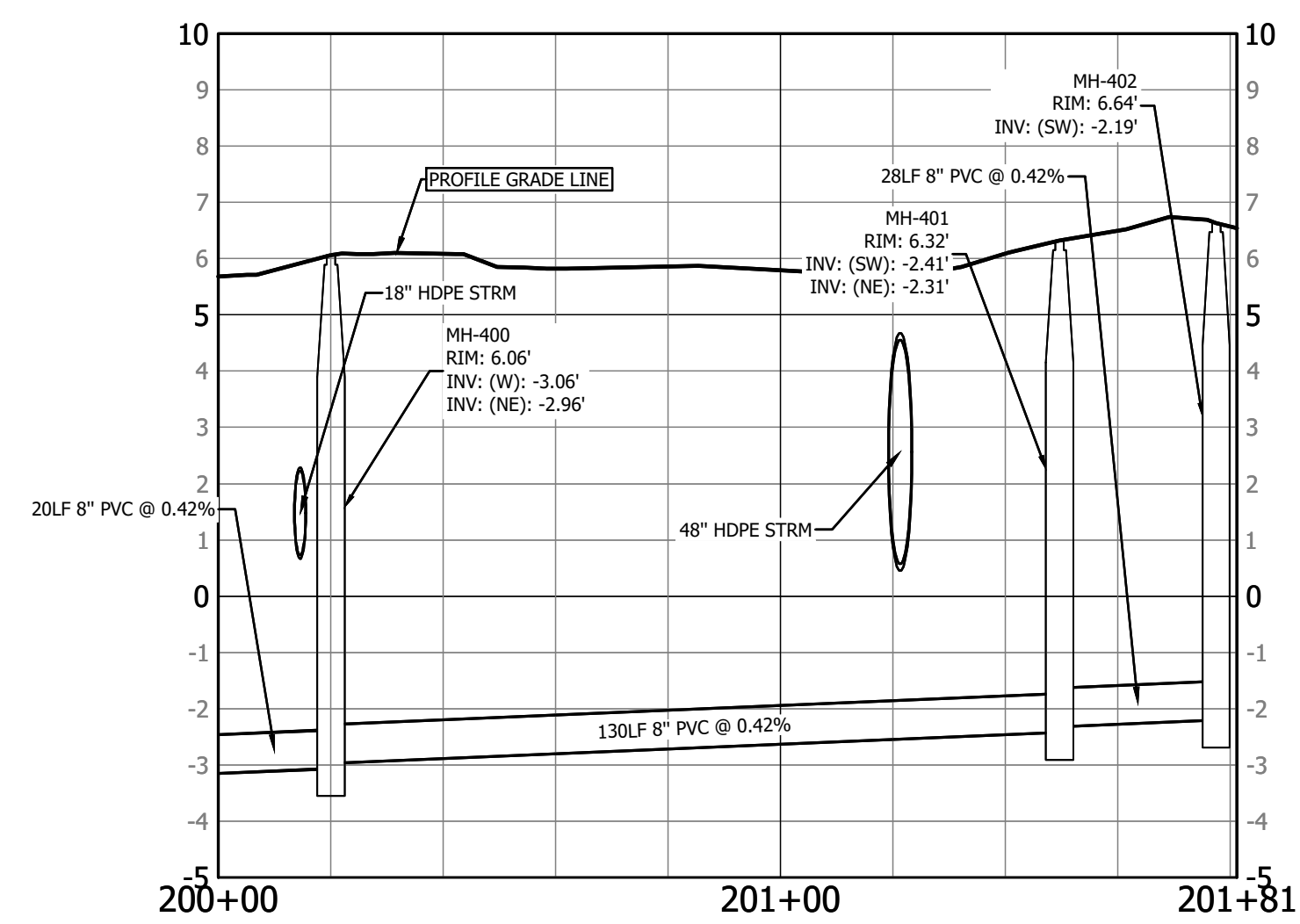


GENERAL LEGEND	
---	LIMITS OF IMPROVEMENTS
---	EASEMENT / SETBACK
WL	WATER LINE
WW	WASTEWATER LINE
SD	STORM DRAINAGE LINE
---	EX WATER LINE
---	EX WASTE WATER LINE
---	EX FORCE MAIN
---	EX DRAINAGE LINE
---	EX GAS LINE
---	EX BURIED ELECTRIC
---	EX BURIED FIBER OPTICS
WV	WATER VALVE
WWM	WASTEWATER MANHOLE
CO	CLEAN-OUT
SDI	STORM DRAIN INLET
SDM	STORM DRAIN MANHOLE
FH	FIRE HYDRANT
FDC	FDC
BP	BACKFLOW PREVENTER
---	LIMITS OF ASPHALT PAVEMENT RESTORATION

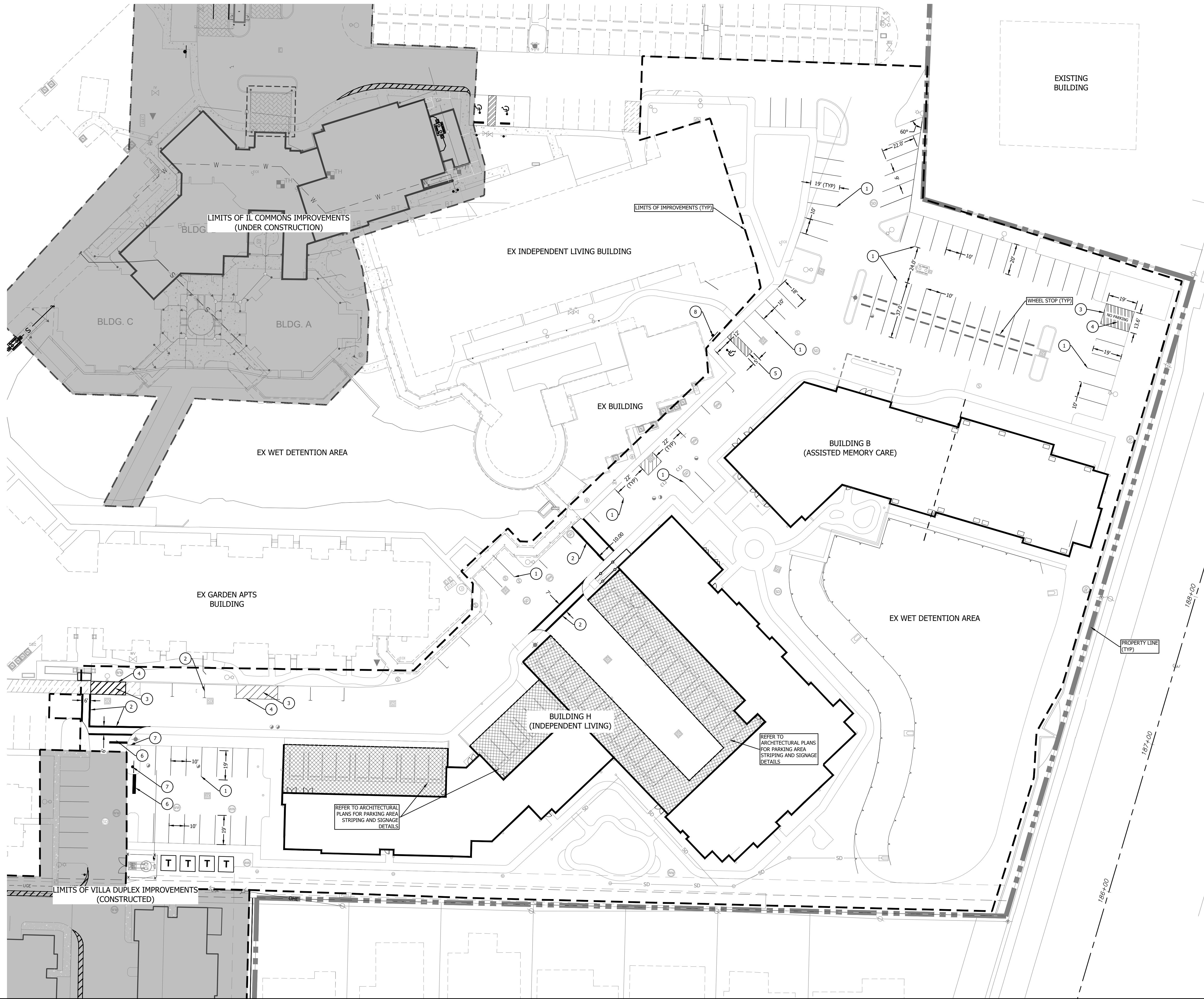


- WATER AND SEWER NOTES:**
- ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 1988).
 - CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIALS AND APPURTENANCES AS CALLED OUT ON PLANS.
 - ALL VERTICAL AND HORIZONTAL WATER LINE BENDS SHALL BE RESTRAINED TO THE MAIN USING MECHANICAL JOINT RESTRAINT DEVICES SUCH AS MEGA-LUG OR APPROVED EQUAL.
 - FILL, COMPACT & TEST GROUND AT PROPOSED FINISHED GRADE ELEVATION TO 95% DENSITY PRIOR TO UTILITY CONSTRUCTION.
 - REPAIR ASPHALT AS REQUIRED FOR INSTALLATION OF WATER & WASTEWATER LINES. REFERENCE CONSTRUCTION DETAILS.
 - EXISTING SERVICE LINE LOCATIONS ARE APPROXIMATE AND NEED TO BE FIELD VERIFIED.
 - ALL GRAVITY LINES ARE TO BE INSTALLED FROM DOWNSTREAM TO UPSTREAM.
 - DEFLECT WATER LINES UNDER STORM WHERE NECESSARY TO MAINTAIN 1' MINIMUM VERTICAL SEPARATION.
 - EXISTING WATER MAIN, GRAVITY SEWER MAINS, AND FORCE MAIN SHALL REMAIN IN SERVICE UNTIL NEW WATER MAIN AND FORCE MAIN ARE INSTALLED, TESTED, AND RELEASE FOR USE.
 - CONTRACTOR TO FIELD VERIFY EXISTING SEWER STRUCTURE INVERT ELEVATIONS PRIOR TO SHOP DRAWING SUBMITTAL FOR SEWER STRUCTURES.
 - REFER TO SHEETS C-402 AND C-403 FOR FORCE MAIN AND WASTEWATER PROFILES.

CERT NO. 6061	
	
351.687.2220	
2035 VISTA PARKWAY, WEST PALM BEACH, FLORIDA 33411	
	
THE WATERFORD	
INDEPENDENT LIVING & MEMORY CARE EXPANSION	
601 UNIVERSE BOULEVARD	
JUNO BEACH, FLORIDA 33408	
WATER AND WASTEWATER PLAN	
SHEET	
C-401	
2920.04	

[illegible]

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DRAWN BY: ANTHONY RUSSO
CHECKED BY: ANTHONY RUSSO
DATE: 12/1/2025 10:11 AM



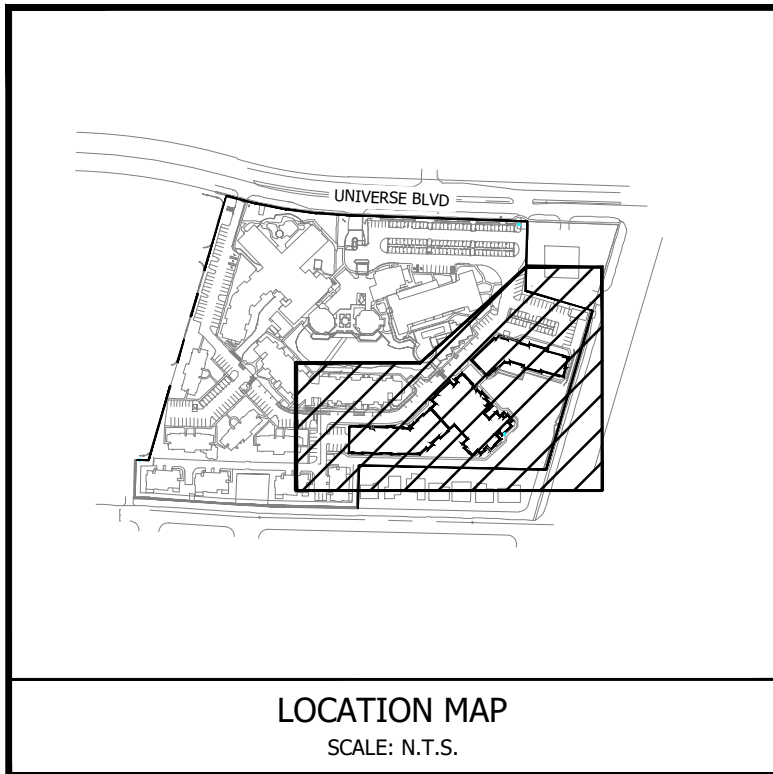
SIGN LEGEND



R1-1 STOP SIGN
30"X30"



FTP-25 ADA SIGNAGE



PAVEMENT PLAN KEY NOTES

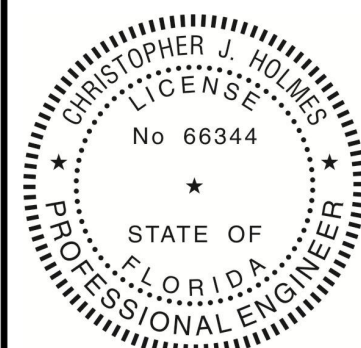
- 1 4" WHITE PARKING STRIPING
- 2 12" WHITE CROSS WALK
- 3 6" YELLOW AT 45° ANGLE AT 3" O.C.
- 4 12" YELLOW
- 5 ADA PARKING SPACE STRIPING
- 6 24" WHITE STOP BAR
- 7 STOP SIGN
- 8 ADA PARKING SIGN

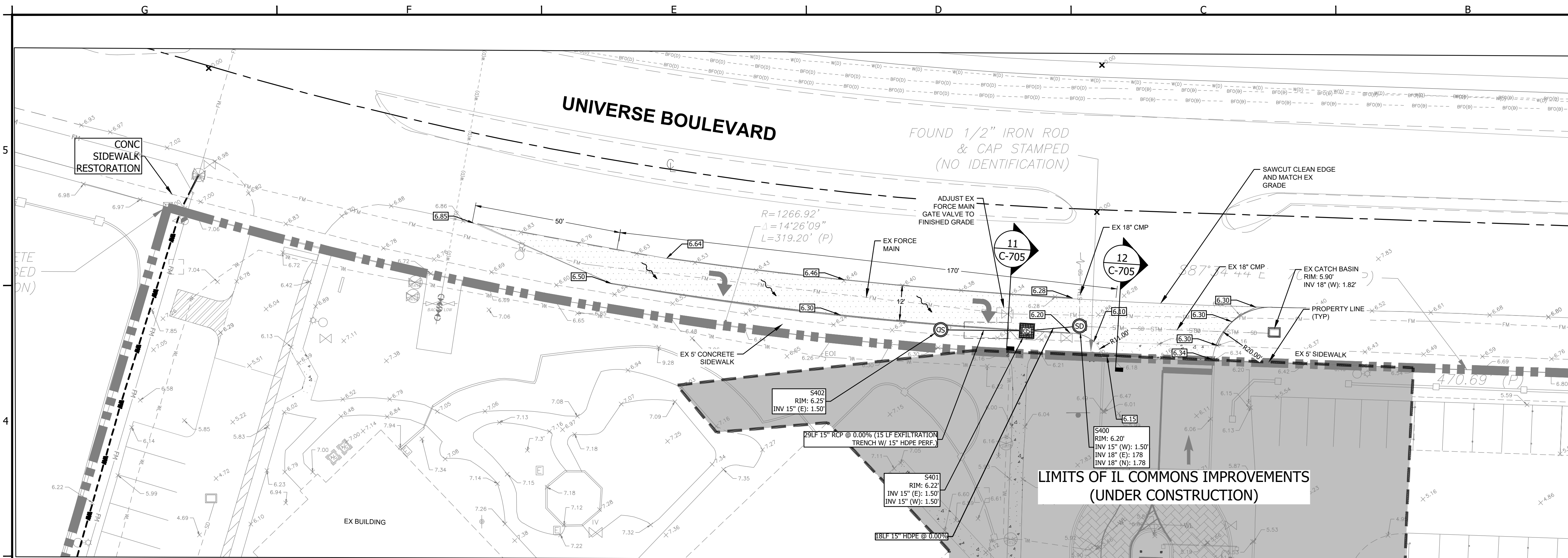
PAVEMENT MARKING AND SIGNAGE NOTES

1. ALL PAVEMENT MARKINGS SHALL BE IN THERMOPLASTIC AND IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND FDOT STANDARD INDEX 711-001, WHERE APPLICABLE.
2. PAINT OR TAPE MAY BE USED FOR TEMPORARY STRIPING. THERMOPLASTIC MATERIAL SHALL BE USED TO MARK FINAL PAVEMENT, WITH EXCEPTION OF PARKING STALLS, WHICH SHALL BE PAINT. MATERIAL SUBMITTAL REQUIRED.

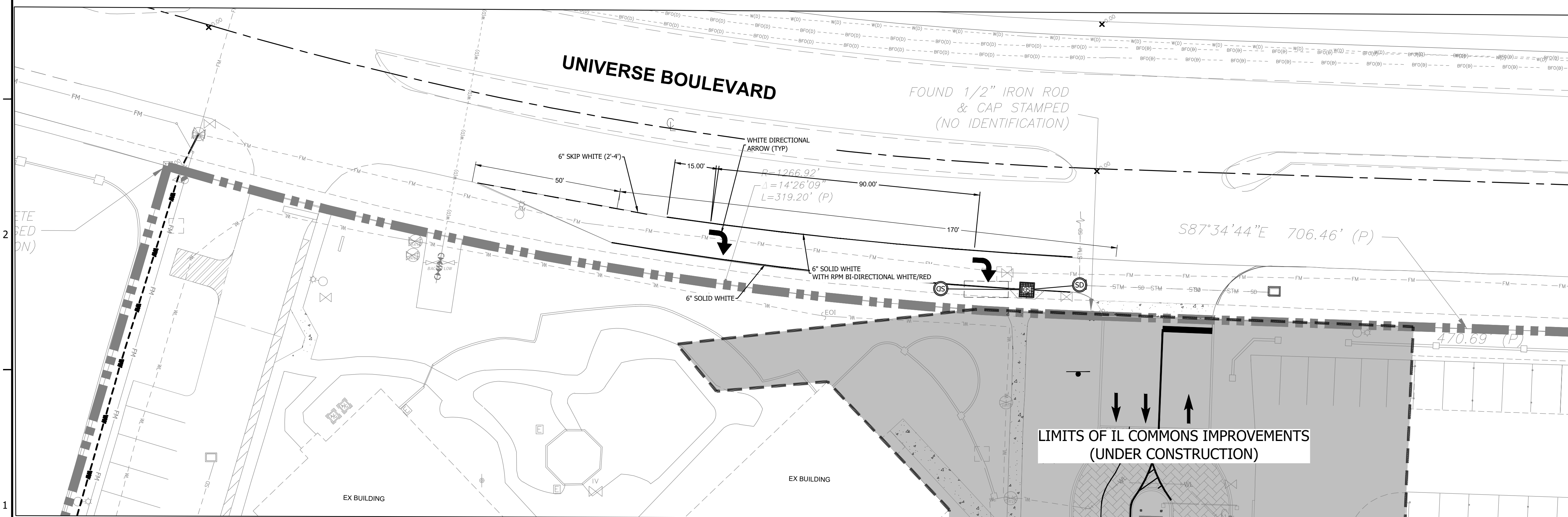
THE WATERFORD
INDEPENDENT LIVING & MEMORY CARE EXPANSION
601 UNIVERSE BOULEVARD
JUNO BEACH, FLORIDA 33408

SIGNING AND PAVEMENT MARKING PLAN

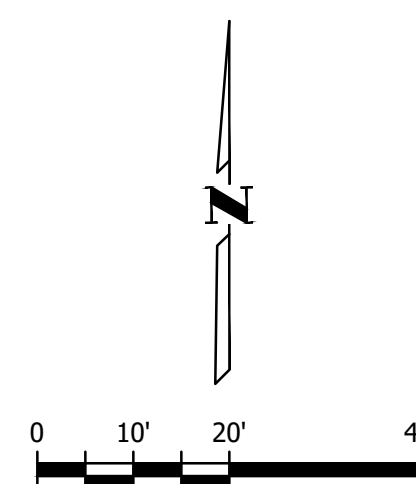




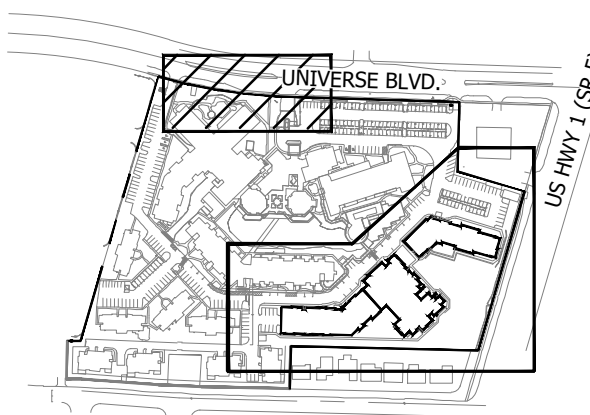
PAVING, GRADING, AND DRAINAGE PLAN



PAVEMENT AND MARKING PLAN



LIMITS OF IMPROVEMENTS	
EXISTING GRADE ELEVATION	
PROPOSED GRADE ELEVATION	
ASPHALT PAVEMENT	
CONCRETE	
STORM DRAIN LINE	
WATER LINE	
WASTEWATER LINE	
EX WATER LINE	
EX WASTEWATER LINE	
EX FORCE MAIN	
EX DRAINAGE LINE	
EX OVERHEAD ELECTRIC	
EX BURIED ELECTRIC	
EX BURIED FIBER OPTICS	
EX GAS LINE	
STORM DRAIN INLET	
STORM DRAIN MANHOLE	
YARD DRAIN	
FLOW ARROW	



LOCATION 1

STRUCTURE TABLE	
STRUCTURE NAME	STRUCTURE DETAILS
S400	STORM MANHOLE USF 170-E FDOT INDEX 425-001
S401	DBI TYPE (TYPE C) USD 4155-6210 FDOT INDEX 425-05
S402	STORM MANHOLE USF 170-E FDOT INDEX 425-001

DRAINAGE STRUCTURE NOTE

STRUCTURE S402 SHALL BE MODIFIED FROM EXISTING CATCH BASIN TO STORM MANHOLE

PAVEMENT MARKING NOTES

1. ALL PAVEMENT MARKINGS SHALL BE IN THERMOPLASTIC AND IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, PALM BEACH COUNTY TYPICAL #T-P-24, AND FDOT STANDARD INDEX 711-001.

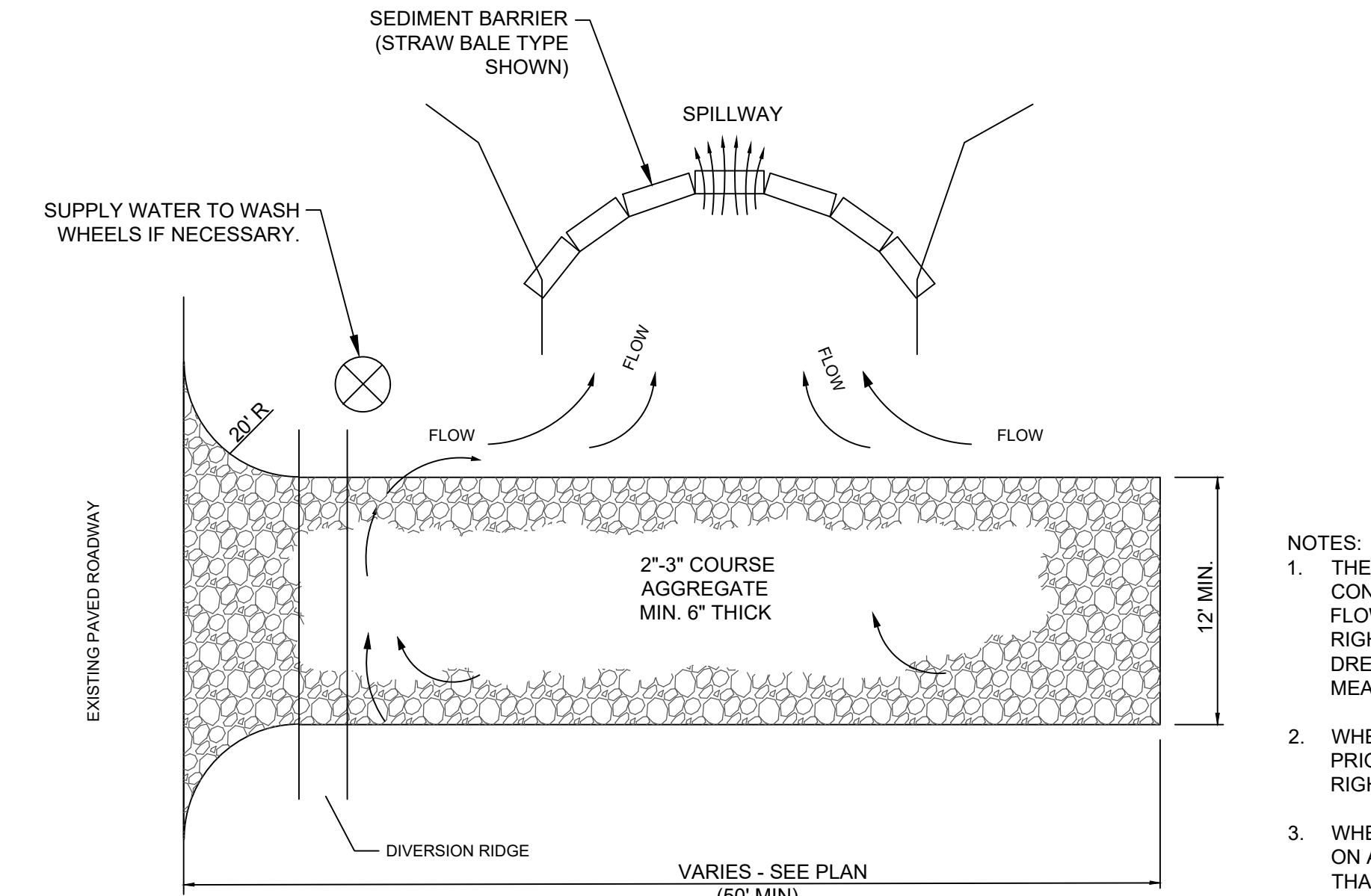
DRAINAGE NOTES:

1. RIM ELEVATIONS ARE BASED ON PROPOSED FINISH GRADES. ADJUSTMENTS MAY BE NECESSARY DUE TO FIELD CONDITIONS. ADJUSTMENTS ARE TO BE MADE BY THE CONTRACTOR WHEN THE BASE COURSE IS IN PLACE OR THE GRADING IS COMPLETE. COST OF ADJUSTING RIMS IS TO BE INCLUDED IN THE BASE BID.
2. ALL ITEMS ARE TO BE FURNISHED & INSTALLED BY THE CONTRACTOR. REFERENCE CONSTRUCTION DETAILS SHEETS FOR ADDITIONAL INFORMATION.
3. ON ALL GRAVITY LINES, CONTRACTOR MUST START AT DOWNSTREAM END AND PROCEED UPSTREAM TAKING CARE TO EXPOSE ALL EXISTING UTILITIES AND STRUCTURES WHICH MAY CONFLICT WITH THE PROPOSED LINE. ANY OTHER SEQUENCE OF CONSTRUCTION WILL BE AT THE CONTRACTORS RISK.
4. CONTRACTOR SHALL EXPOSE ALL EXISTING UTILITIES CROSSING PROPOSED GRAVITY LINES AND ENSURE THERE WILL BE NO CONFLICTS PRIOR TO BEGINNING CONSTRUCTION. ADDITIONALLY, CONTRACTOR TO PLAN UTILITY LINE INSTALLATIONS IN A MANNER TO AVOID CONFLICTS WITH PROPOSED GRAVITY LINES.

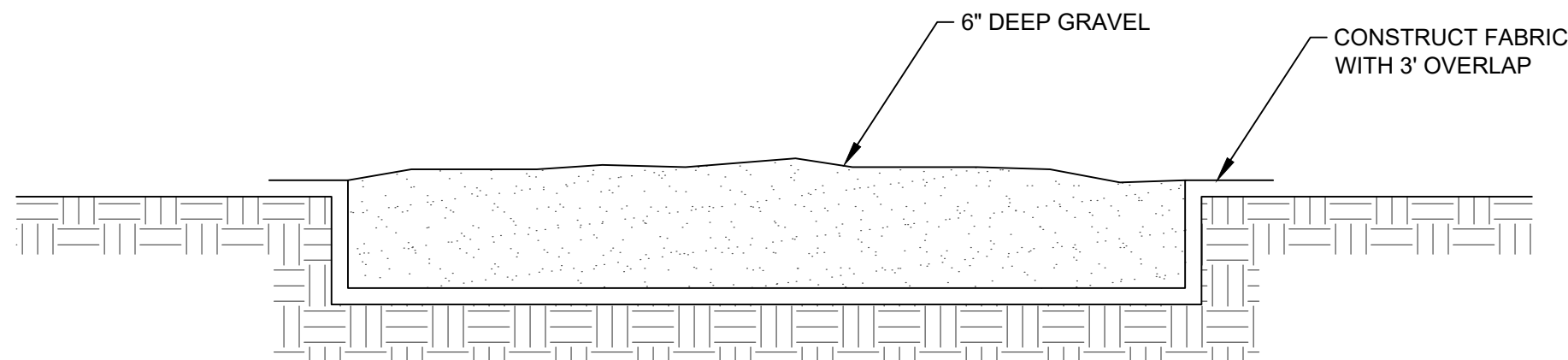
GRADING NOTES:

1. ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). NAVD 88 = NGVD 29 - 1.51
2. CONTRACTOR SHALL FORM SIDEWALKS AND VERIFY SLOPES PRIOR TO POURING CONCRETE. CONTRACTOR SHALL ENSURE THAT CROSS SLOPES ARE NO GREATER THAN 2% ALONG THE ACCESSIBLE ROUTE AND RUNNING SLOPE IS NO GREATER THAN 5%, UNLESS THE RUNNING SLOPE MATCHES THE EXISTING STREET SLOPE. IF ANY DISCREPANCY ARISES, CONTRACTOR SHALL CONTACT ENGINEER FOR SOLUTION.

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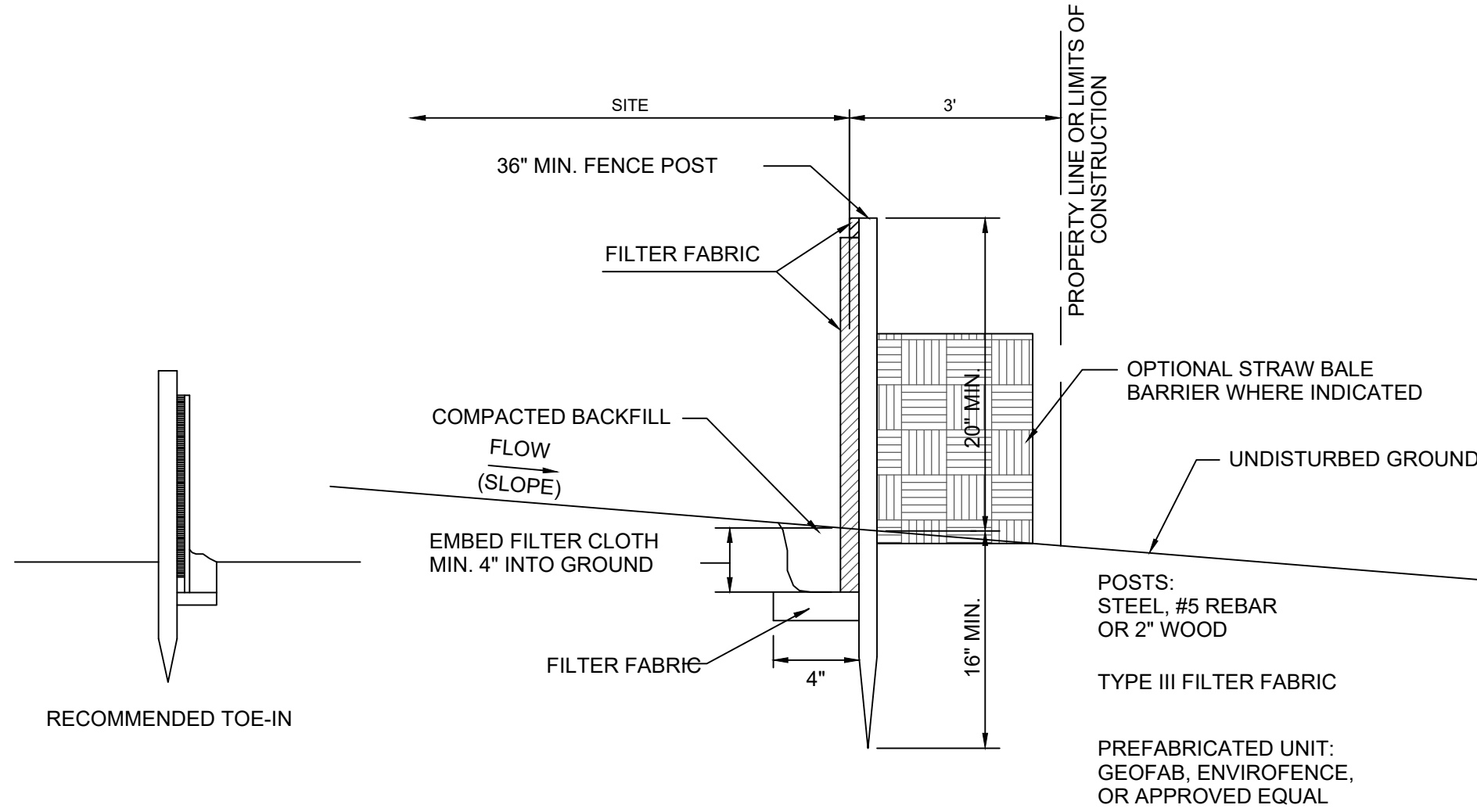
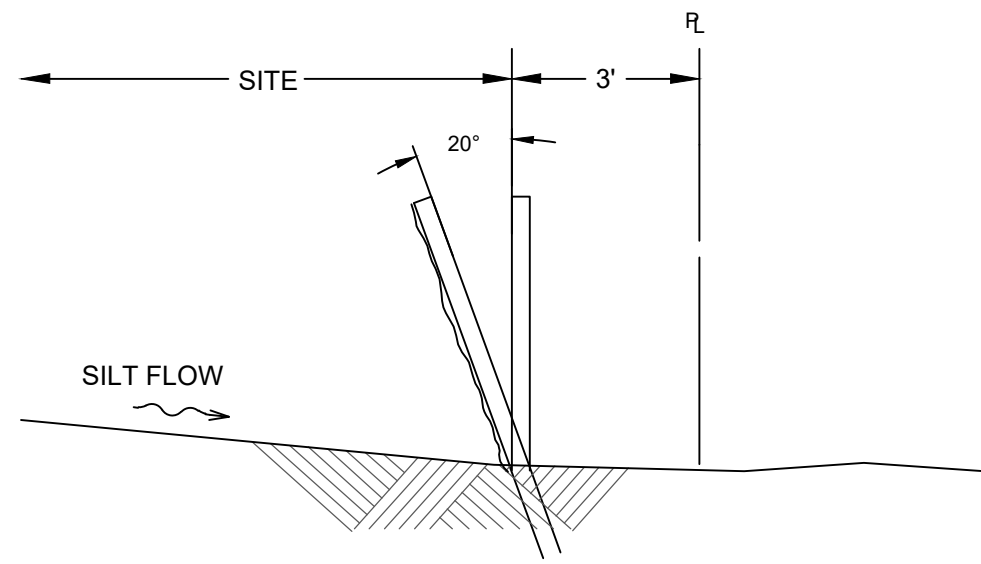


- NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
 3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.



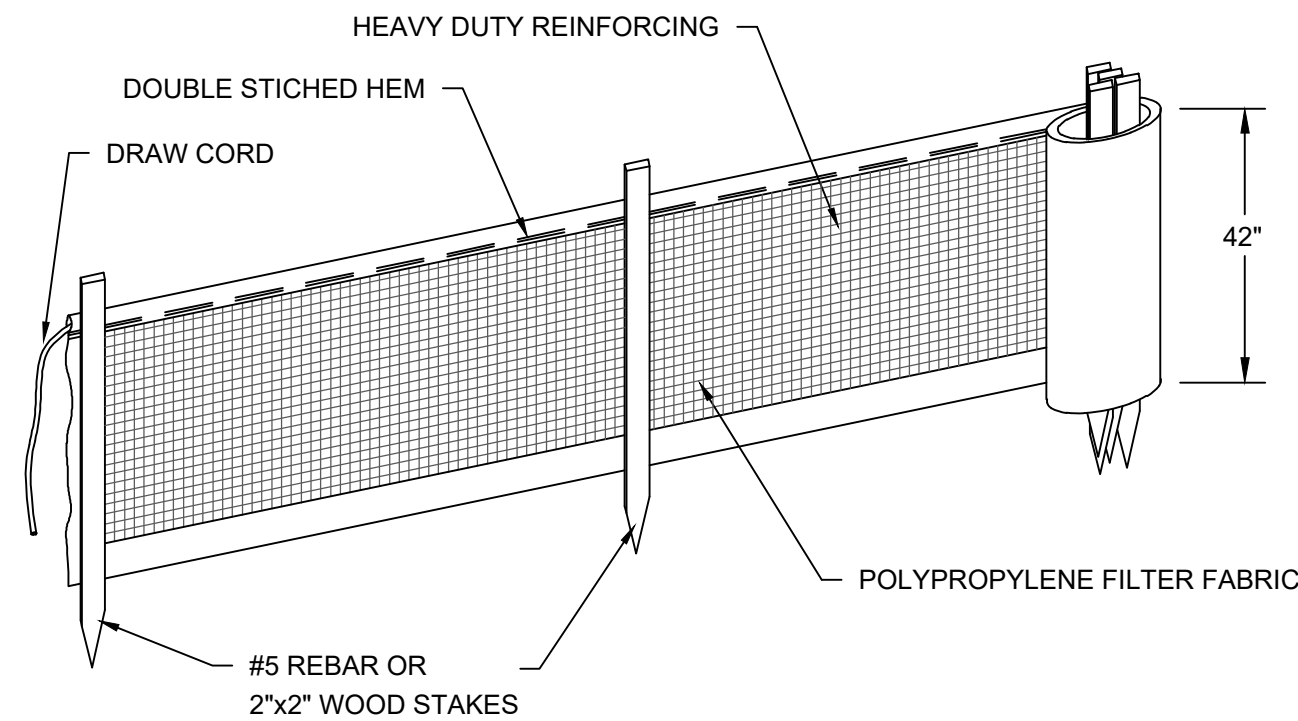
TEMPORARY CONSTRUCTION ENTRANCE

SCALE: NONE



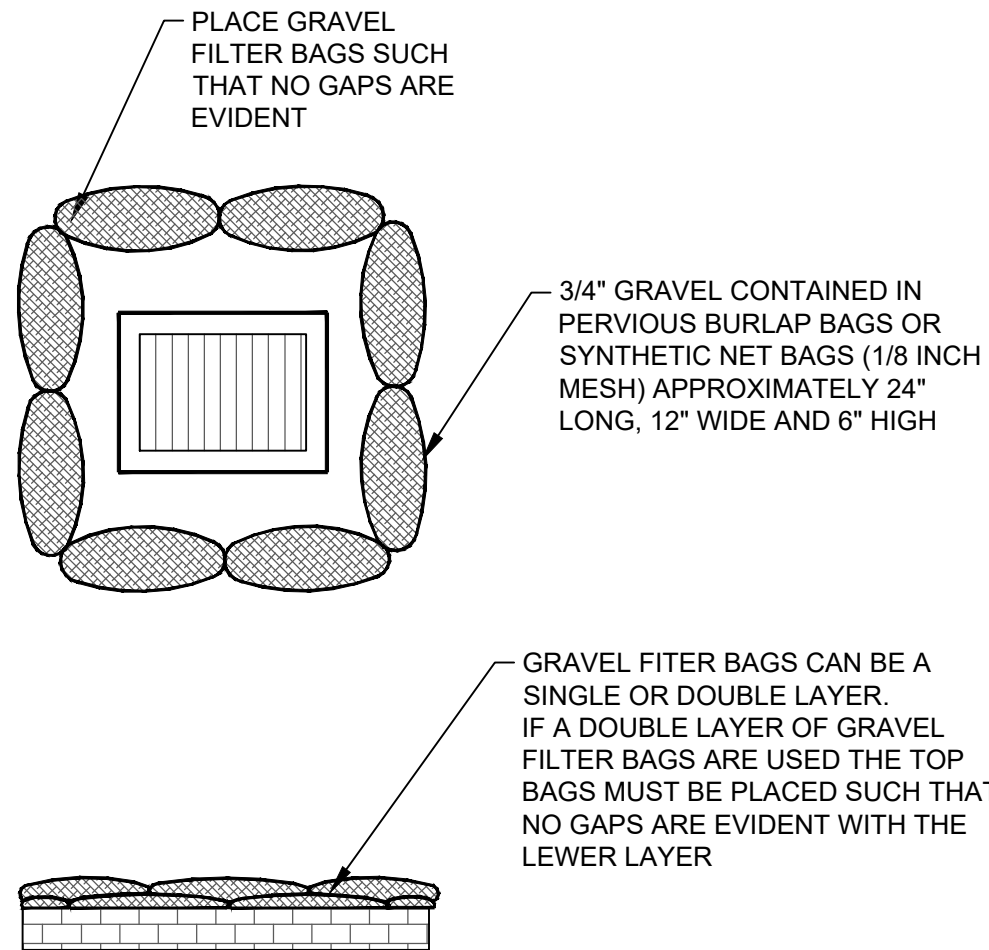
SILT FENCE INSTALLATION

SCALE: NONE



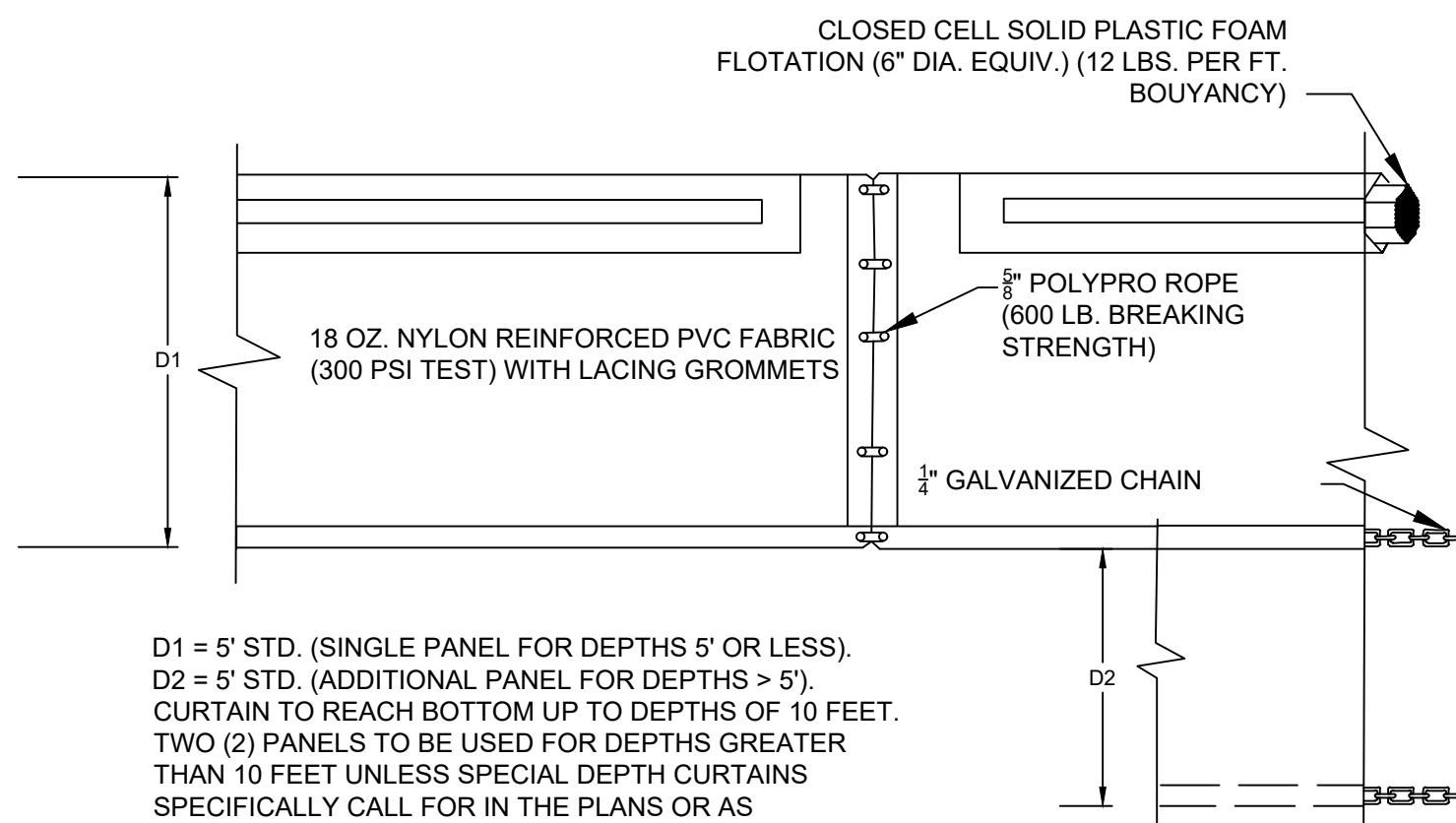
NOTES:

1. FILTER FABRIC FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES SPACED EVERY 24" AT TOP AND BOTTOM.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
3. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE OR DEPTH OF ACCUMULATED SEDIMENT REACHES 6 INCHES.
4. SILT FENCE SHALL BE INSTALLED PER MANUFACTURERS SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION AND SHALL NOT BE REMOVED UNTIL CONSTRUCTION IS COMPLETE.
5. THE CONTRACTOR SHALL INSPECT AND REPAIR THE SILT FENCE AFTER EACH RAIN EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
6. REMOVED SEDIMENT SHALL BE DEPOSITED IN AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFFSITE AND CAN BE PERMANENTLY STABILIZED.
7. THE SILT FENCE SHALL BE PLACED ON SLOPE CONTOUR TO MAXIMIZE ITS PONDING EFFICIENCY.
8. IF DITCH LEVEL IS DEEPER THAN 30", THEN A FLOATING SILT SCREEN SHALL BE USED.



DITCH/PAVEMENT INLET PROTECTION

SCALE: NONE



D1 = 5' STD. (SINGLE PANEL FOR DEPTHS 5' OR LESS)
D2 = 5' STD. (ADDITIONAL PANEL FOR DEPTHS > 5')
CURTAIN TO REACH BOTTOM UP TO DEPTHS OF 10 FEET.
TWO (2) PANELS TO BE USED FOR DEPTHS GREATER THAN 10 FEET UNLESS SPECIAL DEPTH CURTAINS SPECIFICALLY CALL FOR IN THE PLANS OR AS DETERMINED BY THE ENGINEER.

NOTES:

1. TURBIDITY BARRIERS ARE TO BE USED IN ALL PERMANENT BODIES OF WATER REGARDLESS OF WATER DEPTH.
2. NUMBER AND SPACING OF ANCHORS DEPENDANT ON CURRENT VELOCITIES.
3. DEPLOYMENT OF BARRIER AROUND PILE LOCATIONS MAY VARY TO ACCOMMODATE CONSTRUCTION OPERATIONS.
4. NAVIGATION MAY REQUIRE SEGMENTING BARRIER DURING CONSTRUCTION OPERATIONS.

FLOATING TURBIDITY BARRIER

N.T.S.



THE WATERFORD
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601 UNIVERSE BOULEVARD
JUNO BEACH, FLORIDA 33408

EROSION AND SEDIMENTATION CONTROL DETAILS

SHEET

C-700

OF

2920.04

CERT NO: 6091

351.687.2220

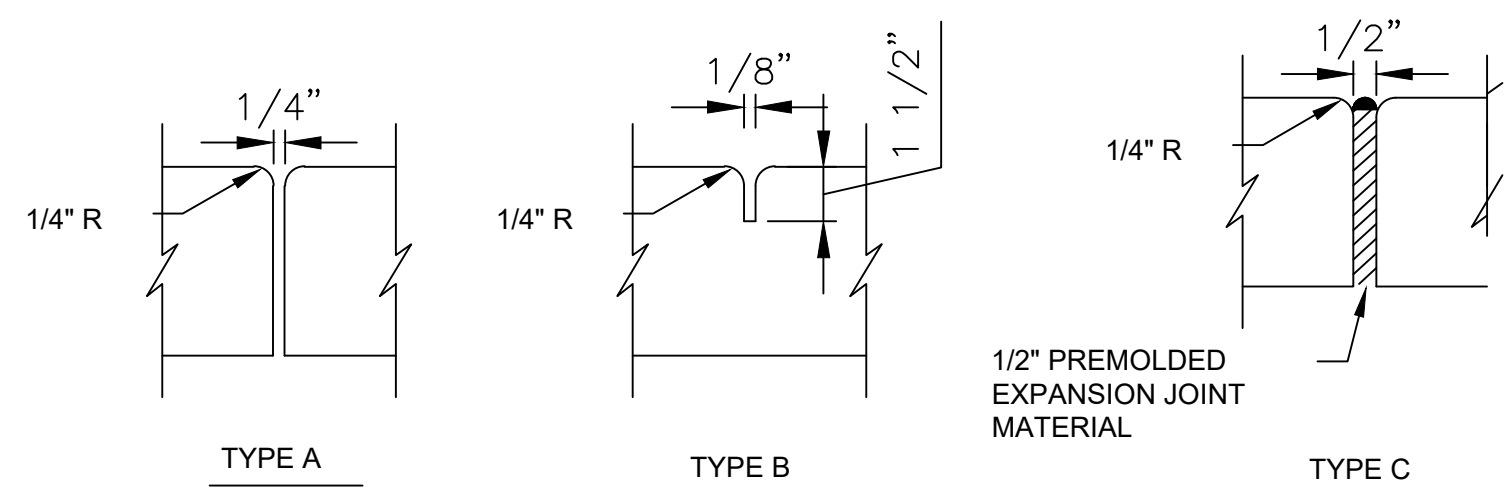
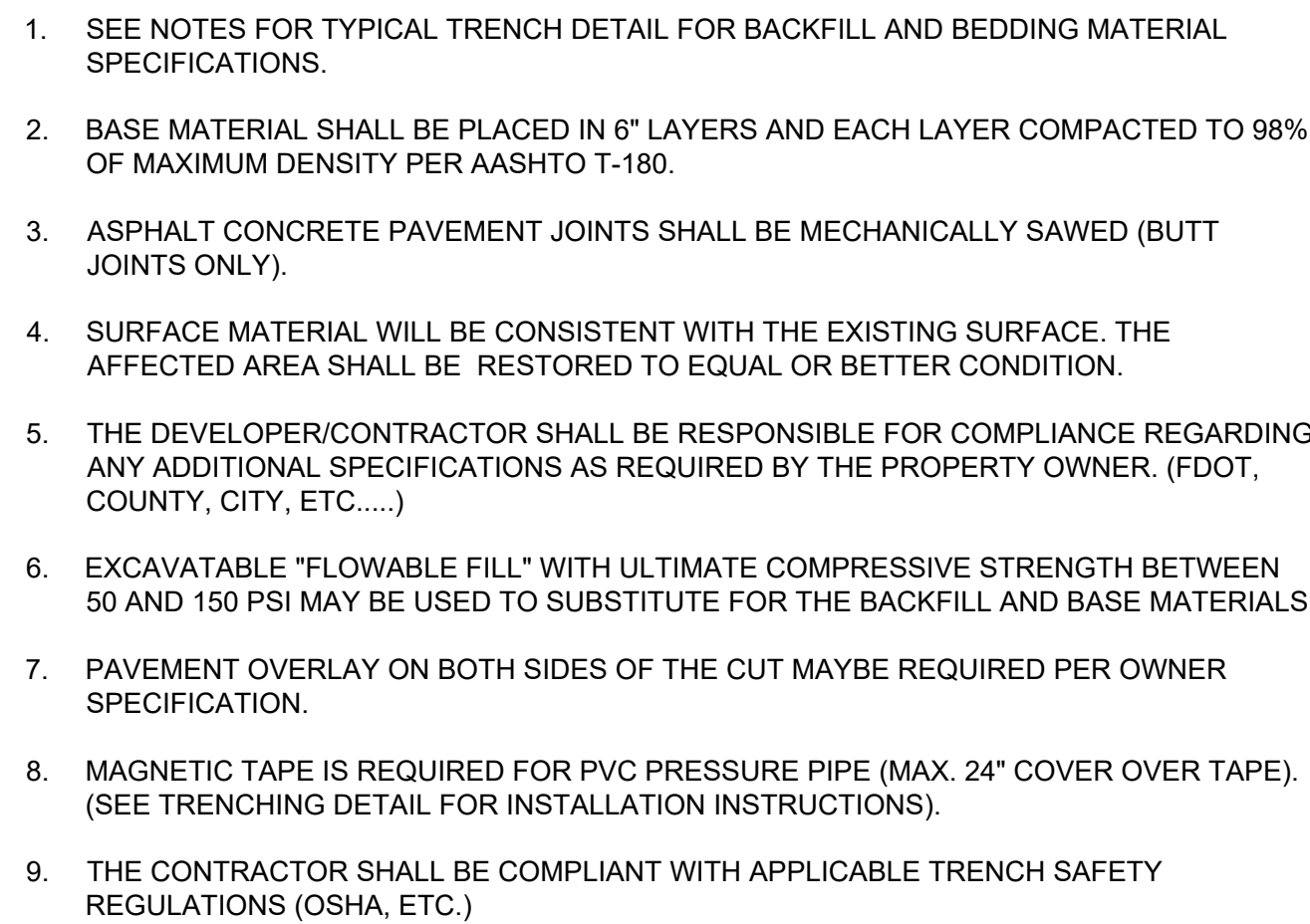
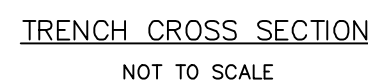
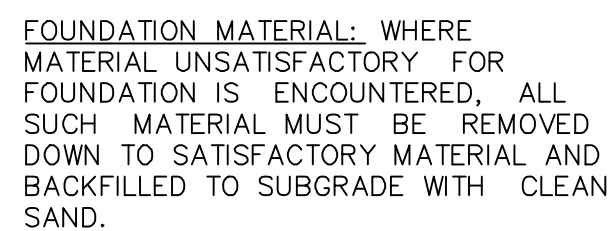


Diagram illustrating the maximum thickness variation (2.0% MAX.) for Section B-B. The diagram shows a cross-section of a slab with a tapered profile, indicating that the thickness varies across the width.

- ## SIDEWALK CONSTRUCTION DETAIL





STAGE #2
THE CONTRACTOR SHALL OBTAIN A WELL
COMPACTED BED AND FILL ALONG THE SIDES
OF THE PIPE AND TO A POINT INDICATING THE
TOP OF SUB-GRADE MATERIAL.

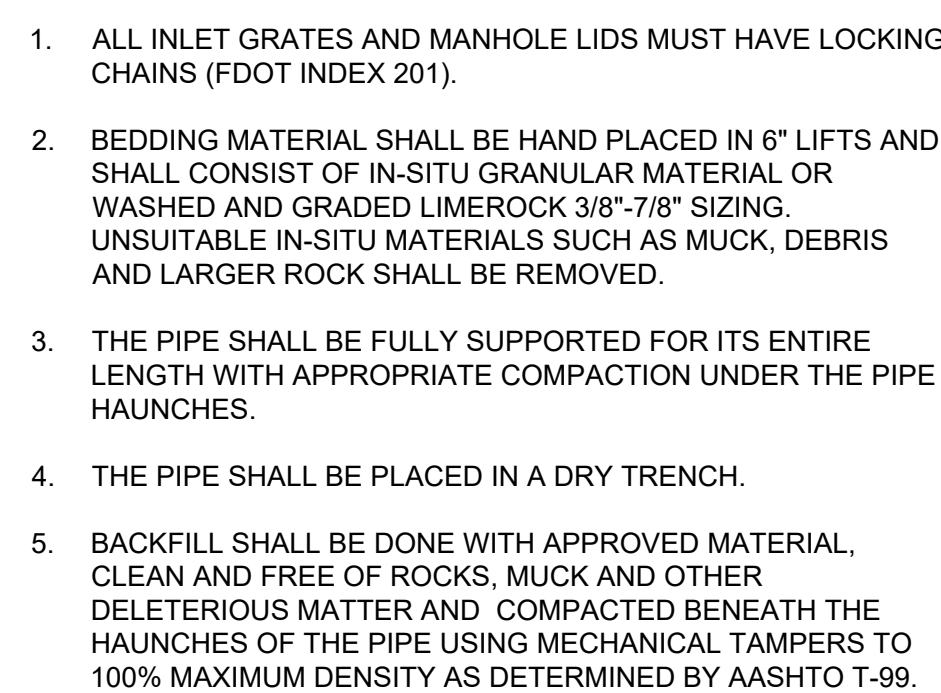
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SCALE: NONE



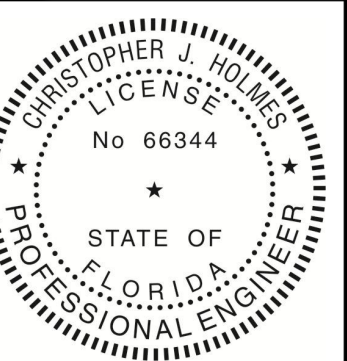
6. BACKFILL TO BE COMPACTED ALONG THE SIDES OF THE PIPE AND TO A POINT ONE FOOT ABOVE THE TOP OF THE PIPE TO 100% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.
7. WHERE PAVEMENT IS TO BE CONSTRUCTED OVER THE PIPE THE REMAINING BACKFILL SHALL BE COMPACTED IN 6 INCH LAYERS AND COMPACTED TO 100% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99. SEE PAVEMENT SPECIFICATIONS FOR COMPACTION AND STABILIZATION REQUIREMENTS OF SUBGRADE.
8. WHERE PAVEMENT WILL NOT BE CONSTRUCTED OVER THE PIPE THE REMAINING FILL SHALL BE COMPACTED IN 6 INCH LAYERS TO A DENSITY 95% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.
9. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL TRENCH SAFETY REGULATIONS.
10. ALL MANHOLES AND INLETS TO HAVE A MINIMUM SUMP OF 1'

SCALE: NONE

[illegible]

CERT NO: 6091

561.687.2220



THE WATERFORD
INDEPENDENT LIVING & MEMORY CARE EXPANSION
601 UNIVERSE BOULEVARD
JUNO BEACH, FLORIDA 33408

PAVING, GRADING AND DRAINAGE DETAILS

SHEET

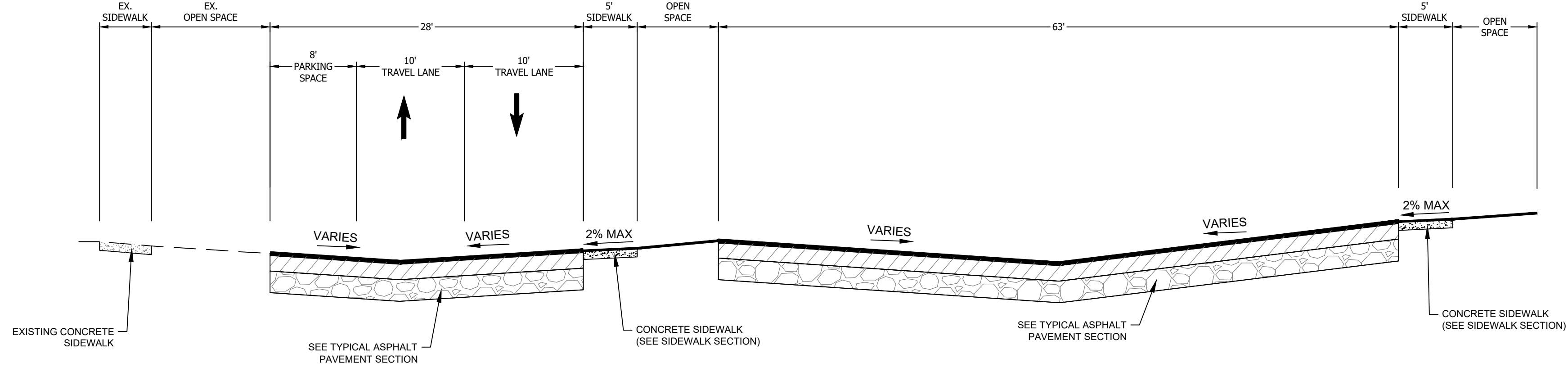
C-702

OF

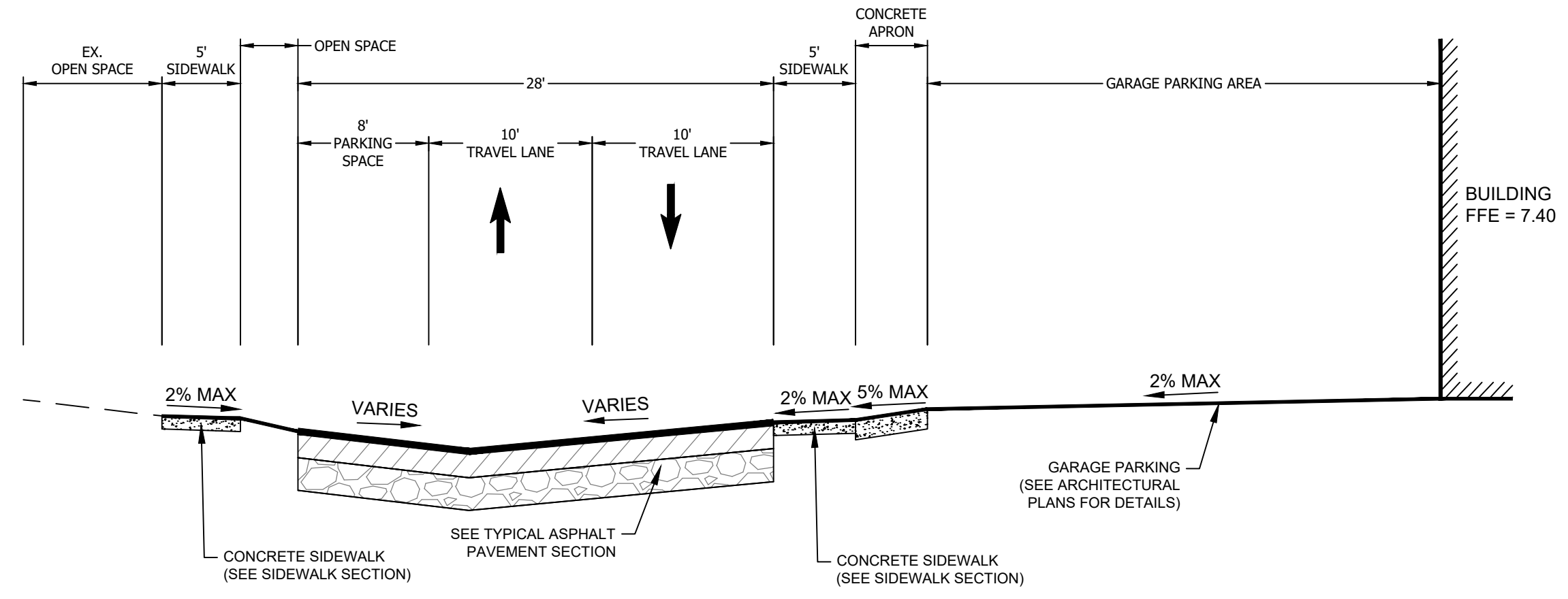
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OF
2920.04

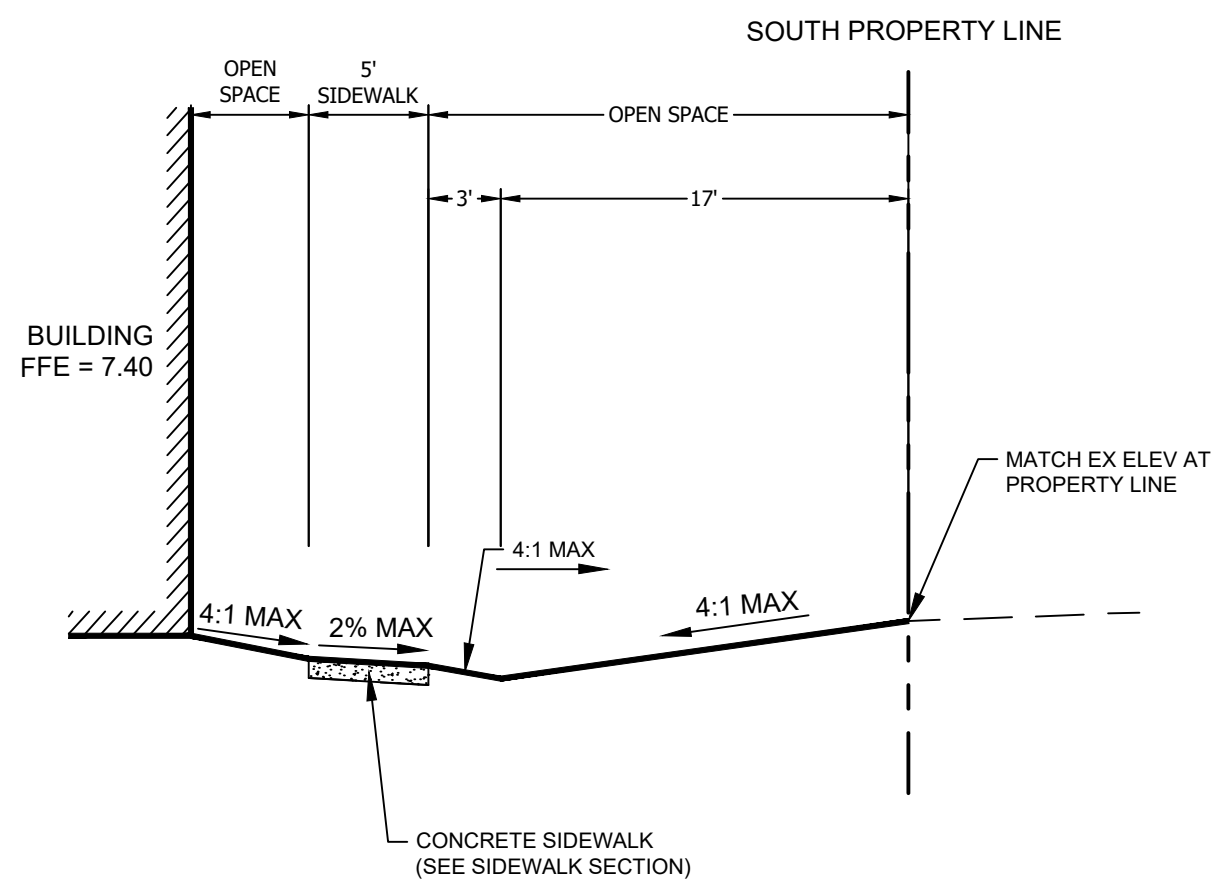
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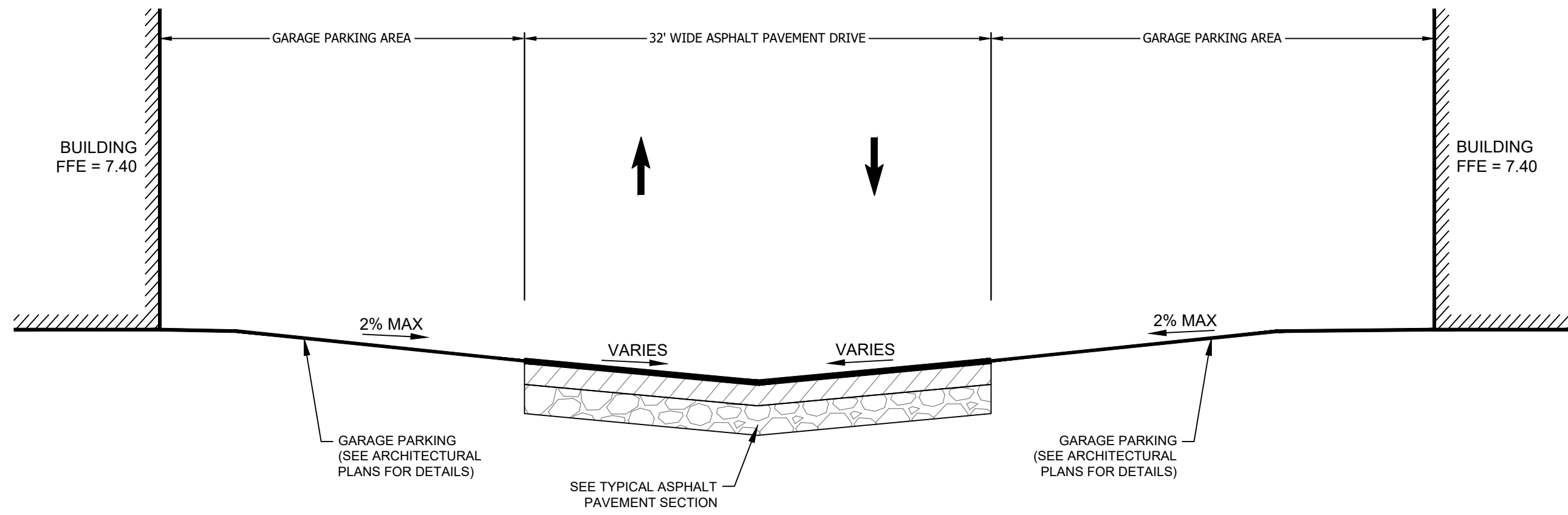
1 TYPICAL ROAD SECTION
Scale: nts



2 TYPICAL ROAD SECTION
Scale: NTS



3 TYPICAL SECTION - SOUTH PROPERTY LINE
Scale: nts

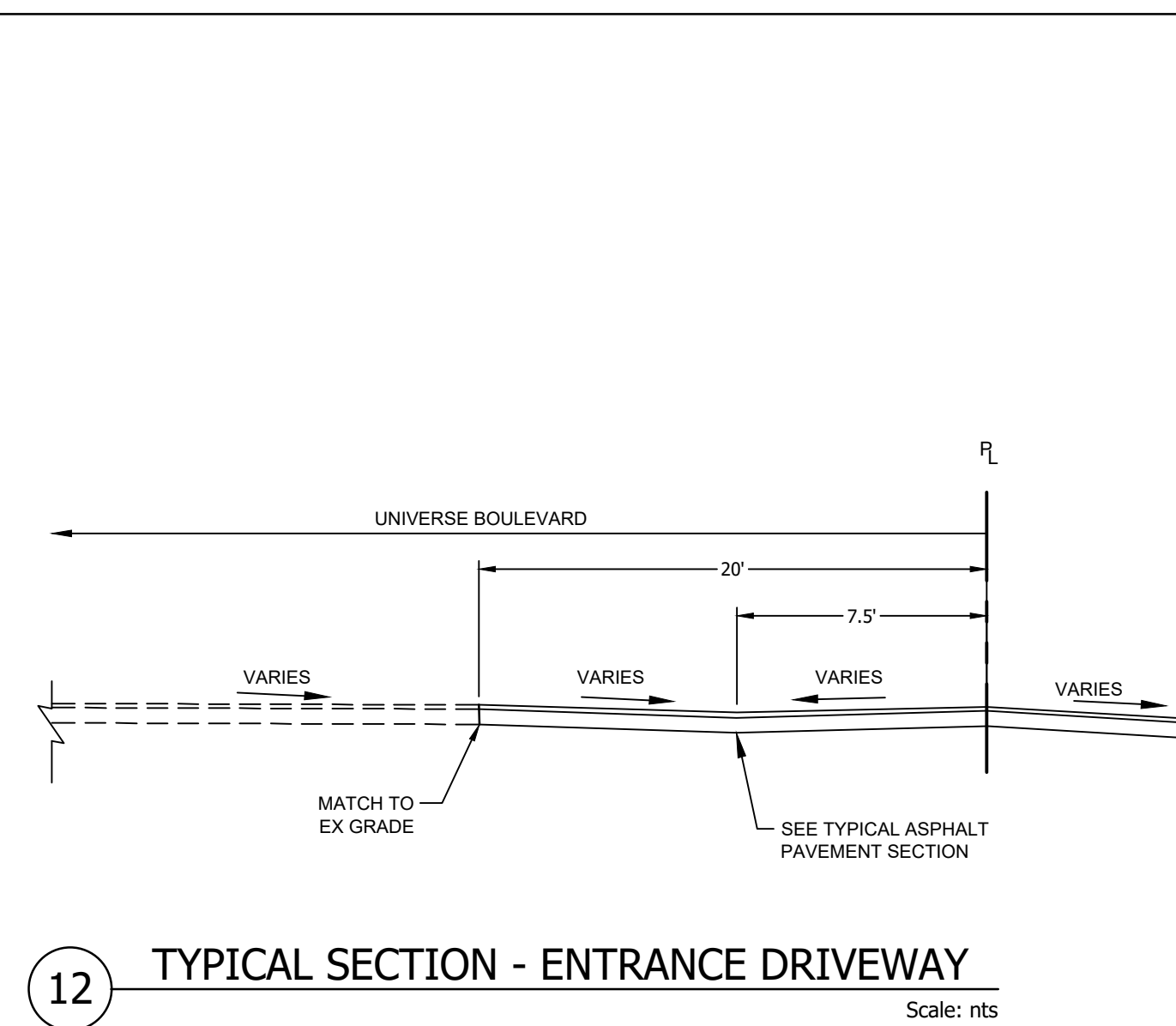
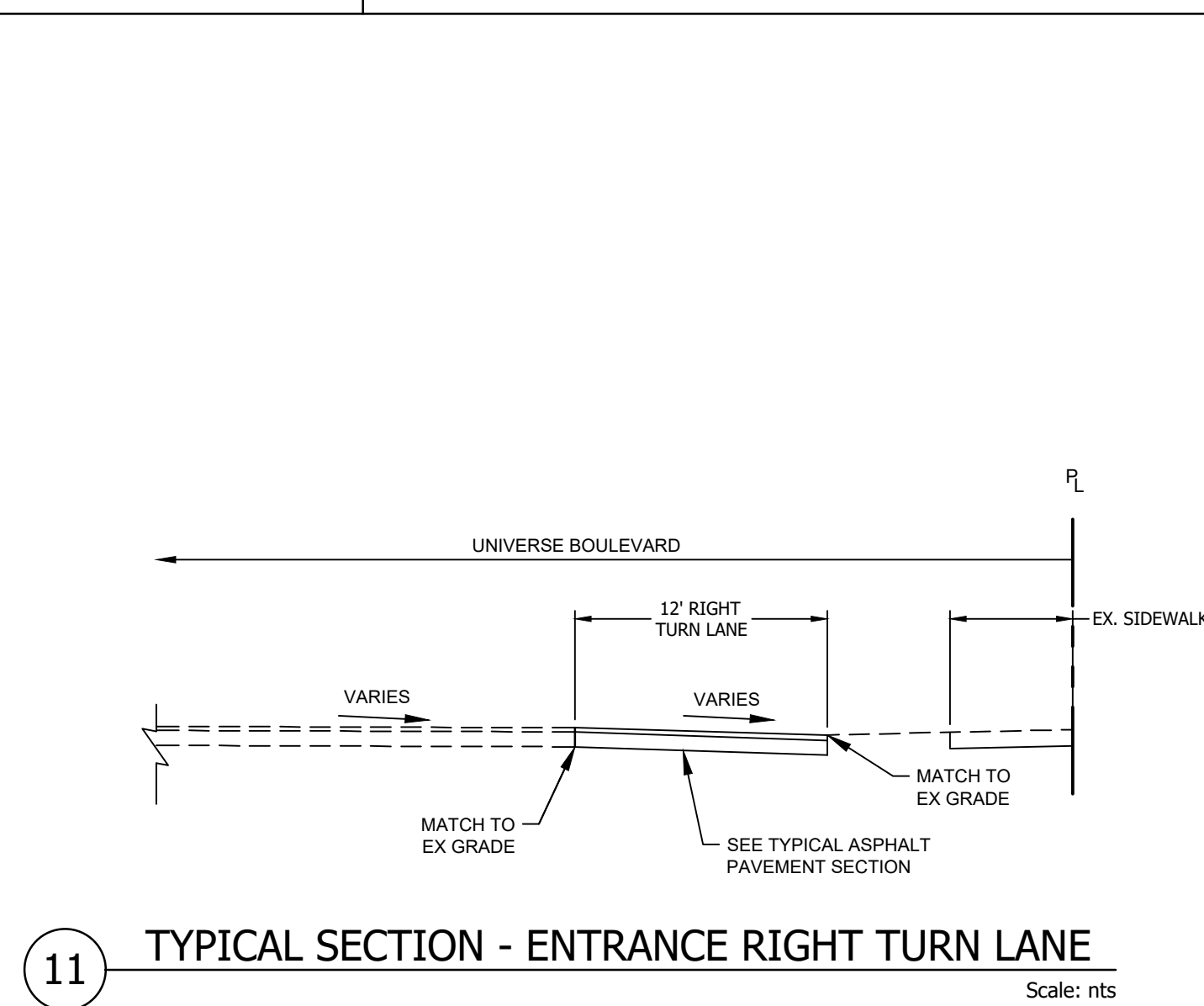
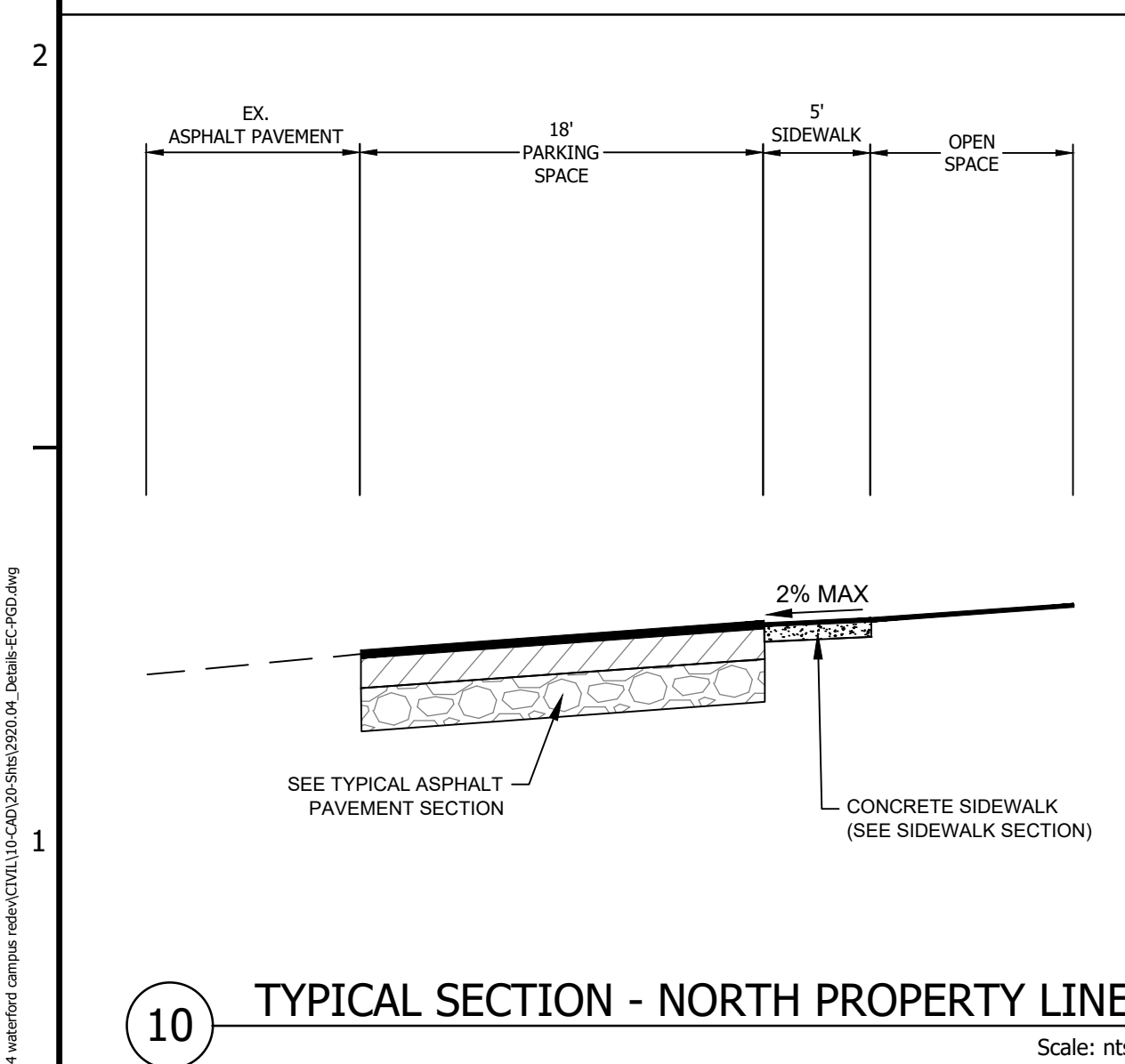
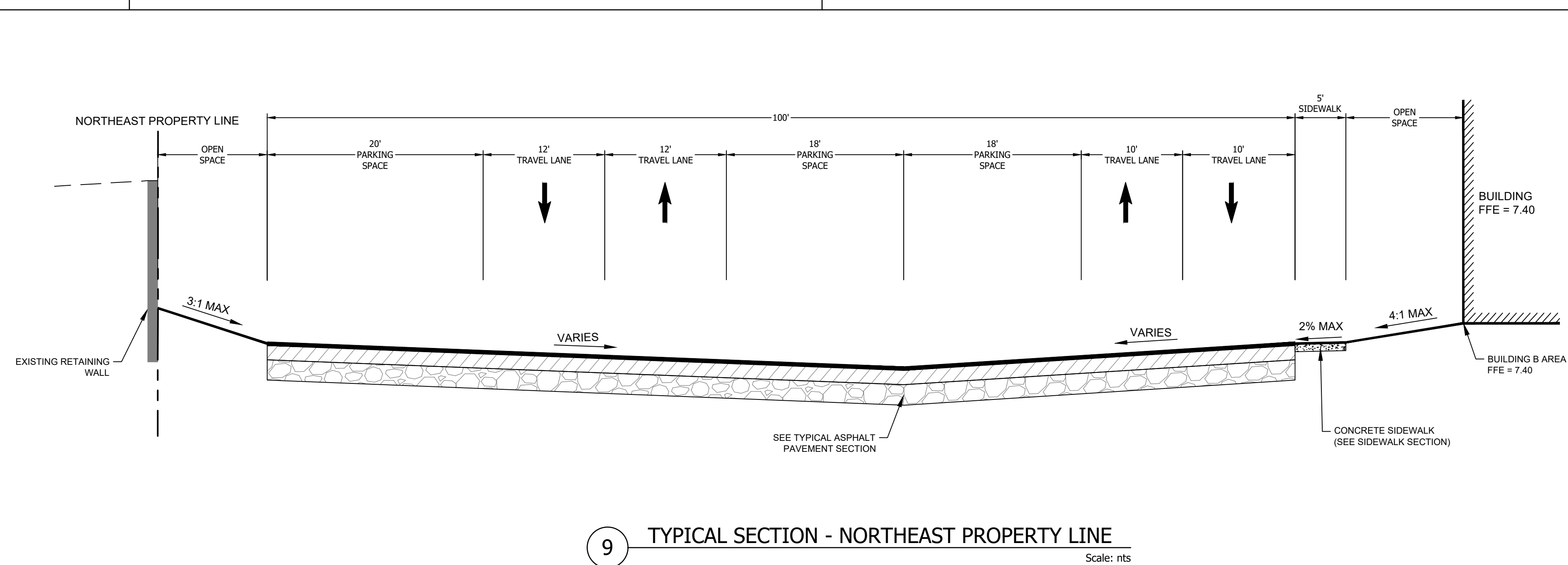
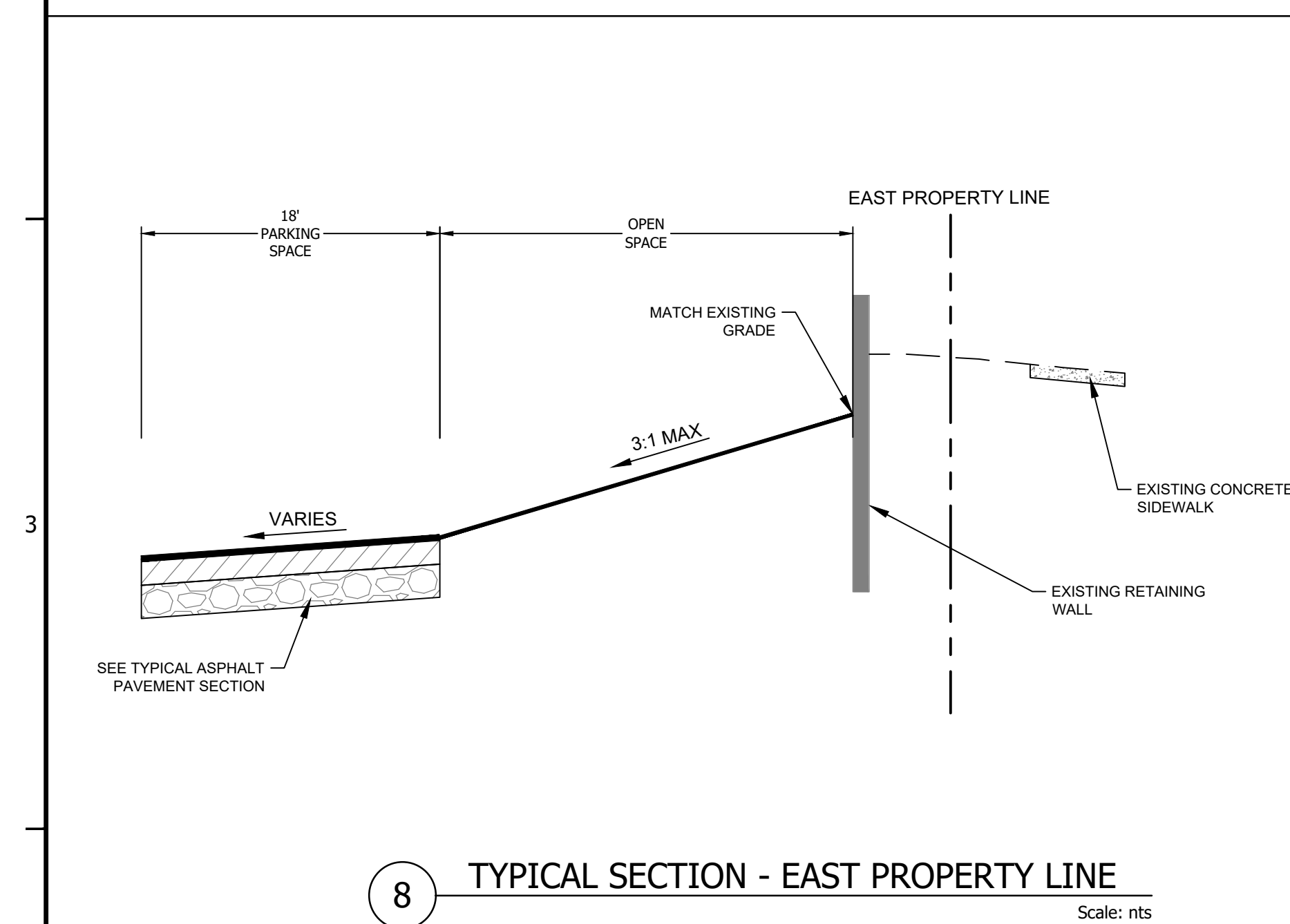
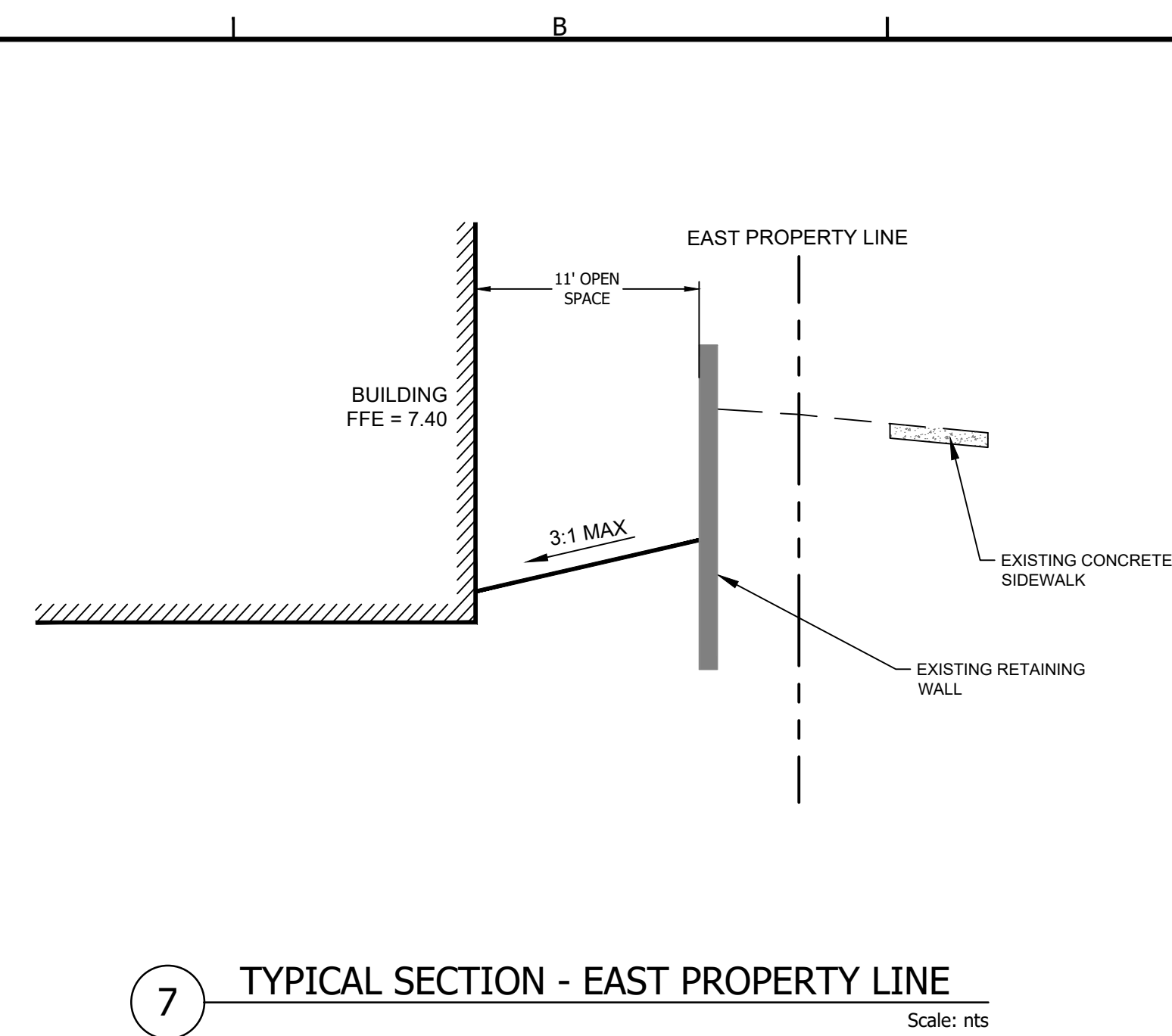
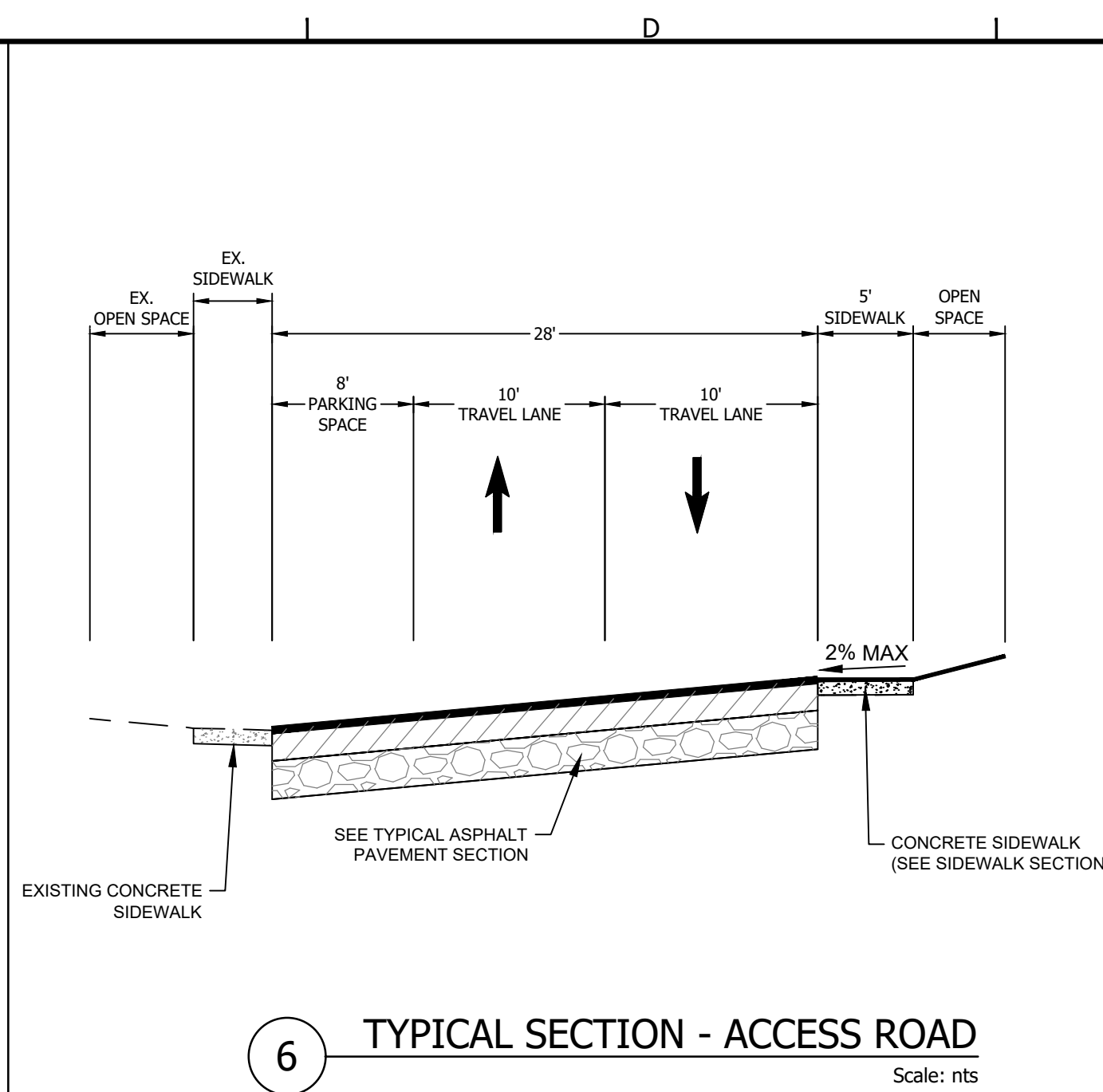
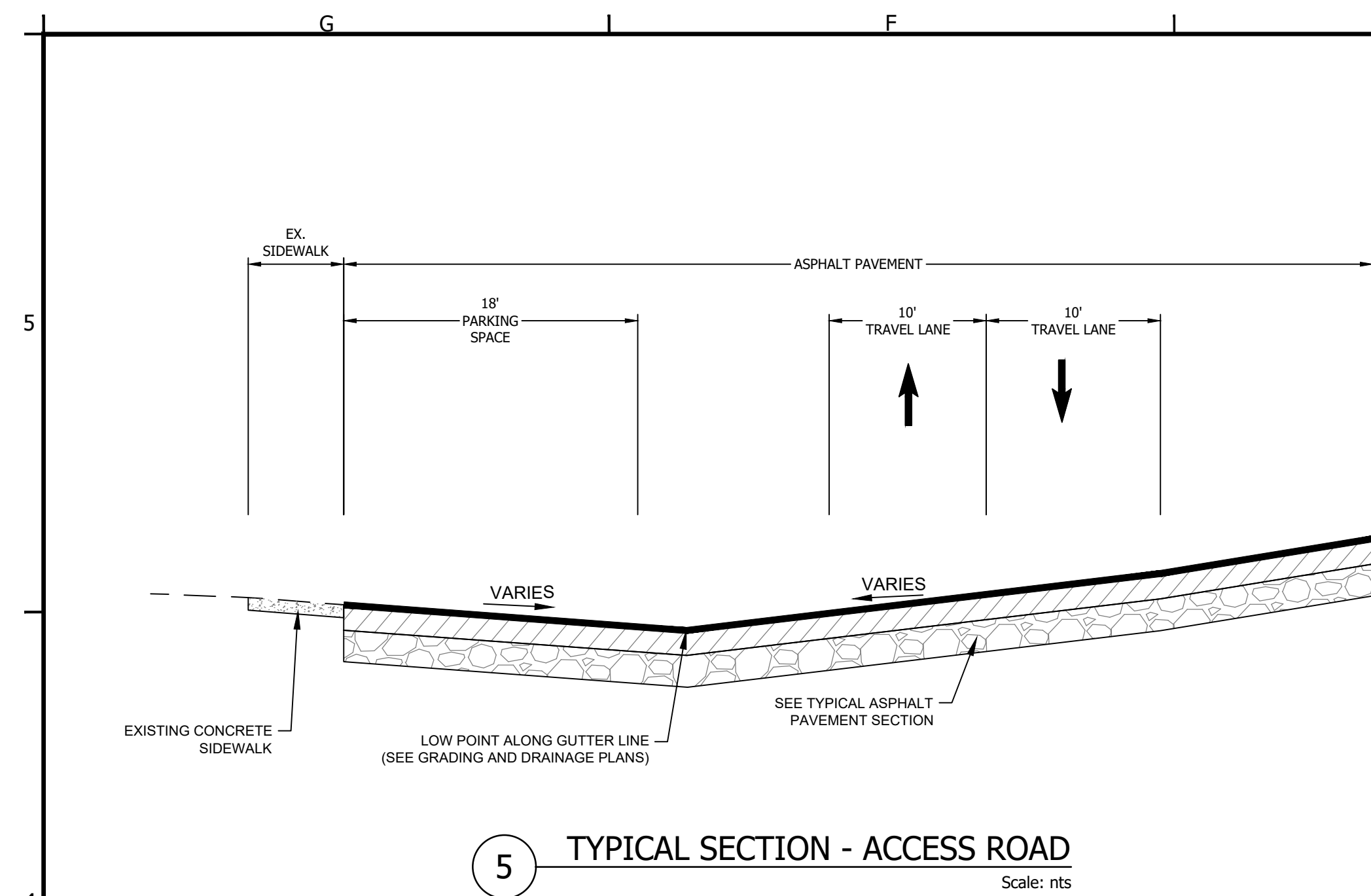


4 TYPICAL SECTION - DRIVE AISLE BETWEEN BUILDING H
Scale: NTS

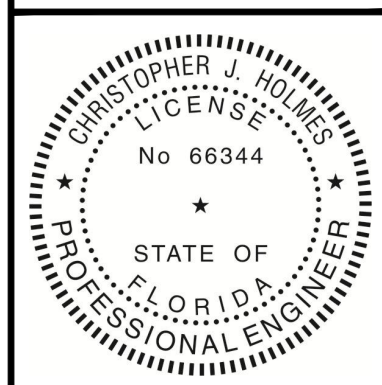
CERT NO: 6901
151.687.2220
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WGInc.com
2035 VISTA PARKWAY, WEST PALM BEACH, FLORIDA 33411



THE WATERFORD
INDEPENDENT LIVING & MEMORY CARE EXPANSION
601 UNIVERSE BOULEVARD
JUNO BEACH, FLORIDA 33408
TYPICAL CROSS SECTIONS

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CERT NO: 6091

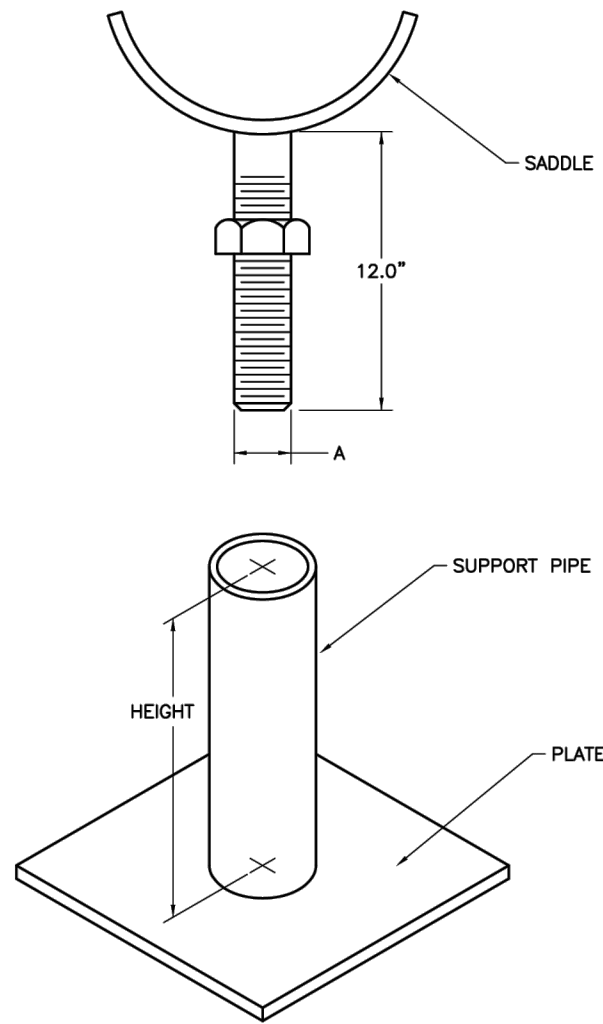


THE WATERFORD
INDEPENDENT LIVING & MEMORY CARE EXPANSION
601 UNIVERSE BOULEVARD
JUNO BEACH, FLORIDA 33408

TYPICAL CROSS SECTIONS

SHEET
C-705
OF
2920.04

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PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS

PIPE SIZE	A	SUPPORT PIPE	SADDLE	PLATE	HEIGHT
3"	3/4"	1"	1/4" x 2"	4" x 4"	1' - 0"
4"	3/4"	1"	1/4" x 2"	4" x 4"	1' - 0"
6"	3/4"	1"	1/4" x 2"	4" x 4"	1' - 0"
8"	3/4"	1"	1/4" x 2"	4" x 4"	1' - 0"
10"	1"	1 1/4"	3/8" x 3"	6" x 6"	1' - 0"
12"	1"	1 1/4"	3/8" x 3"	6" x 6"	1' - 0"
14"	1"	1 1/4"	3/8" x 3"	6" x 6"	1' - 0"
16"	1 1/4"	1 1/2"	1/2" x 3"	6" x 6"	1' - 0"
18"	1 1/4"	1 1/2"	1/2" x 3"	6" x 6"	1' - 0"

NOTE: ALL MATERIAL SHALL BE 316 STAINLESS STEEL

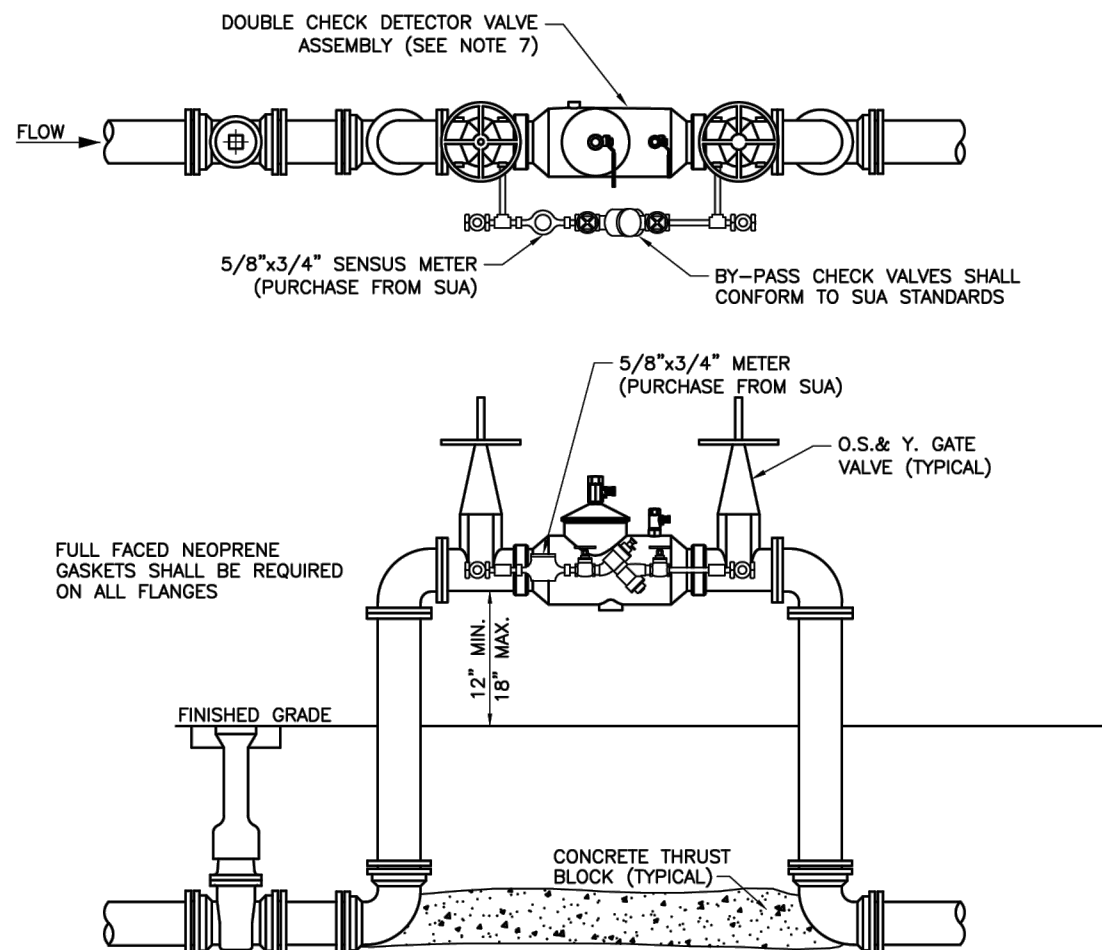
Pipe Support

SEACOAST UTILITY AUTHORITY
CONSTRUCTION STANDARDS AND DETAILS

DATE APPROVED:
FEB 26, 2025

DRAWING No. 32

Revision B-16



NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

- MECHANICAL JOINT FITTINGS SHALL BE REQUIRED UNDERGROUND AND FLANGED FITTINGS FOR ABOVE GROUND USE, NO UNFLANGES PERMITTED.
- PAINT THE ABOVE GROUND ASSEMBLY, INCLUDING ENTIRE LENGTH OF THE RODS, IN ACCORDANCE WITH SUA CONSTRUCTION STANDARD SECTION II, ITEM 7, AFTER MANUFACTURERS RECOMMENDED SURFACE PREP IS COMPLETED. DO NOT PAINT OVER NAME/SERIAL PLATE, STAINLESS STEEL BODY OR BRASS FITTINGS.
- WHEN PROTECTIVE PIPE STANCHIONS OR A SCREEN WALL IS REQUIRED, SEE "PROTECTIVE ENCLOSURES FOR ABOVE GROUND DEVICES" DETAIL.
- SPECIAL FIRE PROTECTION SYSTEMS USING INTERNAL PUMPS, TANKS, ETC. SHALL BE REQUIRED TO USE APOLLO RPDALF4A OR ZURN 375ASTDA.
- ALL TEST PORTS SHALL BE PLUGGED WITH BRASS PLUGS.
- TWO OF THE FOLLOWING FORMS OF RESTRAINT SHALL BE USED WHEN PIPE IS GREATER THAN 12".
 - APPROVED MECHANICAL JOINT RESTRAINT (i.e. MEGALUG)
 - TIE RODS AND NUTS EQUAL IN DIA. TO TEE BOLTS AND NUTS, COATED WITH KOP-COAT 300-M OR APPROVED EQUAL.
- APPROVED DOUBLE CHECK DETECTOR VALVE ASSEMBLIES WITH CHLORAMINE RESISTANT ELASTOMERS; 4" TO 8"
 - AMES DERINGER 300
 - APOLLO DCDALF 4A
 - ZURN 350ASTDA

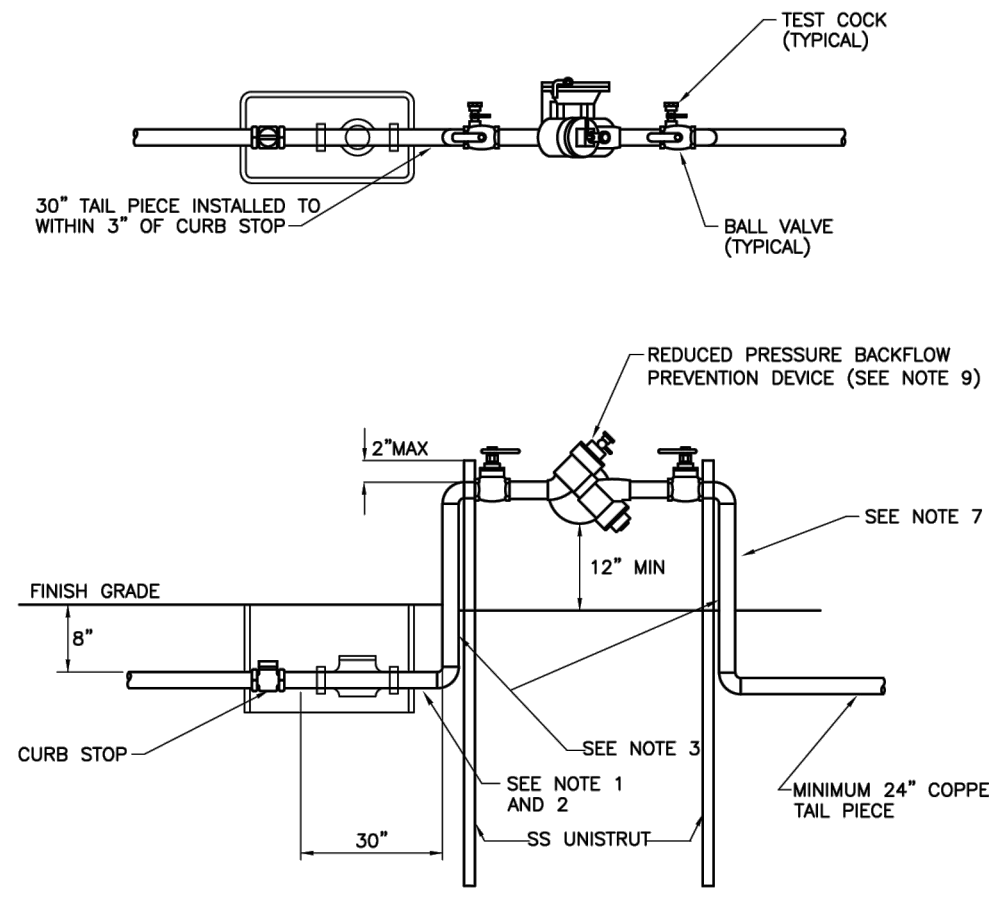
Above Ground Fireline

SEACOAST UTILITY AUTHORITY
CONSTRUCTION STANDARDS AND DETAILS

DATE APPROVED:
FEB 26, 2025

DRAWING No. 34

Revision E-23



NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

- TYPE "K" COPPER TUBING (SOFT DRAWN) OR POLYETHYLENE TUBING SDR 9 COPPER TUBE SIZE.
- IF THIS DISTANCE IS LESS THAN 6 FEET ONLY COPPER TUBING SHALL BE PERMITTED.
- BOTH RISERS SHALL BE TYPE "K" COPPER TUBING (HARD DRAWN) WITH COPPER/BRASS SOLDER FITTINGS AND ADAPTERS. ONLY LEAD FREE PIPE, FITTINGS, VALVES, SOLDER AND FLUX SHALL BE PERMITTED.
- 1 1/2" AND 2" METER STOPS SHALL BE EQUIPPED WITH LOCKING CAPS AND METER FLANGES.
- WHEN THE DEVICE IS INSTALLED PARALLEL TO A BUILDING WALL THERE SHALL BE A MINIMUM OF 2' BETWEEN THE EDGE OF THE DEVICE AND THE BUILDING WALL.
- BACKFLOW PREVENTION DEVICE SHALL BE EQUIPPED WITH BALL VALVES.
- BACKFLOW PREVENTION DEVICE SHALL BE SUPPORTED AT BOTH RISERS WITH A MINIMUM OF 2 - 1 5/8" STAINLESS STEEL UNISTRUTS. RISERS TO BE SECURED TO UNISTRUT WITH 304 STAINLESS STEEL MOUNTING HARDWARE AND 1/4" NEOPRENE INSULATORS.
- BACKFLOW DEVICES SHALL BE A MINIMUM OF 3' FROM BACK OF CURB.
- APPROVED BACKFLOW PREVENTION DEVICES WITH SILICONE RUBBER SEAL RINGS OR DISCS; 3/4" TO 2"
 - AMES LF4000B
 - APOLLO RPLF 4A
 - WATTS LF919
 - ZURN 975XL2

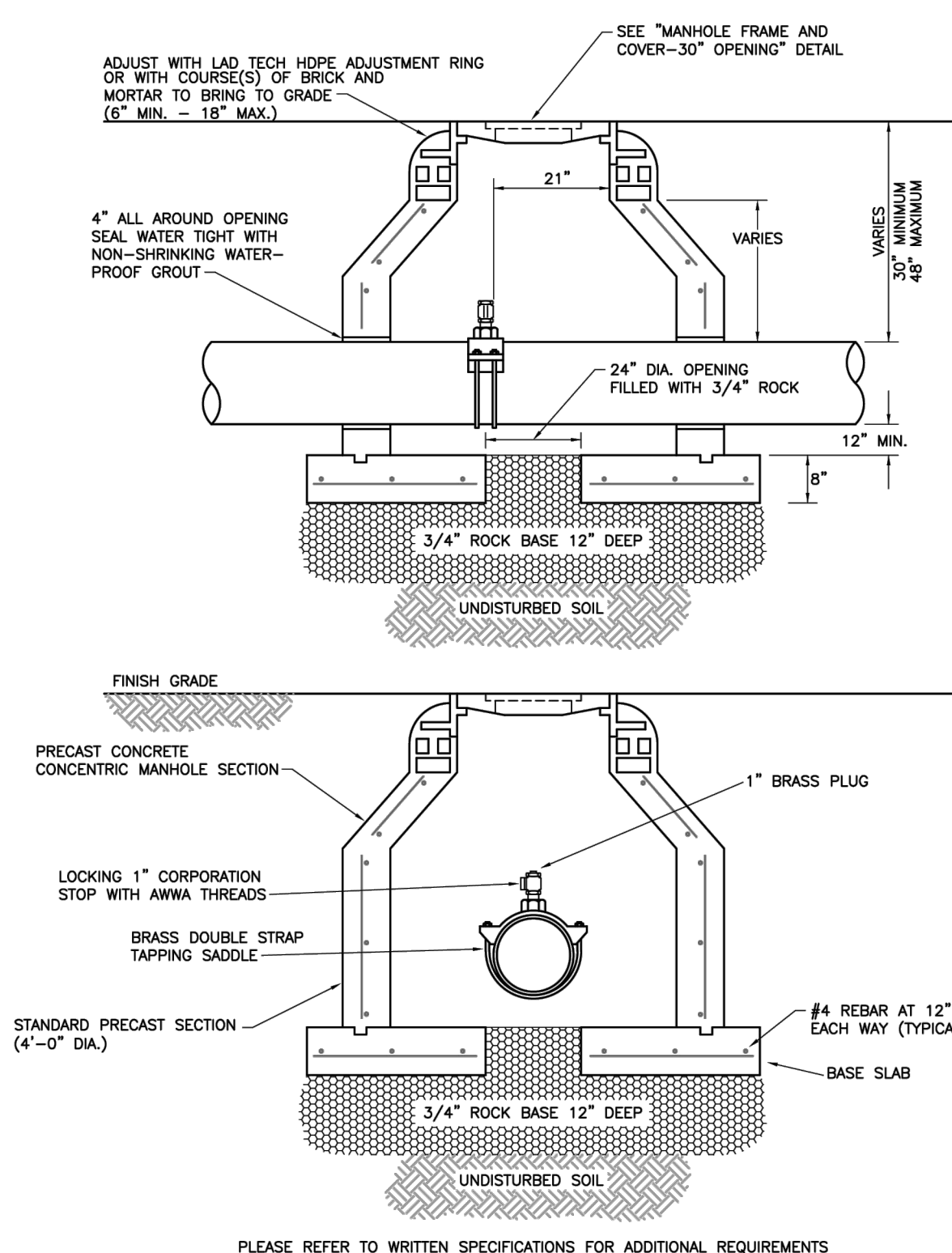
Private Auxiliary Water Supply Backflow Device

SEACOAST UTILITY AUTHORITY
CONSTRUCTION STANDARDS AND DETAILS

DATE APPROVED:
FEB 26, 2025

DRAWING No. 39

Revision B-23



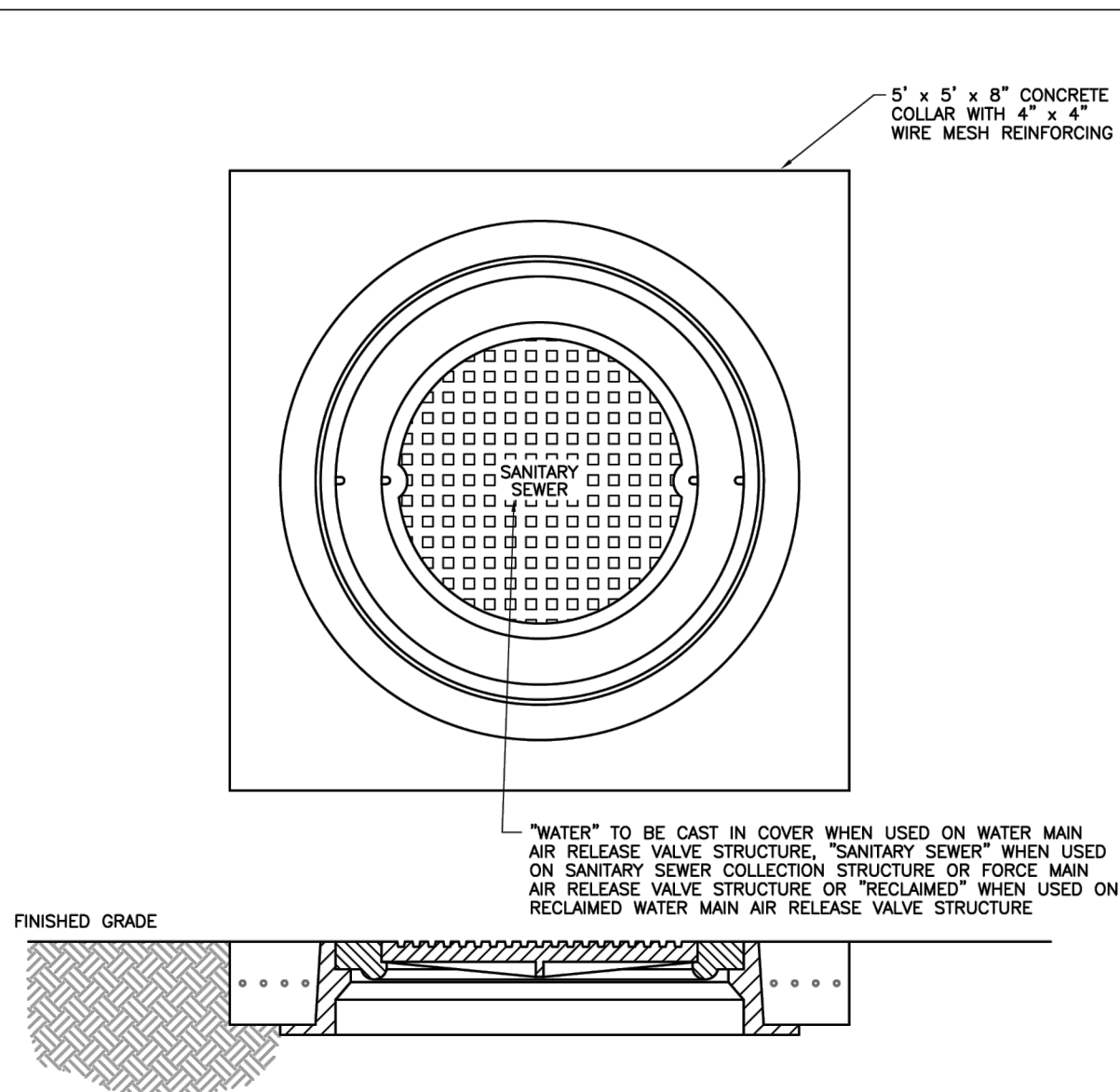
Manual Air Release Valve (Underground Water Main)

SEACOAST UTILITY AUTHORITY
CONSTRUCTION STANDARDS AND DETAILS

DATE APPROVED:
FEB 26, 2025

DRAWING No. 42

Revision C-24



NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

- IN GREEN AREAS OR ANY AREA DEEMED TO HAVE QUESTIONABLE DRAINAGE, A WATER TIGHT MANHOLE INSERT SUCH AS "SEWER GUARD" OR APPROVED EQUAL WILL BE REQUIRED.
- APPROVED MANHOLES (DOUBLE COVER TYPE):
 - U.S. FOUNDRY MODEL No. 230-40-M
 - VULCAN FOUNDRY MODEL No. VM-101
- CONCRETE COLLAR IS REQUIRED ONLY WHEN MANHOLE IS OUT OF PAVEMENT.

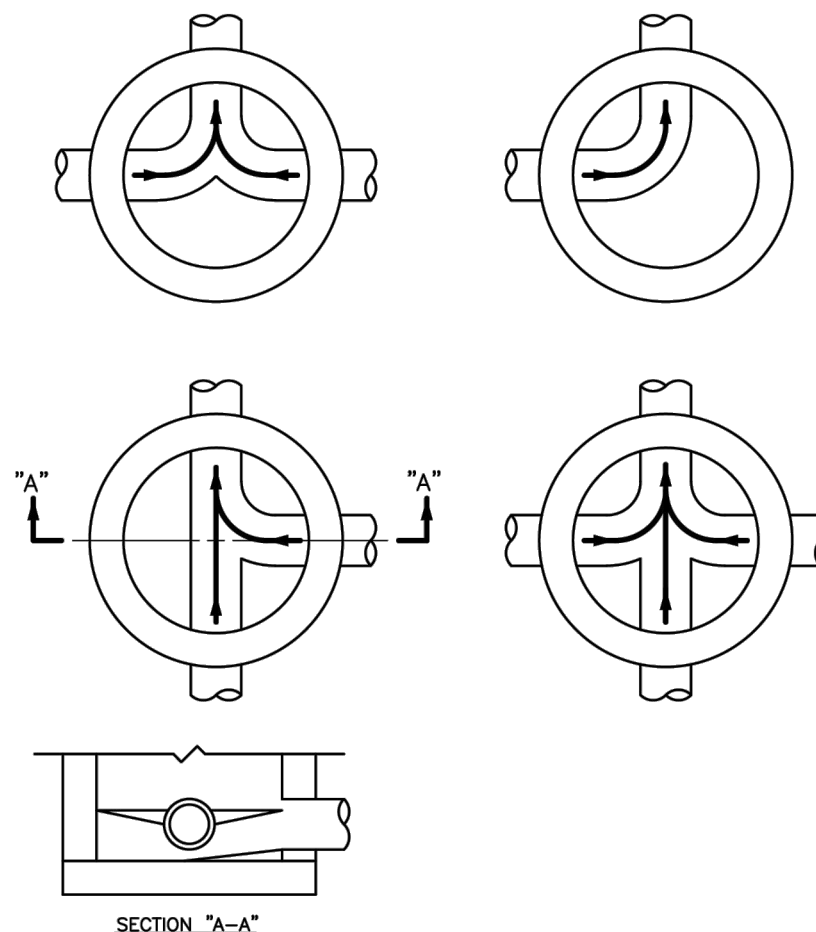
Manhole Frame and Cover (30" Opening)

SEACOAST UTILITY AUTHORITY
CONSTRUCTION STANDARDS AND DETAILS

DATE APPROVED:
FEB 26, 2025

DRAWING No. 50

Revision A-15



NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

- INVERT CHANNELS TO BE CONSTRUCTED FOR SMOOTH FLOW WITH NO OBSTRUCTIONS.
- SPILLWAYS SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT INVERT ELEVATIONS PROVIDING FOR SMOOTH FLOWS.
- CHANNELS FOR FUTURE CONSTRUCTIONS (STUBS) SHALL BE CONSTRUCTED, FILLED WITH SAND, AND COVERED WITH 1" OF MORTAR.
- SLOPE MANHOLE ITSELF WITH A 1:2 SLOPE FROM MANHOLE WALL TO CHANNEL.
- INVERT SHALL BE A MINIMUM OF 1/2 THE DIAMETER OF THE LARGEST PIPE OR 4" DEEP, WHICHEVER IS GREATER.

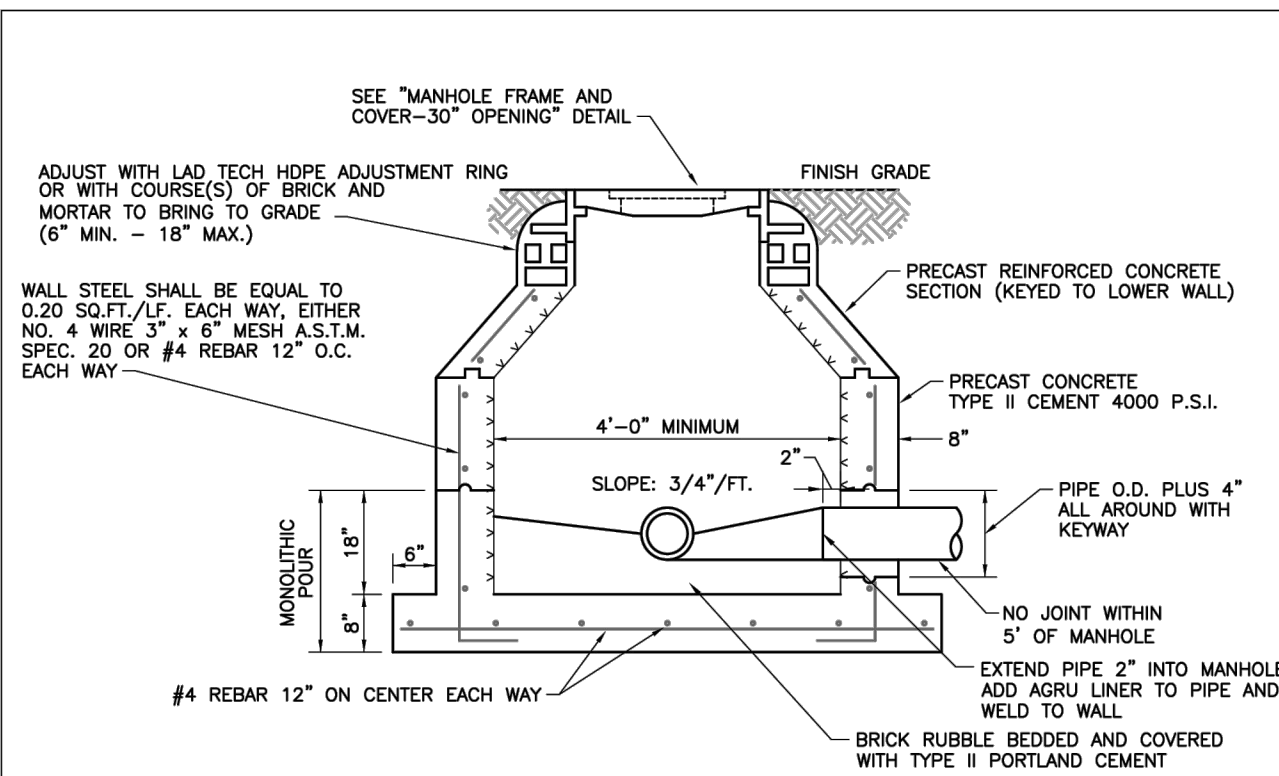
Flow Patterns for Invert Channels

SEACOAST UTILITY AUTHORITY
CONSTRUCTION STANDARDS AND DETAILS

DATE APPROVED:
FEB 26, 2025

DRAWING No. 51

Revision B-23



NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

- MANHOLES SHALL CONFORM TO A.S.T.M. C478(MIN.)
- WALL REINFORCEMENTS A.S.T.M. DESIGNATION A185-64.(LATEST REVISION)(MIN.)
- IF TWO CAGES OF WIRE MESH ARE USED, ONE SHALL BE POSITIONED 3" FROM THE INSIDE SURFACE AND ONE 3" FROM THE OUTSIDE SURFACE. IF A SINGLE CAGE OR REBAR IS USED, IT SHALL BE CENTERED WITHIN WALL THICKNESS. NO EXPOSED STEEL SHALL BE PERMITTED.
- LIFT HOLES THROUGH PRECAST STRUCTURE ARE PERMITTED.
- A MINIMUM OF SEVEN DAYS CURE TIME IS REQUIRED PRIOR TO DELIVERY.
- ALL PIPE HOLES SHALL BE PRECAST OR CORE DRILLED. OVERSIZED HOLES WILL BE REJECTED.
- ANY VISIBLE REINFORCING WIRE, STEEL OR HONEYCOMBS SHALL BE CAUSE FOR REJECTION.
- SEE TECHNICAL SPECIFICATIONS FOR BEDDING REQUIREMENTS.
- "RAM-NEK" OR APPROVED EQUAL AT ALL RISER JOINTS (1/2" THICK WITH WIDTH AT LEAST 1/2 THE WALL THICKNESS) WITH GROUT ON INSIDE AND OUTSIDE.
- ALL OPENINGS SHALL BE SEALED USING ONLY TYPE II PORTLAND CEMENT/SAND MORTAR AND POTABLE WATER FOR MUD WORK ON JOINTS, LIFTING HOLES, INVERTS, ETC. WHEN AN ACCELERATOR IS NECESSARY, "ANTI HYDRO" IS THE ONLY PRODUCT APPROVED.
- BRICK MASONRY CONSTRUCTION TO BE STUCCOED WITH 3/4" TYPE II CEMENT INSIDE AND OUTSIDE, AND INSIDE TO BE COATED WITH TWO COATS OF KOPPERS 300 OR APPROVED EQUAL.
- A FLOW CHANNEL SHALL BE CONSTRUCTED INSIDE MANHOLE TO DIRECT INFLUENT INTO FLOW STREAM, AND COATED WITH TWO COATS OF KOPPERS 300 OR APPROVED EQUAL.
- INTERIOR OF ALL SANITARY MANHOLES SHALL HAVE AGRU SURE GRIP CONCRETE PROTECTIVE LINER INSTALLED AT THE TIME OF MANUFACTURING. SEE "AGRU SURE GRIP LINER DETAILS" DRAWING FOR ADDITIONAL AGRU SURE GRIP REQUIREMENTS.

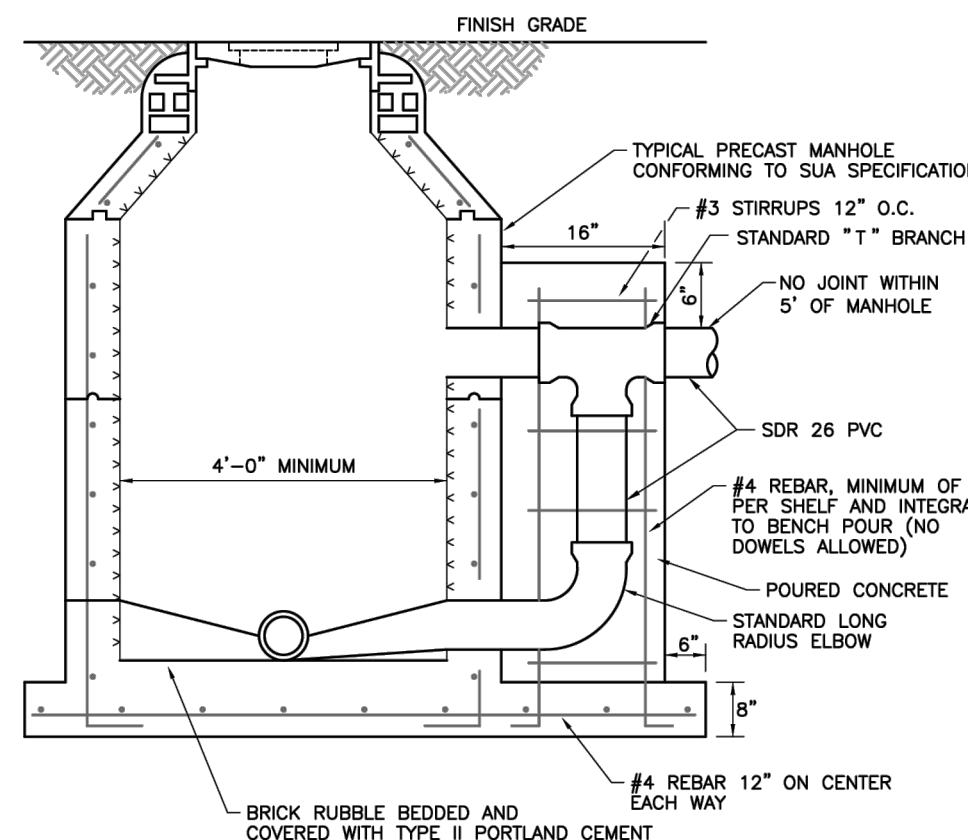
Standard Precast Manhole

SEACOAST UTILITY AUTHORITY
CONSTRUCTION STANDARDS AND DETAILS

DATE APPROVED:
FEB 26, 2025

DRAWING No. 52

Revision C-24



NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

- CONCRETE ENCASEMENT FOR DROP CONNECTION TO BE FIELD POURED.
- DROP CONNECTIONS SHALL BE REQUIRED WHENEVER AN INFLUENT SEWER IS LOCATED TWO (2) FEET OR MORE ABOVE THE MAIN INVERT CHANNEL.
- A FLOW CHANNEL SHALL BE CONSTRUCTED INSIDE MANHOLE TO DIRECT INFLUENT INTO FLOW STREAM.
- WHEN PVC IS USED IN SANITARY SEWER LINES, SOLVENT TYPE JOINT PVC FITTINGS MAY BE UTILIZED IN THE DROP ASSEMBLY ONLY.
- MINIMUM PIPE SIZE FOR DROP IS 8".
- SEE "STANDARD PRECAST MANHOLE" DETAIL FOR ADDITIONAL REQUIREMENTS.

Precast Manhole - Drop Connection Type A

SEACOAST UTILITY AUTHORITY
CONSTRUCTION STANDARDS AND DETAILS

DATE APPROVED:
FEB 26, 2025

DRAWING No. 53

Revision B-24

THE WATERFORD
INDEPENDENT LIVING & MEMORY CARE EXPANSION
601 UNIVERSE BOULEVARD
JUNO BEACH, FLORIDA 33408

WATER AND SEWER DETAILS

SHEET

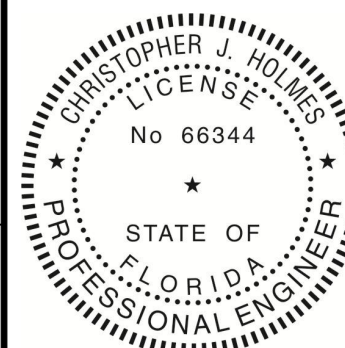
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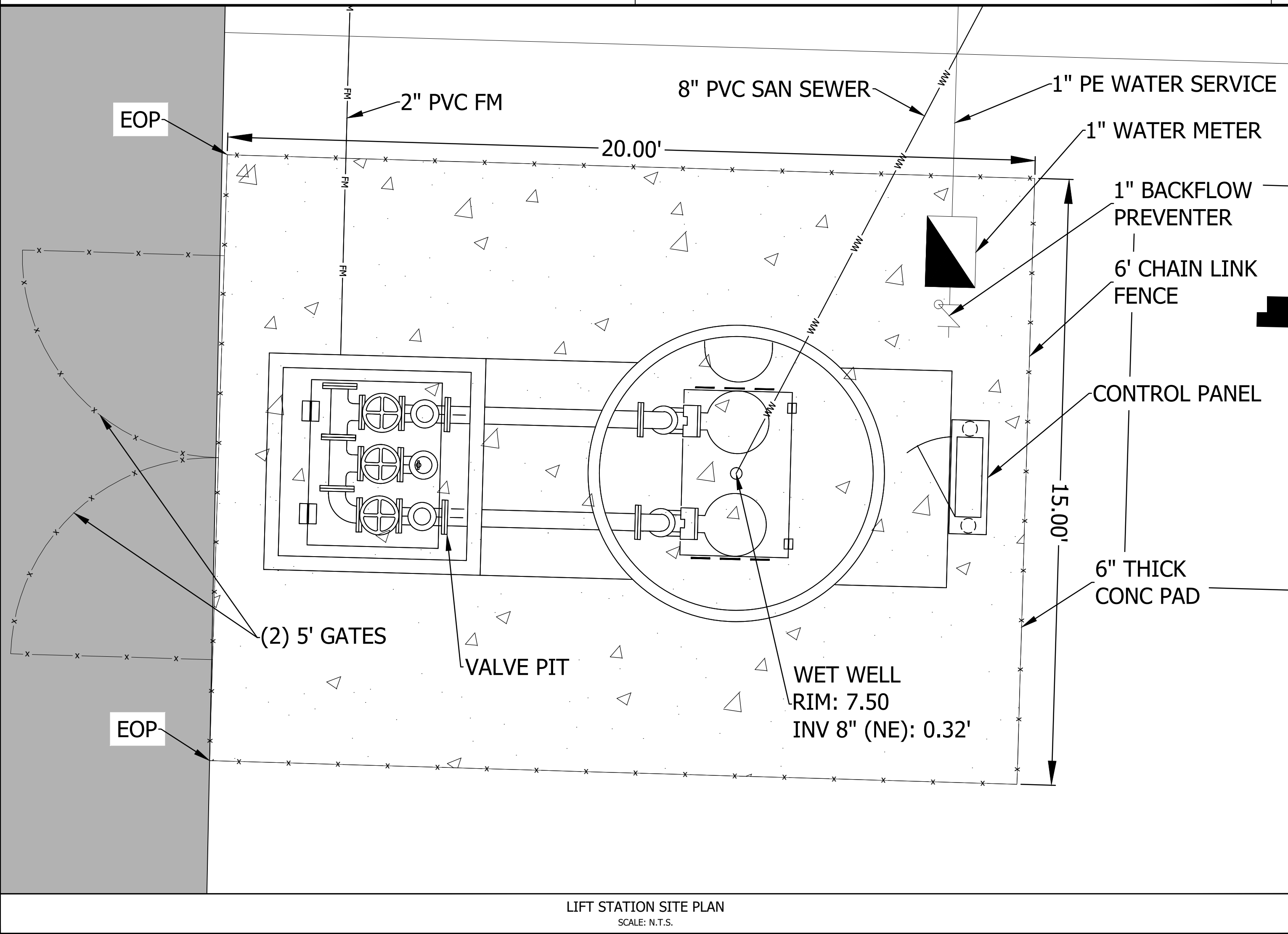
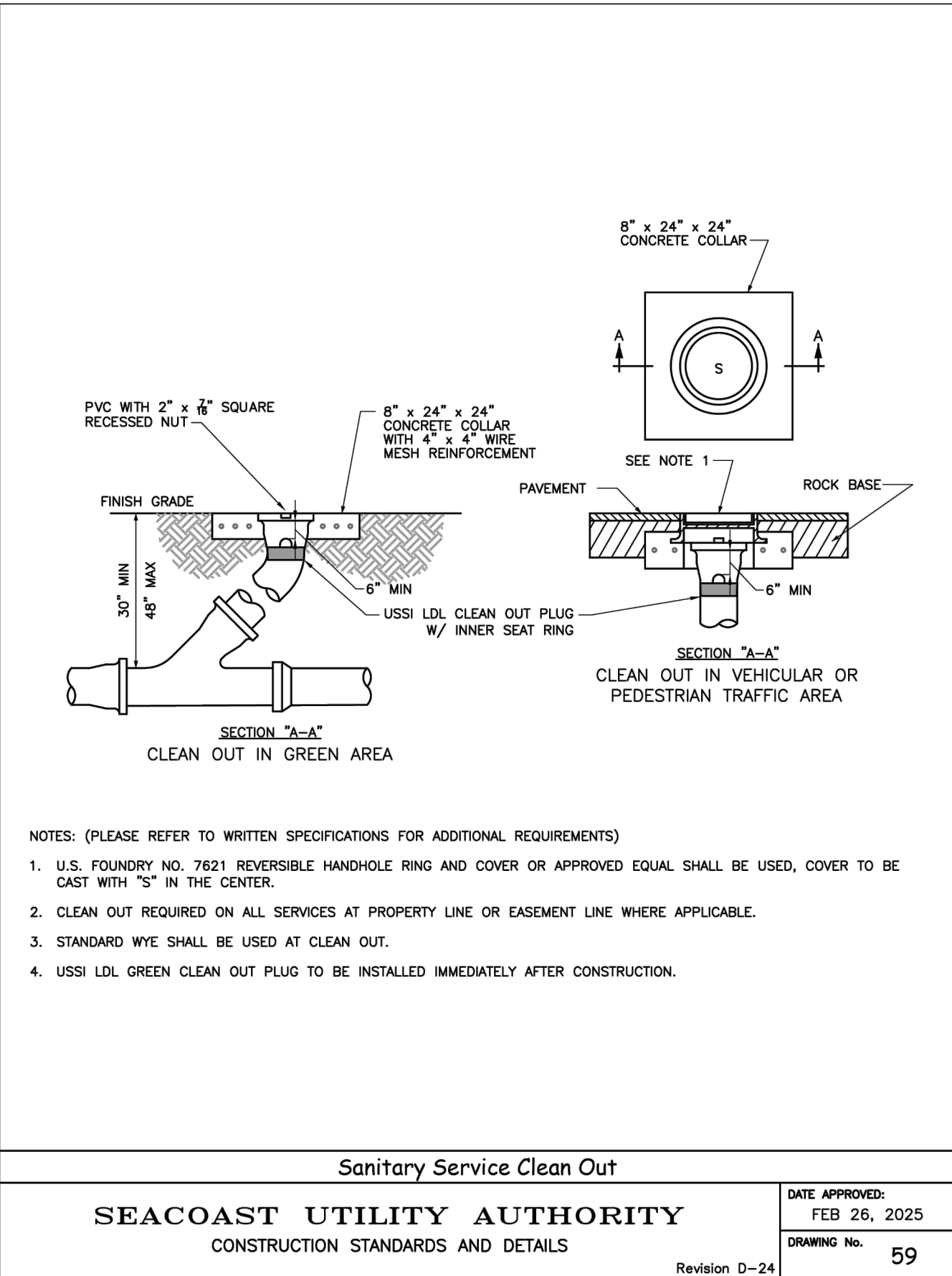
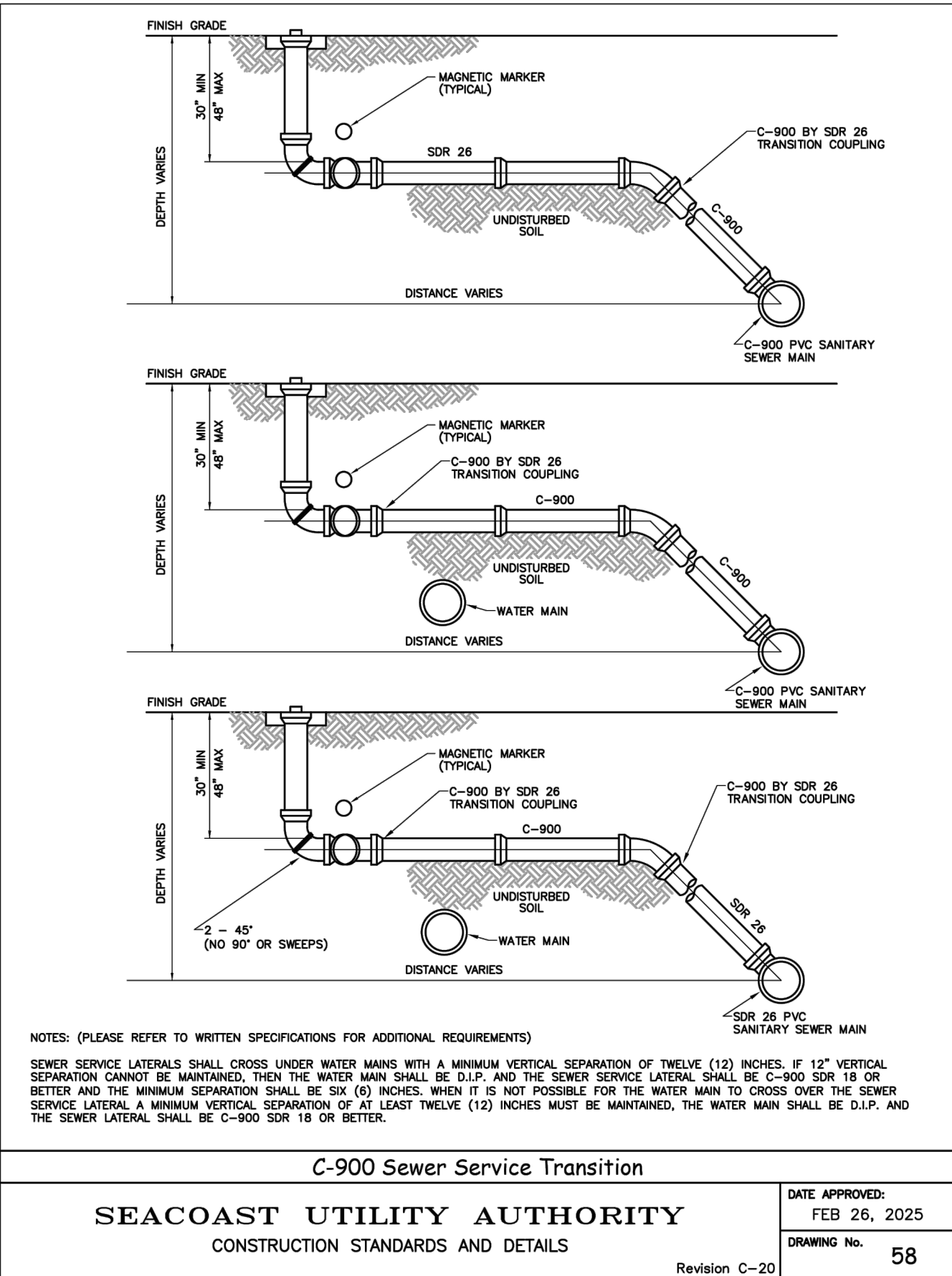
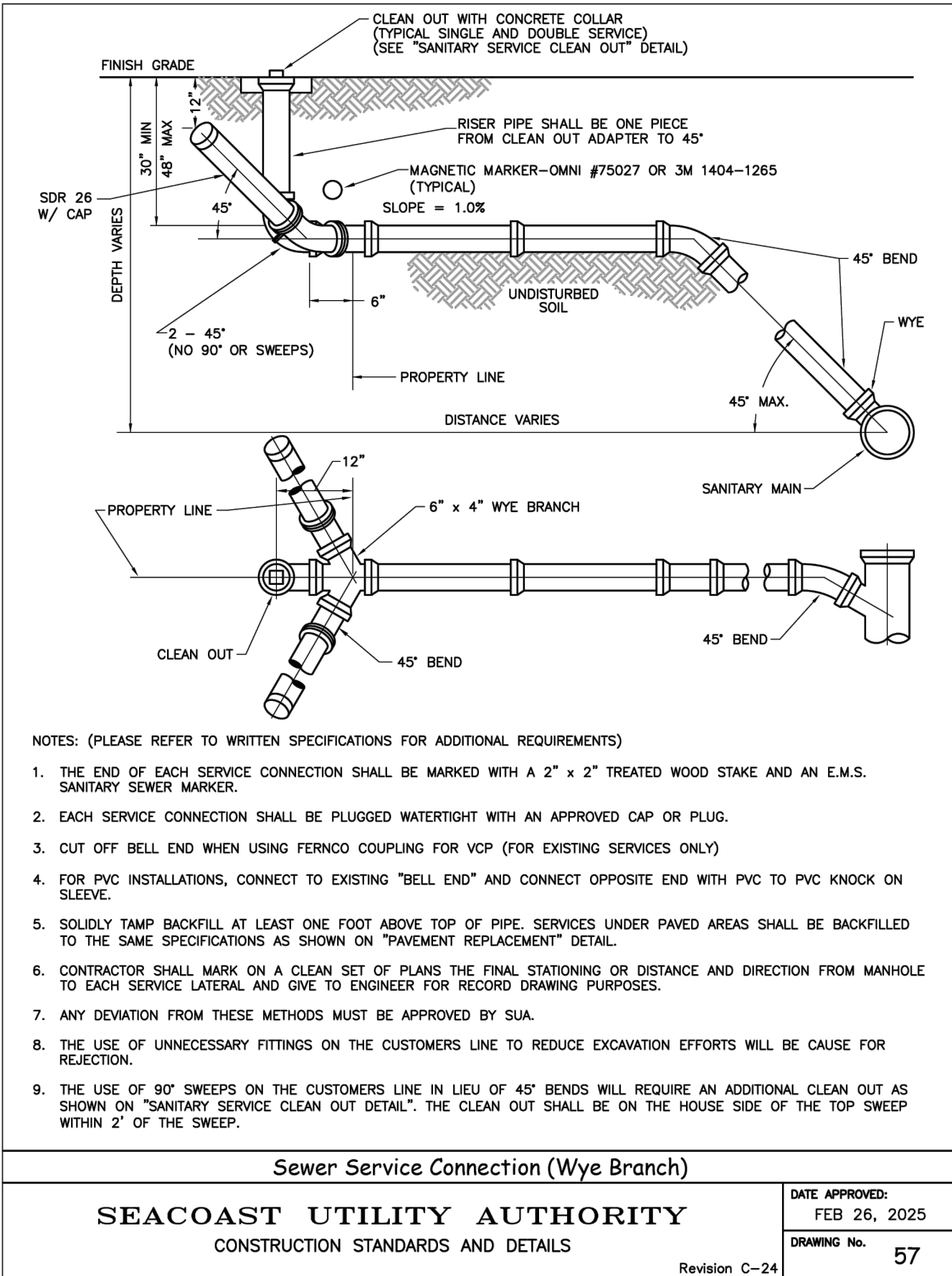
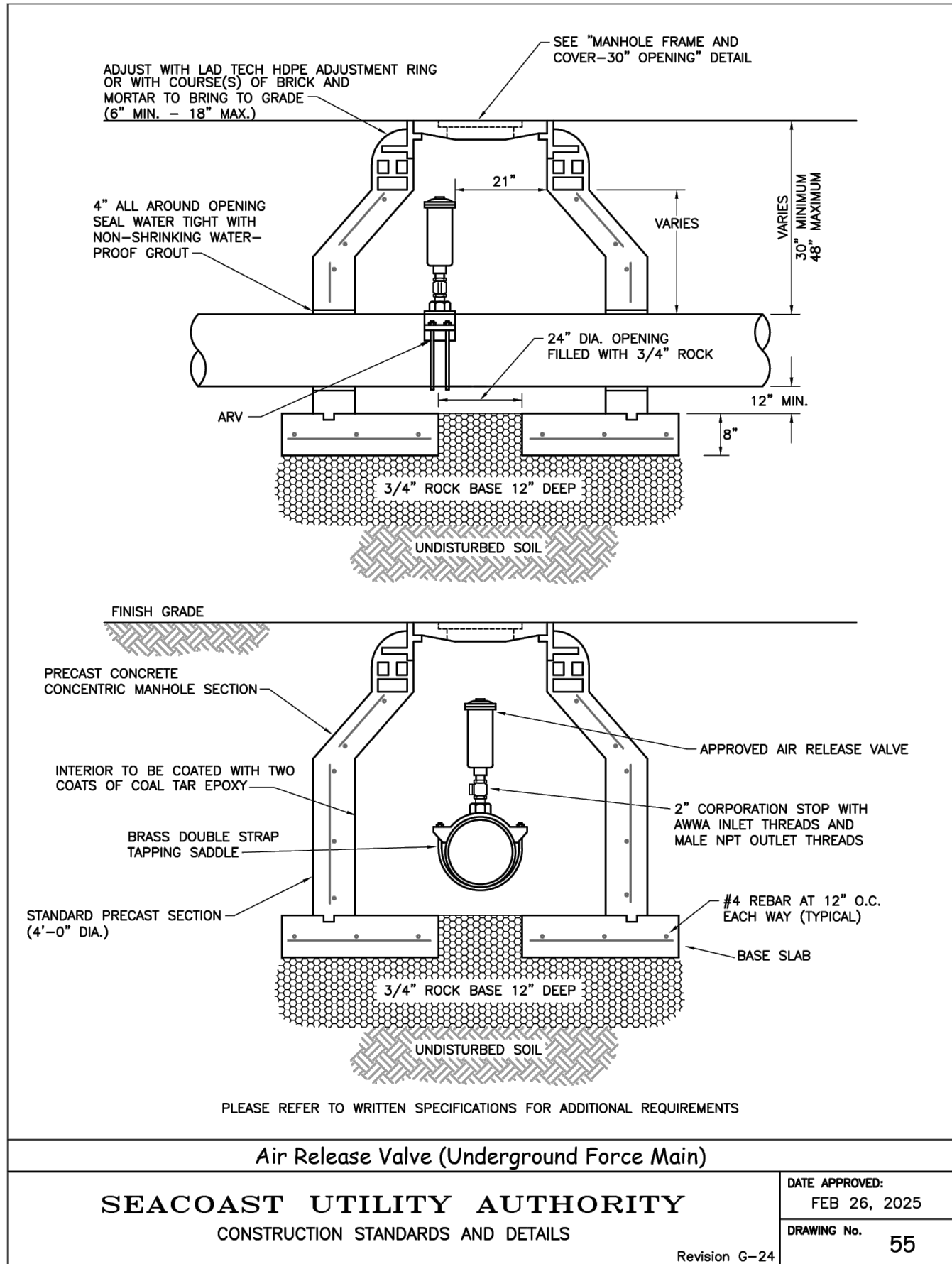
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REVISION

DATE

BY



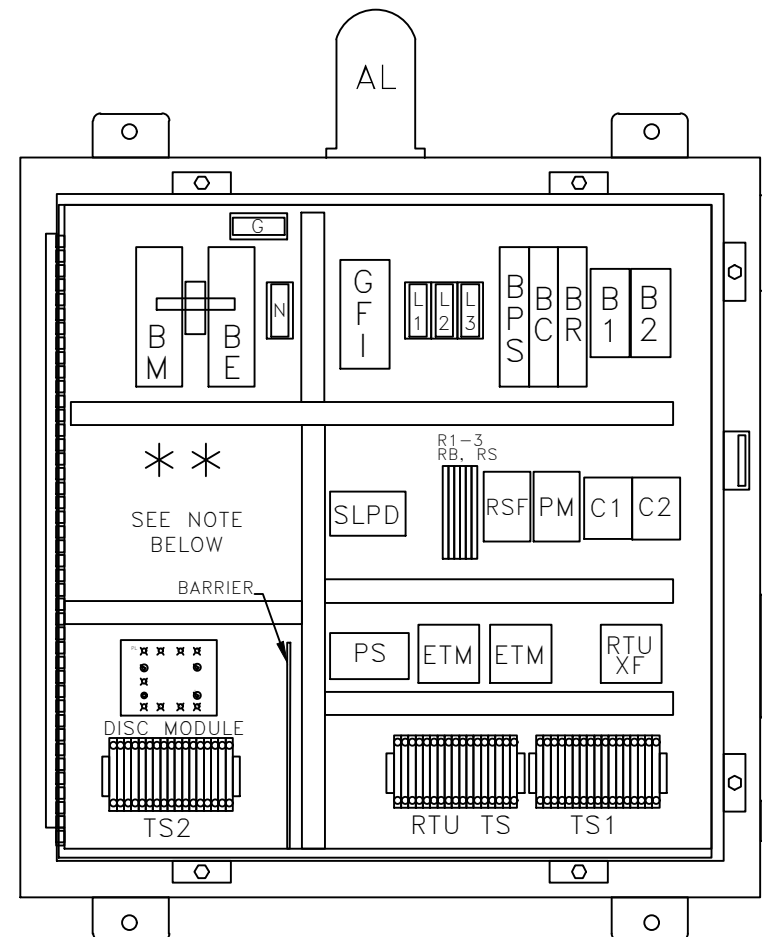
THE WATERFORD
INDEPENDENT LIVING & MEMORY CARE EXPANSION
601 UNIVERSE BOULEVARD
JUNO BEACH, FLORIDA 33408

WATER AND SEWER DETAILS

CONTROL CENTER DESIGNED
& MANUFACTURED TO MEET
ALL D.E.P. REQUIREMENTS

MOPS CONTROL CENTER

SEE SCHEDULE FOR
ELECTRICAL SERVICE REQUIREMENTS



INTERIOR LAYOUT
(DOOR NOT SHOWN FOR CLARITY)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
NEU	120V	RTU	PUMP	MOTOR	MT	1	2	3	4	5	6	7	8	9	10	11	12	13	14
RTU	120V	RTU	PUMP	MOTOR	MT	1	2	3	4	5	6	7	8	9	10	11	12	13	14
RTU	120V	RTU	PUMP	MOTOR	MT	1	2	3	4	5	6	7	8	9	10	11	12	13	14

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
NEU	120V	RTU	PUMP	MOTOR	MT	1	2	3	4	5	6	7	8	9	10	11	12	13	14
RTU	120V	RTU	PUMP	MOTOR	MT	1	2	3	4	5	6	7	8	9	10	11	12	13	14
RTU	120V	RTU	PUMP	MOTOR	MT	1	2	3	4	5	6	7	8	9	10	11	12	13	14

PANEL COMPONENTS

- AL ALARM LIGHT
- AL1 ALTERNATOR (ON DISC)
- AS ALARM SILENCE SWITCH
- B1-2 MOTOR BREAKERS
- BC CONTROL BREAKER
- BE EMERGENCY BREAKER
- BM MAIN BREAKER
- BPS POWER SUPPLY BREAKER
- BR RECEPTACLE BREAKER
- C1-2 CONTACTOR, MOTOR START
- DISC CONVENIENCE RECEPTACLE
- ETM DUPLEX INTRINSICALLY SAFE CONTROLLER
- G ELAPSED TIME METER
- GR GROUND BLOCK
- H GENERATOR RECEPTACLE
- HDA HORN
- L1,2,3 POWER DISTRIBUTION BLOCK
- N NEUTRAL BLOCK
- PL PILOT LIGHT (ON DISC)
- PM PHASE MONITOR
- PS POWER SUPPLY
- R1-3 RELAYS
- RB BATTERY RELAY
- RS SILENCE RELAY
- RSF SEAL FAIL RELAY
- RTUXF RTU TRANSFORMER
- SLPD SURGE/LIGHTNING PROTECTION DEV.
- TS1 TERMINAL STRIP FOR PUMPS
- TS2 TERMINAL STRIP FOR FLOATS

ENCLOSURE

NEMA 4X Stainless Steel
Single Door w/ Padlock Hasp
30" H x 30" W x 8" D

NOTES:

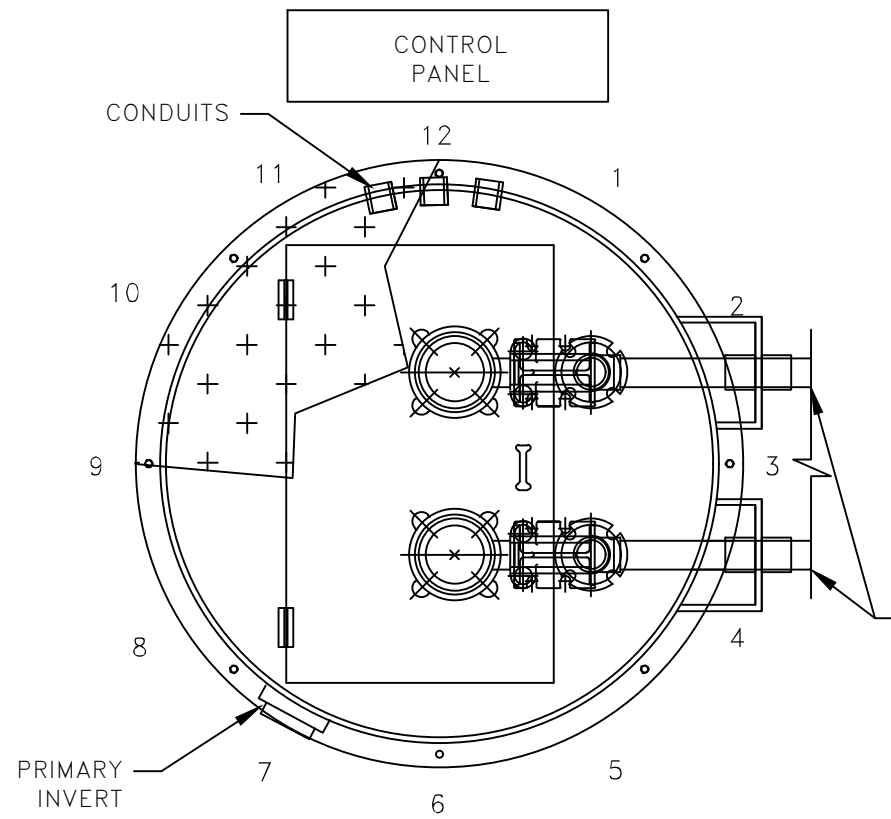
- PANEL LABELED FOR U.L. 508A "MOTOR CONTROL CENTERS" AND U.L. 698A "HAZARDOUS LOCATION PANELS" (INTRINSICALLY SAFE)
- COMPLETE BACK-UP, SELF-CHARGING BATTERY, WITH VISUAL/AUDIO ALARM SYSTEM PER RSF=45.
- SEE CONTROL CENTER DETAIL SHEET FOR ANY ADDITIONAL NOTES.

** THIS SPACE AVAILABLE FOR CAPACITORS FOR SINGLE PHASE OR TRANSFORMER FOR 460V.

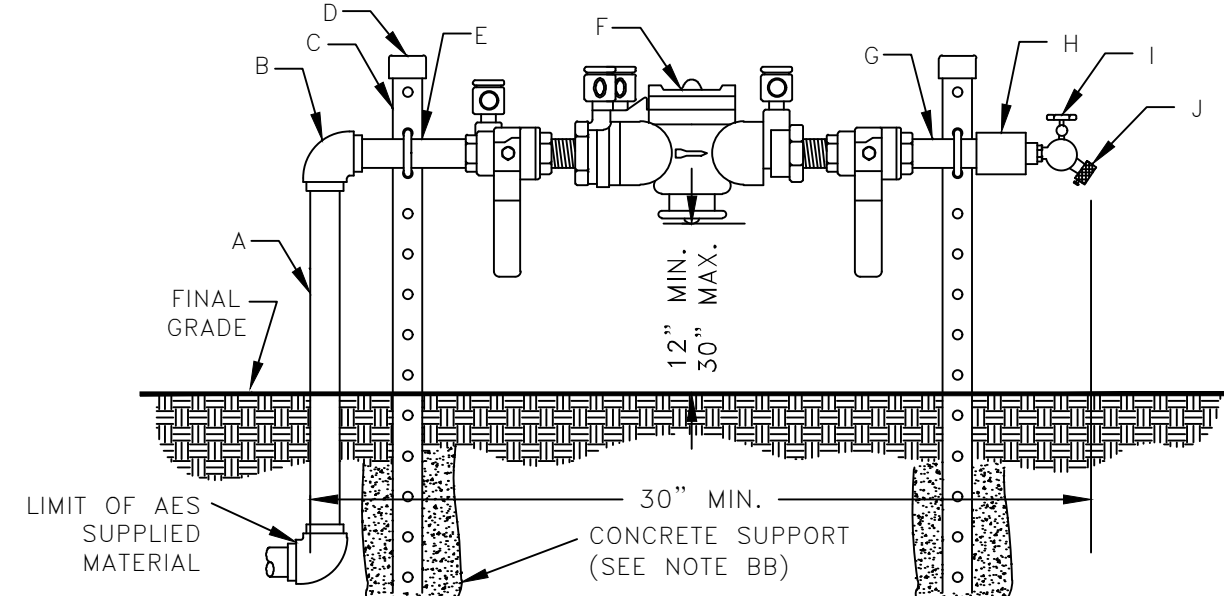
HUB AND INVERT LOCATION

ITEMS	CLOCK POSITION
DISCHARGE LINES	3:00
PRIMARY INVERT	7:00
SECONDARY INVERT	N/A
LOCATION OF CONTROL PANEL	12:00

NOTE: BACKFILL AROUND LIFT STATION FROM ANTI-FLOATATION RING UP TO FINISHED GRADE SHALL BE COMMON FILL COMPACTED IN 12-INCH MAX. LIFTS TO 98% DENSITY PER AASHTO T-180. CONTRACTOR SHALL EXERCISE CARE NOT TO DAMAGE WETWELL DURING COMPACTION.



SCHEMATIC BASED ON THE STATION'S DISCHARGE BEING LOCATED AT THE #3 CLOCK POSITION. SEE SCHEDULE FOR LOCATION OF INVERTS AND CONTROL PANEL. LOCATIONS SUBJECT TO CHANGE.

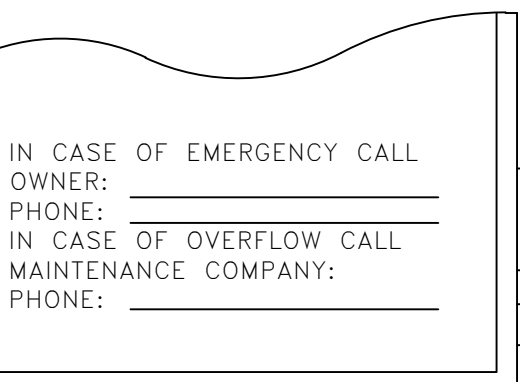


DETAIL B

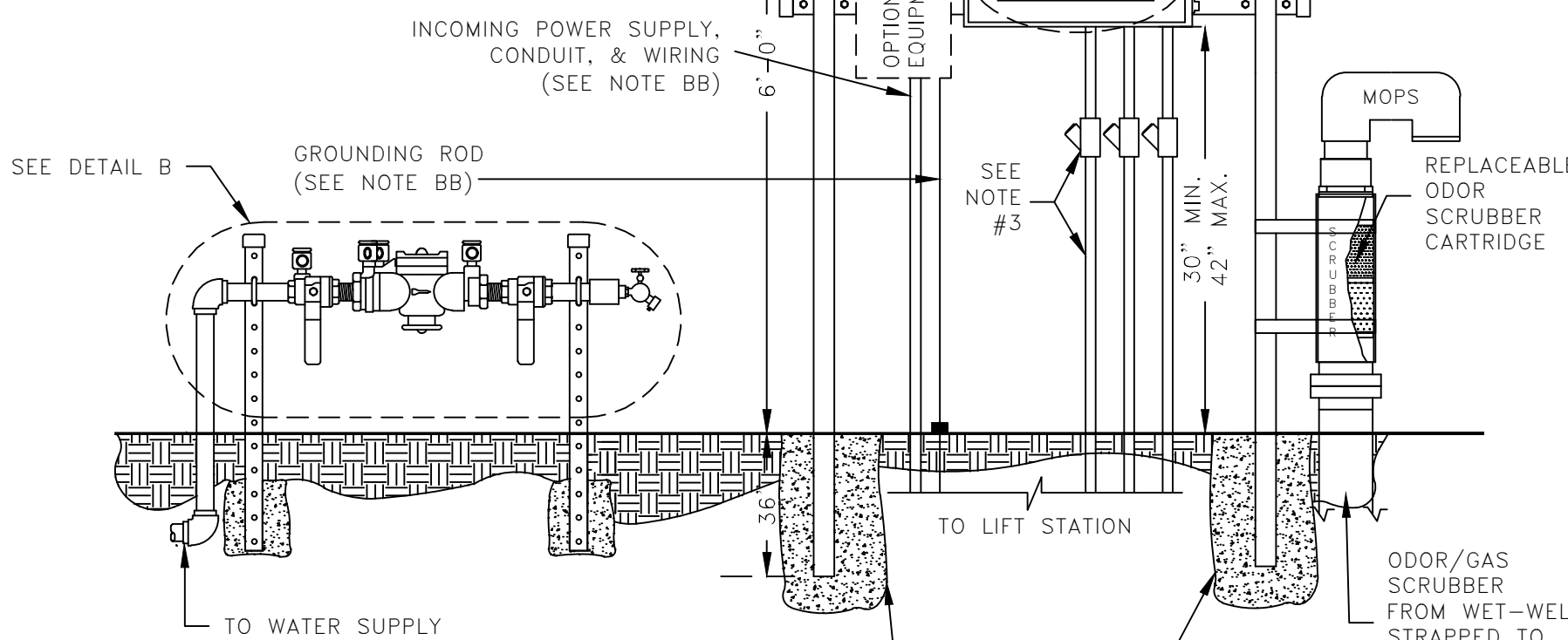
R.P.Z. BACKFLOW PREVENTER ASSEMBLY DETAIL

U.S.C. AND A.S.S.E. APPROVED

N.T.S.

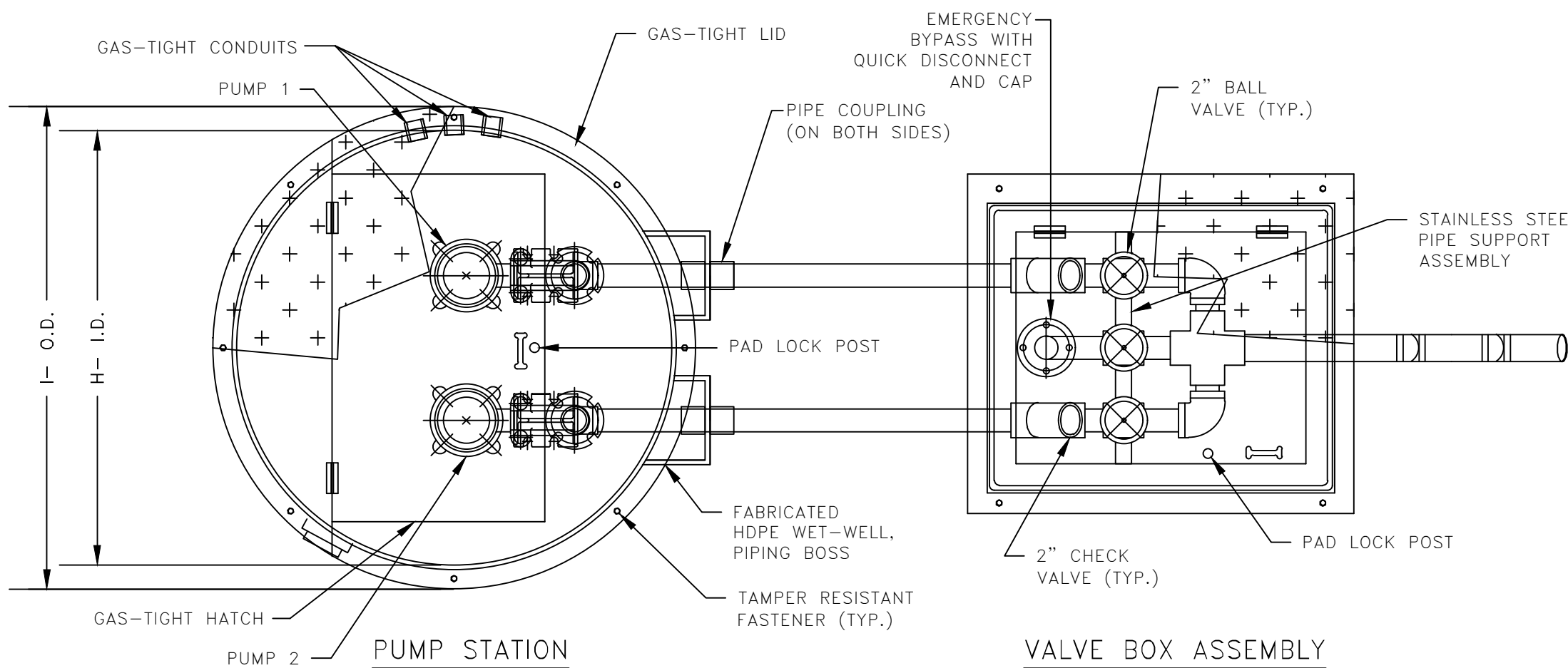


DETAIL C
(SUPPLIED BY MAINT. COMPANY)



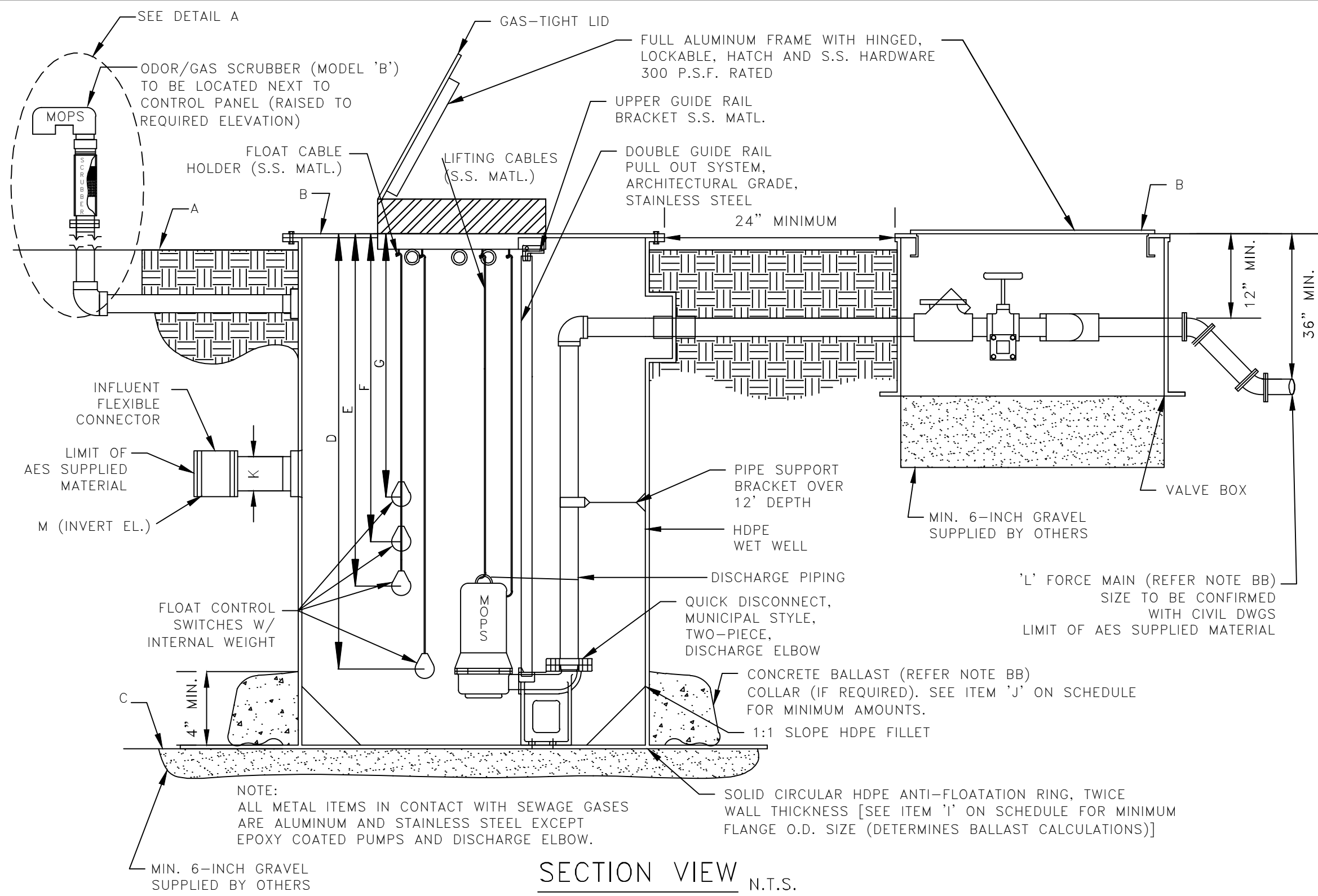
CONTROL CENTER ASSEMBLY AND INSTALLATION

N.T.S.



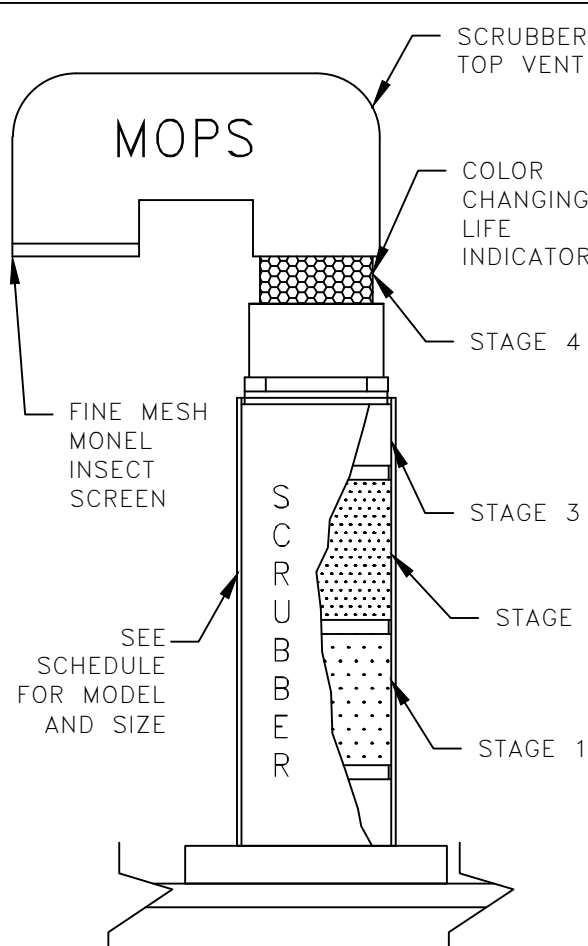
TOP VIEW

N.T.S.



SECTION VIEW

N.T.S.



DETAIL A

MOPS ODOR/GAS SCRUBBER

NOTES:

- SCRUBBER DESIGNED TO REMOVE TOXIC SEWAGE GASES, H₂S, AND OFFENSIVE ODORS SUCH AS SKATOLES AND MERCAPTANS. SCRUBBER'S LIFE EXPECTANCY CALCULATIONS ARE INCLUDED IN SHOP DRAWING SUBMITTALS.
- SCRUBBER UNIT CAN BE MOUNTED INSIDE WET-WELL OR TOP MOUNTED.
- MODEL 'B' SHOWN.

MOPS

MANUFACTURED ODORLESS PUMP STATION
ATLANTIC ENVIRONMENTAL SYSTEMS, INC.

LAKE WORTH, FL 33461
PH: (561) 547-8080 FAX: (561) 547-3999

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PRIVATE SERIES

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MOPS PUMP STATION SCHEDULE

MOPS SERIES	ITEM DESCRIPTION
INITIAL DESIGN FLOW (G.P.M.)	100 YEAR FLOOD ELEVATION
INITIAL DESIGN HEAD (T.D.H.)	25 YEAR FLOOD ELEVATION
SECONDARY DESIGN FLOW (G.P.M.)	A GRADE ELEVATION
SECONDARY DESIGN HEAD (T.D.H.)	B TOP ELEVATION OF WET WELL
RATED PERFORMANCE SPEED	C BOTTOM ELEVATION OF WET WELL
RATED MOTOR HORSEPOWER	D ALL PUMPS OFF ELEVATION
SUBMERSIBLE PUMP TYPE (P-1,P-2)	E LEAD PUMP ON ELEVATION
PUMP MODEL NUMBER	F LAG PUMP ON ELEVATION
SERVICE ENTRANCE VOLTAGE	G HIGH ALARM ELEVATION
SERVICE ENTRANCE PHASE	H INSIDE DIAMETER OF WET-WELL
CONTROL CENTER FULL LOAD AMPS	I OUTSIDE DIAMETER OF ANTI-FLOATATION RING
NEMA 4XSS PAINTED STEEL DISCONNECT SWITCH, RATED AMPS	J MINIMUM CUBIC FEET OF CONCRETE BALLAST (CU YDS)
WET WELL SCOURER SYSTEM	K INVERT PIPE DIAMETER
REMOTE STATION MONITOR (TELEMETRY)	L FORCE MAIN DIAMETER
ON-SITE GENERATOR SYSTEM	M PRIMARY INVERT ELEVATION
	N SECONDARY INVERT ELEVATION

MOPS EQUIPMENT IDENTIFICATION	QTY.	MODEL DESIGNATION
MOPS PUMP STATION	1	B22-48144-C-2.0-HDPE
MOPS VALVE BOX ASSEMBLY (VBA)	1	VBA-22
MOPS ODOR/GAS SCRUBBER (OGS)	1	OGS-B
MOPS R.P.Z. ASSEMBLY	1	75
MOPS CONTROL CENTER	1	PSC-222-2.0
MOPS DISCONNECT SWITCH	1	FDS-30-3-2-SS
MOPS CONTROL CENTER MOUNTING ASSEMBLY	1	CCMA-32SS
MOPS WET WELL SCOURER SYSTEM	0	N/A
MOPS REMOTE STATION MONITOR	1	PROVIDED WITH SERVICE AGREEMENT
1st YEAR SERVICE/MAINTENANCE CONTRACT	1	LEVEL 1 WITH REMOTE MONITOR
MOPS ON-SITE GENERATOR SYSTEM	0	N/A
MOPS FIELD SERVICE WORK	1	CONTROL INSTALLATION & START-UP

MOPS PUMP STATION COMPLIANCE NOTES:

THIS PUMP STATION DESIGN COMPLIES WITH THE FOLLOWING REQUIRED STANDARDS:

- STATE OF FLORIDA ENVIRONMENTAL PROTECTION STANDARDS
- FLORIDA ADMINISTRATIVE CODE (F.A.C.): 62-640.400- COLLECTION AND TRANSMISSION SYSTEMS
- NATIONAL ELECTRIC CODE (NEC) CLASS 1, DIVISION 1, GROUP D- HAZARDOUS LOCATIONS
- UNDERWRITER'S LABORATORIES (U.L.) 508A-MOTOR CONTROL CENTERS AND U.L. 698A-INSTRINSICALLY SAFE CONTROL CENTERS
- RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES (1997 EDITION).

- PUMPS ARE RATED BY FACTORY MUTUAL FOR CLASS 1, DIVISION 1, GROUP D ATMOSPHERES AS REQUIRED BY NEC.
- THE CONTROL CENTER INCORPORATES INTRINSICALLY SAFE RELAYS AND IS LISTED TO UL 698A INTRINSICALLY SAFE FOR CLASS 1, DIVISION 1 ATMOSPHERES.
- THE CONDUIT PROVIDED, ALONG WITH CONDUIT GAS-SEAL-OFFS, ARE RATED FOR CLASS 1, DIVISION 1 LOCATIONS.
- THE WASTEWATER PUMPS AND THE CONTROL CENTER INCORPORATE A MECHANICAL SEAL FAILURE DETECTION AND NOTIFICATION SYSTEM.
- THE CONTROL CENTER INCLUDES EITHER A REMOTE TELEMETRY UNIT (RTU) OR A SELF-CHARGING, BACK-UP ALARM SYSTEM TO OPERATE ON POWER FAILURE.
- THE PUMP STATION INCORPORATES AN ODORLESS DESIGN WITH A SCRUBBER SYSTEM TO CONTROL TOXIC GASES AND ODORS FOR COMPLIANCE TO F.A.C. 62-604.400.
- THE BOTTOM OF THE TOP RIM ELEVATION OF PUMP STATION MUST BE LOCATED AT A HIGHER ELEVATION THAN THE 25 YEAR FLOOD ELEVATION. THE LISTED 25 YEAR FLOOD ELEVATION PROVIDED BY SITE CIVIL ENGINEER.
- THE BOTTOM ELEVATION OF THE MOPS CONTROL CENTER MUST BE LOCATED AT A HIGHER ELEVATION THAN THE 100 YEAR FLOOD ELEVATION. THE LISTED 100 YEAR FLOOD ELEVATION PROVIDED BY THE SITE CIVIL ENGINEER.

MOPS ENGINEERING NOTES:

- AA. THE HORSEPOWER SHOWN ON THE SCHEDULE IS A MINIMUM HORSEPOWER REQUIREMENT BASED ON THE STATION'S DESIGN CRITERIA AND THE REQUIRE TORQUE. (LOWER RATED HORSEPOWER EQUIPMENT WILL NOT BE ACCEPTABLE.)
- BB. THESE ITEMS ARE NOT SUPPLIED BY A.E.S. WITH THE MOPS STATION.
- CC. INVERT ELEVATIONS BASED ON INSIDE BOTTOM OF PIPE.
- DD. THE MOPS CONTROL ASSEMBLY CONSISTS OF THE FOLLOWING: CONTROL CENTER DISCONNECT SWITCH, MOUNTING ASSEMBLY, ELECTRICAL CONDUITS, AND SEAL-OFF. THESE ITEMS MUST BE SUPPLIED AND INSTALLED BY THE MOPS PUMP STATION MANUFACTURER TO VALIDATE MOPS WARRANTY PROGRAM.
- EE. FOR STATIONS IN MIAMI-DADE COUNTY, THE MOPS PUMP STATION IS SUPPLIED WITH A REMOTE TELEMETRY MONITORING UNIT AND A.E.S. MAINTENANCE SERVICE. THE R.T.U. ALLOWS FOR MONITORING OF LAG ALARM, HIGH ALARM, AND POWER FAILURE PER CHAPTER 24.42.2(5). THE R.T.U. IS EQUIPPED WITH A BATTERY BACK UP AND IS INSTALLED ABOVE THE 100 YEAR FLOOD ELEVATION.
- THE MOPS WASTEWATER PUMP STATION DESIGN AND EQUIPMENT SHOWN ON THIS DRAWING HAS BEEN REVIEWED, PERMITTED, AND CERTIFIED AS COMPLYING WITH ALL THE STATE OF FLORIDA D.E.P. AND LOCAL REQUIREMENTS. ANY SUBSTITUTION FROM THIS DESIGN MAY REQUIRE NEW PERMITS, APPLICATION FEES, AND ENGINEERING SERVICES FOR RE-CERTIFICATION AND DESIGN REVIEW.

P.E. CERTIFICATION:

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LIFT STATION DETAILS

SHEET
C-710
OF
2920.04