## FINAL ENGINEERING PLANS

FOR

# NITTI - SCHAUMBURG DEVELOPMENT

SCHAUMBURG, ILLINOIS

## **PROJECT TEAM**

### OWNER/DEVELOPER

Nitti Development, LLC 399 Wall Street, Suite N Glendale Heights, Illinois 60139 630 980 4364 Contact: Nico Nitti

## **ENGINEER**

V3 Companies, Ltd. 7325 Janes Avenue Woodridge, Illinois 60517 630 724 9200 Project Manager: Bryan C. Rieger, P.E. brieger@v3co.com
Project Engineer: Daniel, E. Free, P.E. dfree@v3co.com

## SURVEYOR

V3 Companies, Ltd. 7325 Janes Avenue Woodridge, Illinois 60517 630 724 9200 Contact: Chuck Bartosz

**BENCHMARKS** 

DESCRIPTION: STAINLESS STEEL ROD LOCATED 164.0' NORTH OF THE JUNCTION OF TIMBER DRIVE WITH DAVID LANE, 393.7' SOUTH OF THE DRIVEWAY FOR 950 DAVID LANE, 23.0' WEST OF

DESCRIPTION: SOUTHWEST ARROW BOLT ON FIRE HYDRANT LOCATED 13.5' WEST OF THE EAST

LINE OF SUMMIT DRIVE, 202.0' NORTH OF THE SOUTHWESTERLY PROPERTY CORNER

THE CURB OF DAVID LANE AND 3.3' EAST OF A JOHNSON PARK SIGN.

STATION DESIGNATION: DM3903 ESTABLISHED BY: BCA

STATION DESIGNATION: SBM #1 ESTABLISHED BY: V3 COMPANIES

ELEVATION: 762.72 (MEASURED)

STATION DESIGNATION: SBM #2

ESTABLISHED BY: V3 COMPANIES

## **CONTACT LIST**

## Cook County Department of Transportation

Transportation and Highways George W, Dunne Cook County Office Building 69 W. Washington Street 24th Floor, Chicago, IL 60602 312-603-1601

## Village of Schaumburg

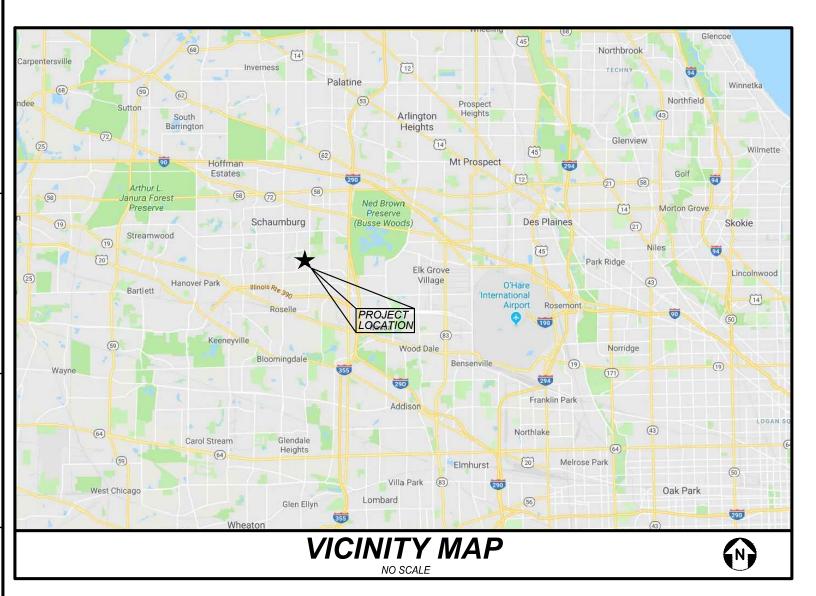
Community Development Department 101 Schaumburg Court Schaumburg, Illinois 60193 847-923-4420 Contact: TBD

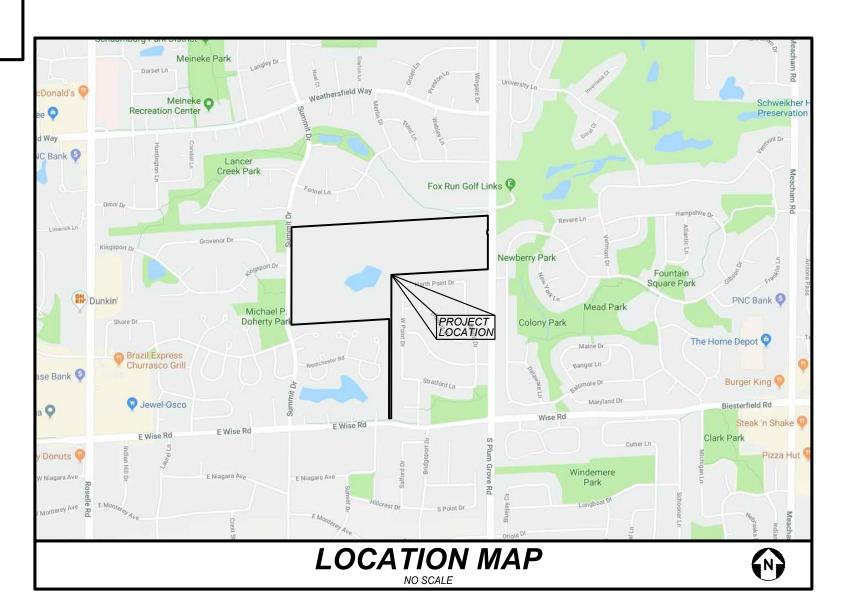
## Metropolitan Water Reclamation District

100 East Erie Street Chicago, IL 60611 312-751-5600

## Army Corps of Engineers

Chicago Civil Works District 231 S. LaSalle Street Ste 1500 Chicago, IL 60604 312-846-5530





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THAT THE CIVIL ENGINEERING PLANS WERE PREPARED ON BEHALF OF NITTI DEVELOPMENT. LLC BY V3 COMPANIES, LTD. UNDER MY PERSONAL DIRECTION. THIS TECHNICAL SUBMISSION IS INTENDED TO BE USED AS AN INTEGRAL PART OF AND IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND CONTRACT DOCUMENTS.

LLINOIS LICENSED PROFESSIONAL ENGINEER 062-068404 MY LICENSE EXPIRES ON NOVEMBER 30, 2021

48 hours before you dig ILLINOIS LICENSED DESIGN FIRM NO. 184-000902

## PROFESSIONAL ENGINEER'S CERTIFICATION DANIEL EDWARD FREE, A LICENSED PROFESSIONAL ENGINEER OF ILLINOIS, HEREBY CERTIFY Locating Information

DRAWING NO.

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DESCRIPTION: WEST NORTH WEST BOLT ON FIRE HYDRANT LOCATED 9.7' EAST OF THE WEST LINE OF PLUM GROVE ROAD, 888.3' SOUTH OF THE ENTRANCE TO PUBLIC WORKS YARD STATION DESIGNATION: SBM #3 ESTABLISHED BY: V3 COMPANIES DATE: 10-28-19 DESCRIPTION: NORTHEAST ARROW BOLT ON FIRE HYDRANT LOCATED 2.8' EAST OF THE WEST LINE OF PLUM GROVE ROAD, 1.4' NORTH OF THE NORTH PROPERTY LINE

THE ELEVATIONS ABOVE WERE KNOWN TO BE ACCURATE AT THE TIME THEY WERE ESTABLISHED. V3 DOES NOT CERTIFY TO THE ACCURACY THEREAFTER. NOR ASSUMES RESPONSIBILITY FOR THE MIS-USE OR MIS-INTERPRETATION OF THE INFORMATION SHOWN

T IS ADVISED THAT ALL OF THE ABOVE ELEVATIONS BE CHECKED BETWEEN EACH OTHER AND VERIFY A MINIMUM OF 3 SURROUNDING UTILITY RIM ELEVATIONS AND ANY ADJACENT BUILDING FINISHED FLOOR OR TOP OF FOUNDATION ELEVATIONS SHOWN HEREON PRIOR TO USE OR COMMENCEMENT OF ANY CONSTRUCTION OR OTHER WORK.

PERSONS USING THIS INFORMATION ARE TO CONTACT V3 IMMEDIATELY WITH ANY DISCREPANCIES FOUND PRIOR TO THE START OF ANY WORK.

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## **GENERAL NOTES**

1. EXISTING SITE TOPOGRAPHY, UTILITIES, RIGHT-OF-WAY AND HORIZONTAL CONTROL SHOWN ON THE DRAWINGS WERE OBTAINED FROM A SURVEY PREPARED BY:

V3 COMPANIES, LTD. 7325 JANES AVENUE WOODRIDGE, IL 60517

COPIES OF THE SURVEY ARE AVAILABLE FROM THE SURVEYOR. SITE CONDITIONS MAY HAVE CHANGED SINCE THE SURVEY WAS PREPARED. CONTRACTORS TO VISIT SITE TO FAMILIARIZE THEMSELVES WITH THE CURRENT CONDITIONS.

- 2. ALL EXISTING TOPOGRAPHY, UNDERGROUND UTILITIES, STRUCTURES AND ASSOCIATED FACILITIES SHOWN ON THESE DRAWINGS HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS. THEREFORE, THEIR LOCATIONS AND ELEVATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER FACILITIES, THE EXISTENCE OF WHICH ARE NOT PRESENTLY KNOWN.
- 3. CONTRACTOR IS TO VERIFY ALL EXISTING STRUCTURES AND FACILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL AND STARTING WORK.
- 4. ALL APPLICABLE PROVISIONS OF THE CURRENT OCCUPATIONAL SAFETY AND HEALTH ACT ARE HEREIN INCORPORATED BY REFERENCE.
- THE CONTRACTOR SHALL SUBSCRIBE TO ALL GOVERNING REGULATIONS AND SHALL OBTAIN ALL NECESSARY PUBLIC AGENCY PERMITS PRIOR TO STARTING WORK. THE CONTRACTOR, BY USING THESE PLANS FOR THEIR WORK, AGREE TO HOLD HARMLESS V3 COMPANIES LTD., THE MUNICIPALITY, THEIR EMPLOYEES AND AGENTS AND THE OWNER WHILE ACTING WITHIN THE SCOPE OF THEIR DUTIES FROM AND AGAINST ANY AND ALL LIABILITY, CLAIMS, DAMAGES, AND THE COST OF DEFENSE ARISING OUT OF CONTRACTOR(S) PERFORMANCE OF THE WORK DESCRIBED HEREIN, BUT NOT INCLUDING THE SOLE NEGLIGENCE OF THE OWNER, HIS AGENTS, THE ENGINEER, HIS EMPLOYEES AND
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FOR CONSTRUCTION ALONG OR ACROSS EXISTING STREETS OR HIGHWAYS. CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE PROPER BRACING, SHORING AND OTHER REQUIRED PROTECTION OF ALL ROADWAYS BEFORE CONSTRUCTION BEGINS. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE STREETS OR ROADWAYS AND ASSOCIATED STRUCTURES AND SHALL MAKE REPAIRS AS NECESSARY TO THE SATISFACTION OF THE OWNER OF THE ROADWAY.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS, TRAFFIC CONTROL DEVICES AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC DURING ALL PHASES OF CONSTRUCTION. BARRICADES AND WARNING SIGNS SHALL BE PROVIDED IN ACCORDANCE WITH THE IDOT STANDARD SPECIFICATIONS. ALL TRAFFIC CONTROL WORK SHALL BE DONE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
- 8. EXCEPT WHERE MODIFIED BY THE CONTRACT DOCUMENTS, ALL WORK PROPOSED HEREON SHALL BE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS WHICH ARE HEREBY
- a. ILLINOIS RECOMMENDED STANDARDS FOR SEWAGE WORKS," AS PUBLISHED BY THE IEPA. LATEST EDITION.
- b. THE LATEST EDITIONS OF THE MUNICIPAL CODE AND STANDARDS OF THE VILLAGE OF SCHAUMBURG.
- c. THE NATIONAL ELECTRIC CODE.
- d. THE ILLINOIS ACCESSIBILITY CODE.
- e. CLEAN CONSTRUCTION OR DEMOLITION DEBRIS (CCDD)
  REQUIREMENTS AS PUBLISHED BY THE IEPA. TESTING OF
  SOILS BEING EXPORTED FROM THE SITE AND APPROPRIATE
  DISPOSAL SHALL BE THE RESPONSIBILITY OF THE
  CONTRACTOR.

IN THE EVENT OF CONFLICTING SPECIFICATIONS WITH REGARD TO SITE WORK ISSUES DESIGNED BY THE ENGINEER, THE MORE STRINGENT REQUIREMENT SHALL GOVERN.

- 9. ALL TREES TO BE SAVED SHALL BE IDENTIFIED PRIOR TO CONSTRUCTION AND SHALL BE PROTECTED PER IDOT STANDARDS. THE RIGHT-OF-WAY LINE AND LIMITS OF THE CONTRACTOR'S OPERATIONS SHALL BE CLEARLY DEFINED THROUGHOUT THE CONSTRUCTION PERIOD. ALL TREES IDENTIFIED TO REMAIN SHALL BE PROTECTED FROM DAMAGE INCLUDING TRUNKS, BRANCHES AND ROOTS. NO EXCAVATING, FILLING OR GRADING IS TO BE DONE INSIDE THE DRIP LINE OF TREES UNLESS OTHERWISE INDICATED.
- 10. CONSTRUCTION ACCESS POINTS TO THE SITE SHALL BE PROTECTED IN SUCH A WAY AS TO PREVENT ACCUMULATION OF MUD OR SOIL ON PUBLIC THOROUGHFARES. AT THE END OF EACH DAY AND AS OFTEN AS OTHERWISE NECESSARY THE CONTRACTOR SHALL CLEAN UP ALL MUD OR SOIL WHICH HAS BEEN TRACKED ONTO PUBLIC STREETS AS REQUIRED BY THE AUTHORITIES HAVING JURISDICTION AND AS DETAILED IN THE STORM WATER POLLUTION PREVENTION PLAN.
- 11. THE CONTRACTOR SHALL PROVIDE FOR THE SAFE AND ORDERLY PASSAGE OF TRAFFIC AND PEDESTRIANS WHERE HIS/HER OPERATIONS ABUT PUBLIC THOROUGHFARES AND ADJACENT PROPERTY IN ACCORDANCE WITH THE VILLAGE OF SCHAUMBURG MUNICIPAL CODE AND IDOT REQUIREMENTS.
- 12. REMOVED PAVEMENT, SIDEWALK, CURB AND GUTTER, ETC. SHALL BE LEGALLY DISPOSED OF BY THE CONTRACTOR AS PART OF THE BASE CONTRACT.

- 13. NO BURNING OR INCINERATION OF RUBBISH WILL BE PERMITTED ON SITE.
- 14. FOR REGULATED UTILITY LOCATIONS, THE CONTRACTOR SHALL CONTACT THE JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS, "J.U.L.I.E." AT 1-800-892-0123. LOCAL GOVERNMENT AGENCIES SHOULD BE CONTACTED BY THE CONTRACTOR FOR LOCATION OF ALL NONREGULATED UTILITY LOCATIONS. CALL FOR LOCATES AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION.
- 15. BEFORE EXCAVATING OVER OR ADJACENT TO ANY EXISTING UTILITIES, CONTRACTOR SHALL NOTIFY THE OWNER OF SUCH UTILITIES TO ENSURE THAT PROTECTIVE WORK WILL BE COORDINATED AND PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE OWNER OF THE UTILITY INVOLVED. IF ANY EXISTING SERVICE LINES, UTILITIES AND UTILITY STRUCTURES WHICH ARE TO REMAIN IN SERVICE ARE UNCOVERED OR ENCOUNTERED DURING THIS OPERATION, THEY SHALL BE SAFEGUARDED, PROTECTED FROM DAMAGE AND SUPPORTED IF NECESSARY.
- 16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION AND SEDIMENTATION CONTROL AS DETAILED IN THE STORM WATER POLLUTION PREVENTION PLAN.
- 17. ALL CURB RADII REFER TO BACK OF CURB.
- 18. ANY AREAS THAT ARE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED IN CONFORMANCE WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION AND SHALL BE INCIDENTAL TO THE CONTRACT.
- 19. STREET PAVING AND CURBS TO REMAIN SHALL BE PROTECTED FROM DAMAGE AND IF DAMAGED, SHALL BE REPLACED PROMPTLY IN CONFORMANCE WITH THE MUNICIPALITY OR IDOT STANDARD SPECIFICATIONS IN MATERIALS AND WORKMANSHIP.
- 20. PROPOSED ELEVATIONS INDICATE FINISHED CONDITIONS. FOR ROUGH GRADING ELEVATIONS ALLOW FOR THICKNESS OF PROPOSED PAVING (ROADS, WALKS, DRIVES, ETC.) OR TOPSOIL AS INDICATED ON DRAWINGS.
- 21. CAD FILES ARE AVAILABLE FOR CONSTRUCTION LAYOUT UPON REQUEST. CONTRACTOR SHALL BE RESPONSIBLE TO CHECK ELECTRONIC INFORMATION AGAINST THE SIGNED AND SEALED PLANS.
- 22. BACKFILL SHALL BE PLACED NEXT TO THE CURB AS SOON AS PERMISSIBLE AFTER CONSTRUCTION TO PREVENT SCOURING AND UNDERCUTTING BY STORM WATER RUNOFF.
- 23. BUTT JOINTS SHALL BE PROVIDED WHEREVER NEW PAVEMENT ABUTS EXISTING PAVEMENT. ALL BUTT JOINTS SHALL BE CONSTRUCTED BY MILLING AND SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE BITUMINOUS SURFACE COURSE.
- 24. WHEN AN EXISTING DRAINAGE ROUTE, EITHER A STORM SEWER OR WATERWAY, IS INTERRUPTED DUE TO CONSTRUCTION, THE DRAINAGE ROUTE SHALL BE REESTABLISHED TO ORIGINAL CONDITIONS BY THE END OF THE SAME WORK DAY. POSITIVE DRAINAGE MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
- 25. PROVIDE SMOOTH VERTICAL CURVES THROUGH HIGH AND LOW POINTS INDICATED BY SPOT ELEVATIONS. PROVIDE UNIFORM SLOPES BETWEEN NEW AND EXISTING GRADES. AVOID RIDGES AND DEPRESSIONS.
- 26. FINAL ADJUSTMENT OF FIRE HYDRANTS, VALVE VAULTS AND MANHOLES TO FINISHED GRADE ARE INCIDENTAL TO THEIR COST.
- 27. ANY EXISTING UTILITY STRUCTURES REQUIRING ADJUSTMENT ARE TO BE ADJUSTED OR RECONSTRUCTED BY THE CONTRACTOR TO THE UTILITY OWNER'S SATISFACTION. ADJUSTMENTS OR RECONSTRUCTIONS NOT CALLED FOR ON THE PLANS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- 28. ALL UTILITY CONNECTIONS TO EXISTING LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REGULATIONS AND TO THE SATISFACTION OF THE UTILITY OWNER.
- 29. PROVIDE TRENCH BACKFILL IN ACCORDANCE WITH THE DETAILS OF THE PLANS FOR ALL UTILITY LINES (OR AS OTHERWISE NOTED ON PLANS). BACKFILL SHALL BE PLACED AND COMPACTED PER THE MUNICIPALITY AND IDOT SPECIFICATIONS. COST OF BACKFILL IS TO BE CONSIDERED INCIDENTAL TO THE UTILITY WORK.
- 30. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 31. PRIOR TO DEMOBILIZATION, ALL WORK SHALL BE CLEANED AND INSPECTED TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION. THE COST OF THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- 32. THE GENERAL CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES TO PROVIDE CABLE TV, PHONE, ELECTRIC, GAS AND IRRIGATION SERVICES. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING SITE LAYOUTS FOR THESE UTILITIES AND SHALL COORDINATE AND PROVIDE CONDUIT CROSSINGS AS REQUIRED. THIS COORDINATION SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. ANY CONFLICTS IN UTILITIES SHALL BE CORRECTED BY THE GENERAL CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- 33. CONTRACTOR SHALL MAINTAIN ACCURATE RECORDS OF ALL CONSTRUCTION IN CONFORMANCE WITH ALL MUNICIPAL AND CLIENT REQUIREMENTS FOR USE IN PREPARING RECORD DRAWINGS.

- 34. THE SUBCONTRACTOR SHALL INSTALL A 2"x4"x6' POST ADJACENT TO THE TERMINUS OF UTILITY MAINS AND SERVICE LINES. POSTS SHALL BE MARKED IN ACCORDANCE WITH THE VILLAGE STANDARDS.
- 35. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING ANY EXCAVATION. ANY DEWATERING REQUIRED SHALL BE INCIDENTAL TO THE CONTRACT.
- 36. COPIES OF SOILS INVESTIGATION REPORTS MAY BE OBTAINED FROM THE OWNER. ANY BRACING, SHEETING OR SPECIAL CONSTRUCTION METHODS REQUIRED IN ORDER TO INSTALL THE PROPOSED IMPROVEMENTS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE PROJECT. ANY ADDITIONAL SOILS DATA NEEDED TO CONFIRM THE CONTRACTOR'S OPINIONS OF THE SUBSOIL CONDITIONS SHALL BE DONE AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL OBTAIN THE OWNER'S WRITTEN AUTHORIZATION TO ACCESS THE SITE TO CONDUCT A SUPPLEMENTAL SOILS INVESTIGATION.
- 37. ALL FIELD TILE ENCOUNTERED DURING CONSTRUCTION OPERATIONS SHALL BE CONNECTED TO THE PROPOSED STORM SEWER OR EXTENDED TO OUTLET INTO A PROPOSED DRAINAGE WAY AS DETERMINED BY THE ENGINEER. IF THIS CANNOT BE ACCOMPLISHED, THEN IT SHALL BE REPAIRED WITH NEW PIPE OF SIMILAR SIZE AND MATERIAL TO THE ORIGINAL LINE AND PUT IN ACCEPTABLE OPERATIONAL CONDITION. A RECORD OF THE LOCATION OF ALL FIELD TILE FOR ON-SITE DRAIN PIPE ENCOUNTERED SHALL BE KEPT BY THE SUBCONTRACTOR AND SUBMITTED TO THE ENGINEER UPON COMPLETION OF THE PROJECT. ALL FIELD TILE REPAIRS SHALL BE CONSIDERED AS INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE PROVIDED.
- 38. THE ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, TIME OF PERFORMANCE, PROGRAMS OR FOR ANY SAFETY PRECAUTIONS USED BY THE CONTRACTOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXECUTION OF HIS/HER WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS.
- 39. HIGH PRESSURE WATERMAIN PROTECTION LIMITS: NO WORK OR ACCESS PERMITTED UNLESS EXPRESSLY AUTHORIZED BY NSMJAWA. ALL APPROVED WORK TO BE PERFORMED UNDER DIRECT SUPERVISION OF JAWA WATCH AND PROTECT PERSONNEL. ACCESS TO BE COORDINATED NO LATER THAN 48-HOURS IN ADVANCE BY CONTACTING (773) 686-0077.

## LEGEND

#### **EXISTING** DESCRIPTION ARC LENGTH PROPOSED B-B BACK TO BACK OF CURB RIGHT-OF-WAY LINE \_\_\_\_\_ B/C BACK OF CURB PROPERTY LINE (EXTERIOR) BLDG BUILDING BM **BENCHMARK** LOT LINE (INTERIOR) BOTTOM OF PIPE **EASEMENT LINE** BV/VV BUTTERFLY VALVE IN VALVE VAULT C & G **CURB AND GUTTER** \_\_\_x\_\_\_x<del>\_\_\_</del> FENCE LINE CB CATCH BASIN CENTERLINE \_\_\_\_\_ **CENTERLINE** PROPERTY CORNER CLOSED LID CO **CLEAN OUT** \_\_\_\_\_ 710 \_\_\_\_ <del>------</del> 710 <del>------</del> CONTOUR DIP DUCTILE IRON PIPE **CURB & GUTTER** DIA DIAMETER DEPRESSED CURB & GUTTER DIWM DUCTILE IRON WATER MAIN DWG DRAWING REVERSE PITCHED CURB EAST OR ELECTRIC OR EDGE × 706.00 × 706.0 SPOT ELEVATION **EXPANSION JOINT** TOP OF CURB ELEVATION **ELEV** EDGE OF PAVEMENT ELEVATION **ELEVATION** E/P EDGE OF PAVEMENT UTILITY STUB EX. **EXISTING** —)———)— SANITARY SEWER F & CL FRAME & CLOSED LID SANITARY FORCE MAIN F&G FRAME & GRATE F & OL FRAME & OPEN LID STORM SEWER ≥|≶|≶|≶| FES FLARED END SECTION WATER MAIN F-F FACE TO FACE OF CURB **GAS MAIN** \_\_\_\_ G\_\_\_\_ FINISHED FLOOR F/G FINISHED GRADE UNDERGROUND TELEPHONE \_\_\_\_\_ T/E \_\_\_\_ FΗ FIRE HYDRANT & ELECTRIC DUCT BANK FLOW LINE BURIED CABLE-ELECTRIC GAS LINE BURIED CABLE-TELEPHONE GATE VALVE IN VALVE BOX GV/VB ATLAS LOCATED UTILITY GV/VV GATE VALVE IN VALVE VAULT HDCP HANDICAP UTILITY STRUCTURE WITH CLOSED LID HDPE HIGH DENSITY POLYETHYLENE PIPE CURB INLET HDW HEADWALL DRAINAGE STRUCTURE WITH OPEN LID HOR HORIZONTAL HP **HIGH POINT** FIRE HYDRANT [8] - [8] e HWL HIGH WATER LEVEL VALVE IN VALVE BOX INVERT ELEVATION GATE VALVE IN VALVE VAULT INLET LINEAL FEET POST INDICATOR VALVE LOW POINT OR LIGHT POLE THRUST BLOCK £ MATCH EXISTING TREE MANHOLE TREE LINE ·~·· MONITORING WELL CONCRETE HEADWALL NIC NOT IN CONTRACT / NOT INCLUDED SUBMERGED HEADWALL NWL NORMAL WATER LEVEL FLARED END SECTION (F.E.S.) OC ON CENTER ---**GUY WIRES** OPEN LID POINT OF CURVATURE PC FLOOD LIGHT Z PORTLAND CEMENT CONCRETE **UTILITY POLE** OR POINT OF COMPOUND CURVE X --- --TION UMBU MENT LIGHT STANDARD PGL PROFILE GRADE LINE POINT OF INTERSECTION TRAFFIC SIGNAL POLE PROPERTY LINE HAND HOLE POWER POLE PRC SOIL BORING POINT OF REVERSE CURVATURE POINT OF TANGENCY **IRRIGATION HEADS** PUE PUBLIC UTILITY EASEMENT SIGN PVC POINT OF VERTICAL CURVATURE OR POLYVINYL CHLORIDE PIPE TELEPHONE MANHOLE $\mathbb{Z}[\mathcal{S}]$ POINT OF VERTICAL INTERSECTION MONITORING WELL PVT POINT OF VERTICAL TANGENCY $\Box$ TELEPHONE PEDESTAL RADIUS OR RIGHT REINFORCED CONCRETE PIPE TRANSFORMER PAD RIGHT OF WAY <del>///>/</del>© UTILITY TO BE ABANDONED SLOPE OR SOUTH $\times\times$ FEATURE TO BE REMOVED SANITARY SF SILTATION FENCE STORMWATER FLOW DIRECTION SFM SANITARY FORCE MAIN STORMWATER OVERFLOW ROUTE SHT DITCH CHECK SHW SUBMERGED HEADWALL ---SMH SANITARY MANHOLE **INLET FILTER BASKET** STA STATION RIP RAP ST STORM STRUCTURE OR STORM SEWER STMH BOLLARD STORM MANHOLE TANGENT LENGTH OR TELEPHONE SILT FENCE T/C TOP OF CURB WATER MAIN PROTECTION T/P TOP OF PIPE (C01) T/W TOP OF WALL UTILITY CROSSING LABEL ΤY TYPE GUARDRAIL TYP **TYPICAL** RAILROAD TRACKS UTILITY POLE VC VERTICAL CURVE RETAINING WALL **VERT** VERTICAL REVISION DELINEATION VCP VITRIFIED CLAY PIPE CONSTRUCTION LIMIT LINE ——— CLL——— WM WATER MAIN TREE PROTECTION FENCE DROP SIDING DRAWING NO. WETLAND FLAG WETLAND BUFFER \_\_\_\_

**ABBREVIATIONS** 

## WATER TRANSMISSION MAIN PROTECTION

**DESCRIPTION.** THIS WORK SHALL CONSIST OF

PROTECTING THE NORTHWEST SUBURBAN MUNICIPAL JOINT ACTION WATER AGENCY'S (NSMJAWA) WATER TRANSMISSION MAIN AND APPURTENANCES (WATER MAIN) WITHIN THE PROJECT LIMITS FOR THE DURATION OF THE CONTRACT AS DESCRIBED BELOW.

NSMJAWA'S EXISTING WATER MAIN WILL BE FIELD LOCATED AND STAKED AT 100 FOOT INTERVALS BY NSMJAWA. ALL WATER VALVES AND HYDRANTS WILL ALSO BE STAKED. CATHODIC PROTECTION SYSTEM ANODE BEDS WILL NOT BE STAKED. TEMPORARY CONSTRUCTION FENCING SIMILAR TO PLASTIC OR WOOD LATHE SNOW FENCING, LOCATED 15 FEET FROM THE CENTERLINE ON EITHER SIDE OF THE EXISTING WATER MAIN, WILL BE INSTALLED BY THE CONTRACTOR PRIOR TO ANY WORK TAKING PLACE AT THE SITE.

CONSTRUCTION REQUIREMENTS. THE FOLLOWING REQUIREMENTS SHALL BE CONSIDERED BY THE CONTRACTOR WHEN DEVELOPING METHODS OF CONSTRUCTION.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ERECT, MAINTAIN, AND PROTECT TEMPORARY CONSTRUCTION FENCING UNTIL COMPLETION OF THE CONTRACT, INCLUDING IMMEDIATE REPLACEMENT OF ANY DAMAGED SECTIONS OF THE FENCE.

NO CONSTRUCTION EQUIPMENT OR VEHICLES SHALL BE ALLOWED IN THE FENCED AREA EXCEPT AS INDICATED IN THE FOLLOWING PARAGRAPHS.

#### ORAGE OF MATERIALS

THE CONTRACTOR SHALL NOT STORE MATERIALS WITHIN THE LIMITS OF 15 FEET WIDE WATER MAIN PROTECTION ZONE DEFINED BY THE TEMPORARY CONSTRUCTION FENCING WITHOUT WRITTEN PERMISSION OF THE NSMJAWA.

#### NIMUM PIPE COVER DEPTI

THE CONTRACTOR SHALL MAINTAIN A MINIMUM 3 FEET DEPTH OF SOIL COVER OVER ALL PORTIONS OF THE WATER MAIN THROUGHOUT THE DURATION OF THE CONTRACT. UNDER NO CIRCUMSTANCE WILL THE DEPTH OF SOIL COVER BE REDUCED TO LESS THAN 3 FEET.

CONSTRUCTION ACCESS OVER OR ACROSS NSMJAWA WATER MAINS

- GENERAL: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE NUMBER AND LOCATION OF ANY PROPOSED WATER MAIN CROSSINGS NECESSARY TO COMPLETE THE WORK REQUIRED UNDER THIS CONTRACT, AND TO ENSURE THAT ALL CONDITIONS FOR EACH PROPOSED CROSSING LOCATION ARE IN COMPLIANCE WITH THE REQUIREMENTS OF THIS SPECIAL PROVISION. ALL PROPOSED WATER MAIN CROSSING LOCATIONS, INCLUDING WORK OVER THE PIPE, WILL BE SUBJECT TO APPROVAL BY THE NSMJAWA ENGINEER, BASED ON DOCUMENTATION SUBMITTED BY THE CONTRACTOR WITH A MINIMUM OF 48 HOURS ADVANCE NOTICE
- ALL CROSSINGS SHALL BE PERPENDICULAR TO THE PIPE LINE AND REQUIRE SETTLEMENT MONUMENTS.
- THE MINIMUM DISTANCE BETWEEN WATER MAIN CROSSINGS SHALL BE 500 FEET, MEASURED FROM CENTERLINE TO CENTERLINE OF THE CROSSING OPENINGS.
- <u>CROSSINGS WHERE SOIL COVER DEPTHS IS LESS THAN 4 FEET</u>: NO VEHICLES OR EQUIPMENT WILL BE ALLOWED TO CROSS THE WATER MAIN IN LOCATIONS WHERE THERE IS LESS THAN 4 FEET OF SOIL COVER DEPTH OVER THE PIPE.
- CROSSINGS WHERE SOIL COVER DEPTH IS GREATER THAN 4 FEET BUT DOES NOT EXCEED 8 FEET:
  - O NO CRANE MAT: VEHICLES AND EQUIPMENT WITH A MAXIMUM LOADED WEIGHT OF UP TO 17,500 POUNDS MAY CROSS THE WATERMAIN WITHOUT A CRANE MAT OR OTHER FORM OF WATER MAIN PROTECTION. CROSSINGS WITHOUT A CRANE MAT SHALL BE RESTRICTED TO A MAXIMUM 20 FEET WIDTH OF OPENING IN THE TEMPORARY PROTECTION FENCE.
  - O SINGLE CRANE MAT: VEHICLES AND EQUIPMENT WITH A MAXIMUM LOADED WEIGHT OF UP TO 65,000 POUNDS MAY UTILIZE A SINGLE CRANE MAT CROSSING AS SHOWN IN THE "CROSSING LAYOUT PLAN FOR SINGLE CRANE MAT" DETAIL PROVIDED IN THE PLANS, OR OTHERWISE APPROVED BY NSMJAWA. THIS INCLUDES ALL WHEELED AND TRACKED VEHICLES AND EQUIPMENT.
- O DOUBLE CRANE MAT: VEHICLES AND EQUIPMENT WITH A MAXIMUM LOADED WEIGHT OF UP TO 75,000 POUNDS MAY UTILIZE A DOUBLE CRANE MAT CROSSING AS SHOWN IN THE "CROSSING LAYOUT PLAN FOR DOUBLE CRANE MAT" DETAIL PROVIDED IN THE PLANS OR OTHERWISE APPROVED BY NSMJAWA. THIS INCLUDES ALL WHEELED AND TRACKED VEHICLES AND EQUIPMENT.
- CROSSINGS WHERE SOIL COVER DEPTH IS GREATER THAN 8 FEET: VEHICLES AND EQUIPMENT THAT MEET THE ALLOWABLE LOADING CRITERIA FOR A DOUBLE CRANE MAT CROSSING FOR SOIL COVER DEPTHS BETWEEN 4 AND 8 FEET WILL BE ALLOWED TO CROSS THE WATER MAIN WITHOUT A CRANE MAT OR OTHER FORM OF WATER MAIN PROTECTION WHERE THE SOIL COVER DEPTH OVER THE PIPE EXCEEDS 8 FEET. THESE CROSSINGS SHALL BE RESTRICTED TO A MAXIMUM 20 FEET WIDTH OF OPENING IN THE TEMPORARY PROTECTION FENCE.
- OTHER CROSSINGS: FOR VEHICLES AND EQUIPMENT THAT DO NOT MEET THE ABOVE WATER MAIN CROSSING REQUIREMENTS, THE CONTRACTOR SHALL PROVIDE THE PROPOSED METHOD OF WATER MAIN CROSSING PROTECTION INCLUDING ALL REQUIRED CONSTRUCTION DETAILS AND SUPPORTING CALCULATIONS INDICATING THE CONSTRUCTION LIVE LOAD EXPECTED ABOVE THE PIPE DOES NOT EXCEED THE ALLOWABLE LOAD PROVIDED BY NSMJAWA FOR THE IDENTIFIED LOCATION. ALL CALCULATIONS MUST BE SIGNED AND SEALED BY A REGISTERED STRUCTURAL ENGINEER LICENSED IN THE STATE OF ILLINOIS. NSMJAWA WILL REVIEW THE SUBMITTED MATERIALS TO DETERMINE IF THE PROPOSED CROSSING LOCATION(S) AND VEHICLE LOAD(S) ARE ACCEPTABLE. THIS REVIEW PROCESS WILL TAKE UP TO TWO WEEKS.
- CROSSING DOCUMENTATION TO BE SUBMITTED FOR REVIEW AND APPROVAL: FOR ALL PROPOSED WATER MAIN CROSSINGS, THE CONTRACTOR SHALL PROVIDE VEHICLE INFORMATION INCLUDING VEHICLE TYPE, MANUFACTURER, WEIGHT (UNLOADED AND MAXIMUM LOADED), AND WHEEL, TIRE OR TRACK LOADING FOR ANY CONSTRUCTION VEHICLE THAT WILL USE THE CROSSING. PROPOSED LOCATION OF THE CROSSINGS SHALL BE IDENTIFIED, AND THE CONTRACTOR SHALL PERFORM ANY NECESSARY EXPLORATORY EXCAVATION TO DETERMINE THE ACTUAL DEPTH OF THE SOIL COVER AT THE PROPOSED CROSSING LOCATION TO THE NEAREST TENTH-OF-A-FOOT. EXPLORATORY EXCAVATIONS SHALL BE BACKFILLED WITH COMPACTED CA-6.
- REQUIRED SIGNAGE FOR WATER MAIN CROSSINGS: THE CONTRACTOR SHALL INSTALL AND MAINTAIN SIGNAGE ON BOTH SIDES OF EACH WATERMAIN CROSSING THAT IDENTIFIES THE MANUFACTURER AND MODEL FOR EACH INDIVIDUAL TYPE OF VEHICLE AND/OR PIECE OF EQUIPMENT THAT HAS BEEN APPROVED BY THE ENGINEER TO UTILIZE THE CROSSING. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE STRICT ENFORCEMENT OF THE VEHICLE AND EQUIPMENT LIMITS FOR EACH WATER MAIN CROSSING.

THE CONTRACTOR SHALL INSTALL AND MAINTAIN TWO SIGNS ON EACH APPROACH TO THE WATERMAIN CROSSING THAT IDENTIFIES THE TYPE OF CROSSING. CROSSING TYPES WILL BE SINGLE MAT, DOUBLE MAT, OR NO MAT. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING DOCUMENTATION IN EACH VEHICLE STATING WHICH CROSSING TYPE AN INDIVIDUAL VEHICLE IS PERMITTED TO USE BASED ON APPROVAL RECEIVED FROM THE NSMJAWA ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE STRICT ENFORCEMENT OF THE VEHICLE AND EQUIPMENT LIMITS FOR EACH WATER MAIN CROSSING.

## GROUND RUTTING AND SETTLEMENT

THE CONTRACTOR SHALL MAINTAIN GROUND SURFACE FREE FROM RUTTING OR SETTLEMENT ABOVE WATER MAIN TO THE GREATEST EXTENT PRACTICABLE. ANY LOCATIONS WHERE GROUND SURFACE RUTTING OR SETTLEMENT EXCEEDS SIX INCHES ABOVE THE WATER MAIN SHALL BE REPAIRED AND RESTORED BY THE CONTRACTOR TO ORIGINAL CONDITIONS PRIOR TO FURTHER USE OF THE WATER MAIN CROSSING.

CONSTRUCTION OVER WATER MAIN
NO CONSTRUCTION EQUIPMENT OR VEHICLES ARE ALLOWED TO WORK, OPERATE, IDLE OR SIT IN
THE CONSTRUCTION LIMITS DESIGNATED ABOVE WITHOUT PRIOR APPROVAL OF NSMJAWA.

#### EXCAVATIONS

ANY EXCAVATIONS THAT OCCUR BELOW THE WATER MAIN AND ARE WITHIN 1H:1V SLOPE FROM THE CONSTRUCTION LIMITS REFERENCE ABOVE SHALL REQUIRE THE CONTRACTOR TO PROVIDE A SLOPE STABILITY ANALYSIS OF THE AREA. SLOPE STABILITY CALCULATIONS SHALL BE SUBMITTED TO THE WATER MAIN OWNER. THE CONTRACTOR SHALL INSTALL SHEETING, SHORING, BRACING AND OTHER STABILITY PROTECTION MEASURES AS NEEDED TO PROTECT THE WATER MAIN. STABILITY PROTECTION CALCULATIONS SHALL BE SUBMITTED TO THE WATER MAIN OWNER. ALL CALCULATIONS SHALL BE SEALED BY REGISTERED STRUCTURAL ENGINEER LICENSED IN THE STATE OF ILLINOIS.

### NO PILING SHALL BE DRIVEN WITHIN 20 FEET OF THE TRANSMISSION MAIN.

#### SURANCE

ANY CONTRACTOR PERFORMING WORK OR ACCESSING ACROSS THE NSMJAWA EASEMENT MUST SUBMIT PROOF OF INSURANCE, LISTING "NORTHWEST SUBURBAN MUNICIPAL JOINT ACTION WATER AGENCY" AS ADDITIONAL INSURED.

#### N-COMPLIANCE

ANY OCCURRENCE OF NON-COMPLIANCE WITH THIS WATER TRANSMISSION MAIN PROTECTION SPECIAL PROVISION SHALL BE SUBJECT TO A FINE OF \$10,000 PER OCCURRENCE, AND THE CONTRACTOR SHALL TAKE IMMEDIATE CORRECTIVE ACTION TO RECTIFY THE NON-COMPLIANCE TO THE SATISFACTION OF THE ENGINEER.

UPON COMPLETION OF THE WORK UNDER THIS CONTRACT, THE CRANE MATS AND CONSTRUCTION FENCING SHALL REMAIN IN PLACE FOR USE BY ANOTHER CONTRACT.

METHOD OF MEASUREMENT. THIS WORK WILL NOT BE MEASURED FOR PAYMENT.

BASIS OF PAYMENT. THIS WORK WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR WATER TRANSMISSION MAIN PROTECTION IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS, WHICH PAYMENT SHALL BE FULL COMPENSATION FOR ALL LABOR, EQUIPMENT, SUPPLIES, MATERIALS, AND PERFORMING ALL OPERATIONS NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED HEREIN.

## **VILLAGE OF SCHAUMBURG STANDARD NOTES**

- 1. THE COMMUNITY DEVELOPMENT DEPARTMENT MUST BE NOTIFIED ONE BUSINESS DAY PRIOR TO EACH INSPECTION AT 847.923.4420. A MINIMUM NOTICE OF THREE BUSINESS DAYS IS REQUIRED BY THE ENGINEERING AND PUBLIC WORKS DEPARTMENT, 847.895.7100, FOR A WATER MAIN SHUT DOWN IN A COMMERCIAL AREA.
- 2. TREE PROTECTION FENCING MUST BE INSTALLED, INSPECTED, AND APPROVED BY THE VILLAGE PRIOR TO THE ISSUANCE OF A LAND DEVELOPMENT PERMIT. THE FENCING MUST BE MAINTAINED FOR THE DURATION OF THE SITE WORK.
- 3. A SEPARATE ELECTRICAL PERMIT MUST BE OBTAINED FROM THE COMMUNITY DEVELOPMENT DEPARTMENT PRIOR TO INSTALLING ANY SITE LIGHTING. THE ELECTRICAL SYSTEM MUST BE APPROVED AS PART OF THE ELECTRICAL PERMIT FOR THE SITE LIGHTING. THE DETAILED PHOTOMETRICS AND EXTERIOR LIGHT POLE LOCATIONS MUST BE APPROVED AS PART OF THE LAND DEVELOPMENT PERMIT.
- 4. THE CONTRACTOR SHALL INDEMNIFY THE VILLAGE, AND THEIR AGENTS, ETC. FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, TESTING, AND OPERATION OF ALL WORK ASSOCIATED WITH THIS PROJECT.
- 5. THE CONTRACTOR IS RESPONSIBLE FOR HAVING A SET OF THE "APPROVED" LAND DEVELOPMENT PERMIT PLANS ON THE JOB SITE DURING CONSTRUCTION. THE CONTRACTOR IS ALSO RESPONSIBLE FOR MAKING ANY NECESSARY COPIES OF THE "APPROVED" PLANS FOR ALL SUBCONTRACTORS PERFORMING SITE WORK.
- 6. THE CONTRACTOR IS TO VERIFY THE LOCATION, DEPTH, AND INVERT OF ALL EXISTING UTILITIES AND FACILITIES PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING PUBLIC OR PRIVATE UTILITIES, OR THE RELOCATION OF ANY EXISTING UTILITIES TO FACILITATE THE INSTALLATION OF THE NEW SITE WORK. THE CONTRACTOR MUST NOTIFY THE DESIGN ENGINEER IMMEDIATELY OF ANY DISCREPANCIES WITH THE PLANS AND ANY EXISTING UTILITIES. NO WORK IS TO BE DONE UNTIL THE DISCREPANCY IS RESOLVED.
- 7. ACCESS TO THE SITE, AND TO WITHIN 100 FEET OF ANY BUILDING, SHALL BE PROVIDED FOR EMERGENCY VEHICLES AT ALL TIMES VIA A 20 FOOT WIDE APPROVED ALL-WEATHER ROAD. AN APPROVED WATER SUPPLY SHALL BE AVAILABLE WITHIN 100 FEET OF ANY BUILDING PRIOR TO DELIVERY OF ANY COMBUSTIBLE MATERIALS TO THE SITE.
- 8. NO HOLES ARE TO BE LEFT OPEN IN THE PAVEMENT OR PARKWAY OVER ANY HOLIDAY, WEEKEND, OR AFTER 3 PM ON THE DAY PRECEDING ANY HOLIDAY OR ANY WEEKEND.
- 9. ALL EXISTING PAVEMENT OR CONCRETE TO BE REMOVED SHALL BE SAWCUT FULL-DEPTH ALONG THE LIMITS OF PROPOSED REMOVAL BEFORE COMMENCEMENT OF THE PAVEMENT REMOVAL.
- 10. ALL PUBLIC RIGHT OF WAY AREAS THAT ARE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED WITH 4" OF TOPSOIL AND SOD. SEEDING WILL NOT BE PERMITTED IN THESE AREAS.
- 11. ALL PAVING, SUBGRADE PREPARATION, CURBING, AND SIDEWALK CONSTRUCTION SHALL CONFORM TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", LATEST EDITIONS.
- 12. NO ASPHALT WORK IS ALLOWED BETWEEN NOVEMBER 1ST AND APRIL 1ST WITHOUT THE WRITTEN PERMISSION FROM THE VILLAGE ENGINEER.
- 13. ANY TEMPORARY OR PERMANENT EXTERIOR SITE FENCING, INCLUDING FENCING FOR DUMPSTER ENCLOSURES, REQUIRES A SEPARATE PERMIT FROM THE COMMUNITY DEVELOPMENT DEPARTMENT. DEMOLITION OF EXISTING BUILDINGS ALSO REQUIRES A SEPARATE PERMIT FROM THE COMMUNITY DEVELOPMENT DEPARTMENT.
- 4. ALL BITUMINOUS CONCRETE USED FOR SURFACE, BINDER AND BASE COURSES IS TO HAVE A MARSHALL STABILITY OF 1700. ALL PORTLAND CEMENT CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3500 PSI AT 14 DAYS.
- 15. PRIOR TO PLACING ANY PAVEMENT MATERIAL, THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY PREPARING AND COMPACTING THE SUBGRADE. THE REQUIRED PROOF ROLL MUST BE WITNESSED BY THE VILLAGE. NO PAVEMENT MATERIAL IS TO BE PLACED ON A WET OR SOFT SUBGRADE. IF THIS CONDITION EXISTS, THE CONTRACTOR IS TO STOP WORK AND IMMEDIATELY NOTIFY THE VILLAGE. NO ADDITIONAL PAVEMENT WORK SHALL BE DONE UNTIL THE PROBLEM IS CORRECTED.

- 16. ALL CURBS CONSTRUCTED OVER A UTILITY TRENCH SHALL BE REINFORCED WITH TWO #5 REBARS FOR A LENGTH OF 20 FEET CENTERED OVER THE TRENCH. SIDEWALKS SHALL BE TREATED IN THE SAME MANNER USING THREE #5 REBARS.
- 17. ALL SEWER AND WATER MAIN CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" LATEST EDITION.
- 18. THE CONTRACTOR SHALL NOT INSTALL ANY SANITARY SEWER PIPE OR STRUCTURES UNTIL HE HAS A COPY OF THE PERMIT AND PERMIT DRAWINGS ISSUED BY THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (MWRD) ON THE JOB SITE. THIS MAY ALSO APPLY TO STORM SEWER AND/OR DETENTION FACILITIES IF INCLUDED IN THE MWRD PERMIT.
- 19. ALL MANHOLES AND VALVE VAULTS SHALL HAVE THE "VILLAGE OF SCHAUMBURG" AND "WATER," "STORM SEWER," OR "SANITARY SEWER" CAST INTO THE LID. ALL OPEN LIDS OR GRATES SHALL HAVE THE WORDS "DRAINS TO RIVER, DUMP NO WASTE" PERMANENTLY INSCRIBED.
- 20. BAND-SEAL CONNECTORS SHALL BE USED TO JOIN PIPES OF DIFFERENT MATERIALS.
- 21. USE CA-6 TRENCH BACKFILL, COMPACTED TO 95% OF MODIFIED PROCTOR, UNDER AND WITHIN A 1:1 SLOPE FROM THE BOTTOM OF ALL PAVEMENT, CURBS AND SIDEWALK.
- 22. A WATER QUALITY DEVICE, STORMCEPTOR, CDS, OR EQUIVALENT, SHALL BE INSTALLED AS REQUIRED BY THE SUBDIVISION AND LAND DEVELOPMENT ORDINANCE AND AS SHOWN ON THE APPROVED PLANS.
- 23. ALL WATER MAIN PIPE 4" AND LARGER SHALL BE DUCTILE IRON PIPE CLASS 52 CONFORMING TO ANSI A21.51 WITH CEMENT LINING UNLESS OTHERWISE APPROVED BY THE VILLAGE ENGINEER. ALL WATER SERVICE LINES 3" AND SMALLER SHALL BE TYPE K COPPER, UNLESS OTHERWISE NOTED.
- 24. ALL WATER LINES ARE TO BE PRESSURE TESTED AND CHLORINATED PER THE REQUIREMENTS OF THE VILLAGE OF SCHAUMBURG. ALSO, THE MINIMUM COVER FOR ALL WATER MAINS AND SERVICE LINES IS 5.5 FEET.
- 25. FIRE SERVICE MAINS AND LEAD IN CONNECTIONS TO SYSTEM RISERS ARE REQUIRED TO BE COMPLETELY FLUSHED BEFORE MAKING THE CONNECTION TO THE SPRINKLER PIPING. (NFPA 13, 1999 ED, 10-2.1.) THE FIRE PREVENTION BUREAU SHALL BE NOTIFIED 24 HOURS IN ADVANCE TO WITNESS THE FLUSH AT 847.985.4452. A SEPARATE INSPECTION FEE IS ALSO REQUIRED AT THE TIME THE LAND DEVELOPMENT PERMIT IS ISSUED.
- 26. UPON COMPLETION OF THE PROJECT, THE DEVELOPER SHALL PROVIDE FINAL "RECORD DRAWINGS" (1 MYLAR SEPIA REPRODUCIBLE, SIGNED AND SEALED BY THE ENGINEER) OF ALL UTILITIES WHICH INCLUDE THE LOCATIONS AND ELEVATIONS OF ALL MAINS, SERVICE LINES, STRUCTURES, PAVED AREAS, SITE GRADING, STREET LIGHTS AND CABLES, AND CURBS. MONUMENTS, AS SPECIFIED IN ITEM #27, SHALL ALSO BE SHOWN. FINAL RECORD DRAWINGS MUST ALSO INCLUDE A STATE PLANE COORDINATE SYSTEM TIE IN. IN ADDITION TO THE DRAWINGS, AN ELECTRONIC FILE (IN DWG OR DGN FORMAT) OF THE RECORD DRAWINGS MUST BE SUBMITTED ON CD-ROM.
- 27. ALL PLATS THREE ACRES OR LARGER REQUIRE CONCRETE MONUMENTS COMPLETE WITH THE VILLAGE OF SCHAUMBURG CAP AND SHALL BE PLACED AT LOCATIONS TO BE DETERMINED BY THE VILLAGE ENGINEER. MONUMENTS SHALL BE IN ACCORDANCE WITH THE SUBDIVISION AND LAND DEVELOPMENT ORDINANCE AND SHALL BE SHOWN ON THE RECORD DRAWINGS.

## **SPECIFICATIONS**

### **EARTHWORK**

- 1. THE GRADING OPERATIONS ARE TO BE INSPECTED BY A THIRD PARTY SOILS ENGINEER. THE CONTRACTOR'S REPRESENTATIVE MUST BE NOTIFIED PRIOR TO ANY UNSUITABLE SOIL REMOVAL AND MUST APPROVE, IN WRITING, ANY REMEDIATION. BOTH THE CONTRACTOR AND SOILS ENGINEER MUST BE PRESENT DURING REMEDIATION.
- 2. THE PROPOSED GRADING ELEVATIONS SHOWN ON THE PLANS ARE FINISH GRADE. A MINIMUM OF 6 INCHES OF TOPSOIL IS TO BE PLACED BEFORE FINISH GRADE ELEVATIONS ARE ACHIEVED, UNLESS OTHERWISE NOTED. AREAS IN DETENTION FACILITIES NOTED TO BE ESTABLISHED WITH NATIVE VEGETATION SHALL REQUIRE A MINIMUM OF 12 INCHES OF TOPSOIL. REFER TO PLANTING PLANS TO VERIFY TOPSOIL THICKNESS REQUIREMENTS.
- 3. THE SURFACE VEGETATION, TOPSOIL, TRANSITIONAL MATERIAL, AND ANY OBVIOUSLY SOFT UNDERLYING SOIL SHALL BE STRIPPED FROM ALL AREAS TO RECEIVE STRUCTURAL FILL. IF THE UNDERLYING SUBGRADE IS FOUND TO BE UNSUITABLE FOR PROPER COMPACTION, CONTRACTOR TO CONSULT WITH SOILS ENGINEER PRIOR TO REMEDIATION.
- 4. EMBANKMENT MATERIAL WITHIN ROADWAY, DRIVEWAY, BUILDING AND OTHER STRUCTURAL CLAY FILL AREAS SHALL BE COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM SPECIFICATION D1557 (MODIFIED PROCTOR METHOD), OR TO SUCH OTHER DENSITY AS MAY BE DETERMINED APPROPRIATE BY THE SOILS ENGINEER, THE AUTHORITY HAVING JURISDICTION, AND THE CONTRACTOR.
- 5. ALL PAVEMENT SUBGRADE SHALL MEET THE REQUIREMENTS DETERMINED BY THE SOILS ENGINEER AND DOCUMENTED IN THE GEOTECHNICAL REPORT. IF AREAS OF PAVEMENT SUBGRADE ARE ENCOUNTERED WHICH DO NOT MEET THESE REQUIREMENTS, SUBGRADE REPLACEMENT OR PAVEMENT DESIGN REVISIONS SHALL BE PROVIDED WHICH ARE ADEQUATE TO OBTAIN EQUIVALENT PAVEMENT STRENGTH AS DETERMINED BY THE ENGINEER, SOILS ENGINEER, AND THE AUTHORITY HAVING JURISDICTION.
- 6. COMPLETED GRADING (FINISHED FINE GRADE) FOR PROPOSED PAVEMENT SUBGRADE AREAS, BUILDING PADS, AND OPEN SPACE AREAS SHALL BE WITHIN A 0.1' TOLERANCE OF DESIGN SUBGRADE
- 7. THE SUBGRADE FOR PROPOSED STREET AND PAVEMENT AREAS SHALL BE PROOF-ROLLED BY THE SUBCONTRACTOR IN THE PRESENCE OF THE JURISDICTIONAL INSPECTOR, CONTRACTOR, AND SOILS ENGINEER.
- 8. BORROW PIT LOCATION(S) SHALL BE APPROVED BY THE OWNER, ENGINEER, AND GEOTECHNICAL ENGINEER.

#### WATERMAIN DISTRIBUTION SYSTEM

1. VALVE VAULTS SHALL BE USED AT ALL VALVE LOCATIONS WHERE WATER MAIN IS 8" DIAMETER OR LARGER. VAULTS SHALL BE PRECAST CONCRETE STRUCTURES, WITH APPROPRIATE FRAME AND LIDS (SEE CONSTRUCTION DETAIL SHEETS).

- 2. THRUST BLOCKING OR RESTRAINED JOINTS SHALL BE INSTALLED ON WATER MAINS AT ALL BENDS, TEES, ELBOWS, ETC. AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION. COST OF SAME SHALL BE INCIDENTAL TO THE UNIT PRICE FOR PIPE INSTALLED.
- 3. WATER MAIN FITTINGS (BENDS, ELBOWS, TEES, INCREASES, REDUCERS, ETC.) MAY OR MAY NOT BE SPECIFICALLY REFERENCED ON THE CONSTRUCTION PLANS. THEY ARE TO BE CONSIDERED AS INCIDENTAL AND INCLUDED IN THE LINEAL FOOTAGE COST OF THE WATER MAIN.

## STORM SEWER

- 1. STORM SEWERS SHALL BE CONSTRUCTED OF THE FOLLOWING MATERIALS AS SPECIFIED ON THE PLANS:
- A. REINFORCED CONCRETE PIPE ( RCP) IN CONFORMANCE WITH IDOT STANDARD SPECIFICATIONS DETERMINATION FOR PIPE CLASS, AND CONFORMING TO ASTM C76. ALL STORM SEWER SHALL HAVE GASKETED JOINTS CONFORMING TO ASTM C-361, UNLESS OTHERWISE NOTED.
- B. DUCTILE IRON PIPE, CLASS 52, CONFORMING TO ANSI A21.51 (AWWA C151) WITH JOINTS CONFORMING TO ANSI 21-11 (AWWA C-111).

## IEPA CROSSING REQUIREMENTS

- 1. HORIZONTAL SEPARATION
- A. WATERMAINS SHALL BE LAID AT LEAST TEN FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED DRAIN, STORM SEWER, SANITARY SEWER OR SEWER SERVICE CONNECTION.
- B. WATERMAINS MAY BE LAID CLOSER THAN TEN FEET TO A SEWER LINE WHEN:
  - i. LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF TEN FEET;
  - ii. THE WATER MAIN INVERT IS AT LEAST EIGHTEEN INCHES ABOVE THE CROWN OF THE SEWER; AND
  - iii. THE WATER MAIN IS EITHER IN A SEPARATE TRENCH OR IN THE SAME TRENCH ON AN UNDISTURBED EARTH SHELF LOCATED TO ONE SIDE OF THE SEWER.
- C. BOTH THE WATER MAIN AND DRAIN OR SEWER SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT CAST OR DUCTILE IRON PIPE, PRE STRESSED CONCRETE PIPE, OR PVC PIPE MEETING THE REQUIREMENTS OF SECTION 653.111 WHEN IT IS IMPOSSIBLE TO MEET (a) OR (B) ABOVE. THE DRAIN OR SEWER SHALL BE PRESSURE TESTED TO THE MAXIMUM EXPECTED SURCHARGE HEAD BEFORE BACKFILLING.

- 2. VERTICAL SEPARATION
  - A. A WATER MAIN SHALL BE LAID SO THAT ITS INVERT IS A MINIMUM OF 18 INCHES ABOVE THE CROWN OF THE DRAIN OR SEWER WHENEVER WATERMAINS CROSS STORM SEWERS, SANITARY SEWERS OR SEWER SERVICE CONNECTIONS. THE VERTICAL SEPARATION SHALL BE MAINTAINED FOR THAT PORTION OF THE WATERMAIN LOCATED WITHIN TEN FEET HORIZONTALLY OF ANY SEWER OR DRAIN CROSSED. A LENGTH OF WATERMAIN PIPE SHALL BE CENTERED OVER THE SEWER TO BE CROSSED WITH JOINTS EQUIDISTANT FROM THE SEWER OR DRAIN.
- B. BOTH THE WATERMAIN AND SEWER SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT CAST OR DUCTILE IRON PIPE, PRESTRESSED CONCRETE PIPE, OR PVC PIPE MEETING REQUIREMENTS OF SECTION 653.111 WHEN:
  - i. IT IS IMPOSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION AS DESCRIBED IN (A) ABOVE; OR
  - ii. THE WATER MAIN PASSES UNDER A SEWER DRAIN
- C. A VERTICAL SEPARATION OF 18 INCHES BETWEEN THE INVERT OF THE SEWER OR DRAIN AND THE CROWN OF THE WATER MAIN SHALL BE MAINTAINED WHERE A WATERMAIN CROSSES UNDER A SEWER. SUPPORT THE SEWER OR DRAIN LINES TO PREVENT SETTLING AND BREAKING THE WATER MAIN.
- D. CONSTRUCTION SHALL EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE NORMAL DISTANCE FROM THE WATERMAIN TO THE SEWER OR DRAIN LINE IS AT LEAST TEN FEET.

#### **PAVING**

- 1. BASE COURSE SHALL BE AGGREGATE BASE COURSE, CONFORMING TO IDOT STANDARD SPECIFICATIONS (SEE PLANS FOR THICKNESS).
- CURB & GUTTER AND SIDEWALK SHALL BE CLASS SI PORTLAND CEMENT CONCRETE CONFORMING TO IDOT STANDARD SPECIFICATIONS.
- 3. SUBGRADE SHALL BE FINISHED TO BE WITHIN 0.1 FEET OF DESIGN SUBGRADE ELEVATIONS BY THE EARTHWORK CONTRACTOR. FINE GRADING FOR PAVEMENTS AND SIDEWALKS SHALL BE THE RESPONSIBILITY OF THE PAVING CONTRACTOR.
- 4. AGGREGATE BASE COURSES SHALL BE PRIMED AT THE RATE OF 0.25 TO 0.50 GALLONS PER SQUARE YARD AND BRICK, CONCRETE, OR HMA BASES SHALL BE PRIMED AT THE RATE OF 0.05 TO 0.10 GALLONS PER SQUARE YARD WITH LIQUID ASPHALT CONFORMING TO THE IDOT STANDARD SPECIFICATIONS AND APPROPRIATE FOR PREVAILING WEATHER AND SITE CONDITIONS. PRIME COAT AND CLEANING THE EXISTING SURFACE SHALL BE CONSIDERED AS INCIDENTAL TO THE CONTRACT.
- 5. PAVEMENT SHALL BE CONSTRUCTED ON A THOROUGHLY COMPACTED SUBGRADE MEETING THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND RECOMMENDATIONS OF THE GEOTECHNICAL CONSULTANT. PRIOR TO PLACEMENT OF THE NEW PAVEMENT, THE SUBGRADE SHALL BE PROOF ROLLED WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK (MINIMUM 20 TONS). PROOF ROLLING SHALL BE WITNESSED BY THE GEOTECHNICAL CONSULTANT.
- 6. SIDEWALKS SHALL BE OF THE THICKNESS AND DIMENSIONS AS SHOWN IN THE CONSTRUCTION PLANS. CONTRACTION JOINTS SHALL BE SET AT 5' CENTERS AND ½ INCH PREMOLDED FIBER EXPANSION JOINTS SHALL BE SET AT 50' CENTERS AND WHERE THE SIDEWALK MEETS THE CURB, A BUILDING, OR AT THE END OF EACH POUR. ALL SIDEWALKS CONSIDERED TO BE ACCESSIBLE ROUTES AS DEFINED BY THE AMERICANS WITH DISABILITIES ACT (ADA) SHALL BE SUBJECT TO ILLINOIS ACCESSIBILITY CODE (IAC) REQUIREMENTS, UNLESS OTHERWISE NOTED.
- 7. TESTING OF THE SUBBASE, BASE COURSE, BINDER COURSE, SURFACE COURSE, AND CONCRETE WORK SHALL BE REQUIRED IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS AND IN ACCORDANCE WITH THE SPECIFIC REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION. A QUALIFIED TESTING FIRM SHALL BE EMPLOYED TO PERFORM THE REQUIRED TESTS.
- 8. ASPHALT JOINTS FOR BINDER AND SURFACE COURSES ARE TO BE STAGGERED.

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SPECIFICATIONS
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JRG DEVELOPMENT

325 Janes Avenue 'oodridge, IL 60517 30.724.9200 phone ww.v3co.com



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### A. REFERENCED SPECIFICATIONS

- I. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS MODIFIED HEREIN OR ON THE PLANS:

  \* STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), BY THE
- ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT SS) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWER AND WATER MAIN CONSTRUCTION;

  \* STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS) FOR SANITARY SEWER AND WATER MAIN CONSTRUCTION;
- \* VILLAGE ÒF SCHAUMBURG MUNICIPAL CODE; \* THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (MWRD) WATERSHED
- MANAGEMENT ORDINANCE AND TECHNICAL GUIDANCE MANUAL;

  \* IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHALL TAKE PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION.

#### B. NOTIFICATIONS

- 1. THE MWRD LOCAL SEWER SYSTEMS SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK (CALL 708-588-4055).
- 2. THE VILLAGE OF SCHAUMBURG ENGINEERING DEPARTMENT AND PUBLIC MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO EACH PHASE OF WORK. CONTRACTOR SHALL DETERMINE ITEMS REQUIRING INSPECTION PRIOR TO START OF CONSTRUCTION OR EACH WORK PHASE.
- 3. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION FOR THE EXACT LOCATIONS OF UTILITIES AND FOR THEIR PROTECTION DURING CONSTRUCTION. IF EXISTING UTILITIES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED. CALL J.U.L.I.E. AT 1-800-892-0123.

#### C GENERAL NOTE

- 1. ALL ELEVATIONS SHOWN ON PLANS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
- 2. MWRD, THE MUNICIPALITY AND THE OWNER OR OWNER'S REPRESENTATIVE SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION IMPROVEMENTS.
- 3. THE CONTRACTOR(S) SHALL INDEMNIFY THE OWNER, ENGINEER, MUNICIPALITY, MWRD, AND THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, OR TESTING OF THIS WORK ON THE PROJECT.
- 4. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY MWRD AND THE MUNICIPALITY UNLESS CHANGES ARE APPROVED BY MWRD, THE MUNICIPALITY, OR AUTHORIZED AGENT. THE CONSTRUCTION DETAILS, AS PRESENTED ON THE PLANS, MUST BE FOLLOWED. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED ON THE IMPROVEMENTS INDICATED ON THE PLANS.
- 5. THE LOCATION OF VARIOUS UNDERGROUND UTILITIES WHICH ARE SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER. VERIFY LOCATIONS AND ELEVATIONS PRIOR TO BEGINNING THE CONSTRUCTION OPERATIONS.
- 6. ANY EXISTING PAVEMENT, SIDEWALK, DRIVEWAY, ETC., DAMAGED DURING CONSTRUCTION OPERATIONS AND NOT CALLED FOR TO BE REMOVED SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
- 7. MATERIAL AND COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY, MWRD, AND OWNER.
- 8. THE UNDERGROUND CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS TO NOTIFY ALL INSPECTION AGENCIES.
- 9. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS DISTURBED DURING CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO FINAL INSPECTION.
- 10. RECORD DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS UNDERGROUND IMPROVEMENTS ARE COMPLETED. FINAL PAYMENTS TO THE CONTRACTOR SHALL BE HELD UNTIL THEY ARE RECEIVED. ANY CHANGES IN LENGTH, LOCATION OR ALIGNMENT SHALL BE SHOWN IN RED. ALL WYES OR BENDS SHALL BE LOCATED FROM THE DOWNSTREAM MANHOLE. ALL VALVES, B-BOXES, TEES OR BENDS SHALL BE TIED TO A FIRE HYDRANT.

#### . SANITARY SEWE

TESTED AND ACCEPTED

- 1. THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT ANY POLLUTED WATER, SUCH AS GROUND AND SURFACE WATER, FROM ENTERING THE EXISTING SANITARY SEWERS.
- 2. A WATER-TIGHT PLUG SHALL BE INSTALLED IN THE DOWNSTREAM SEWER PIPE AT THE POINT OF SEWER CONNECTION PRIOR TO COMMENCING ANY SEWER CONSTRUCTION. THE PLUG SHALL REMAIN IN PLACE UNTIL REMOVAL IS AUTHORIZED BY THE MUNICIPALITY AND/OR MWRD AFTER THE SEWERS HAVE BEEN
- 3. DISCHARGING ANY UNPOLLUTED WATER INTO THE SANITARY SEWER SYSTEM FOR THE PURPOSE OF SEWER FLUSHING OF LINES FOR THE DEFLECTION TEST SHALL BE PROHIBITED WITHOUT PRIOR APPROVAL FROM THE MUNICIPALITY OR MWRD.
- 4. ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS

## 5. ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER SYSTEM.

FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (LATEST EDITION).

- 6. ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.
- 7. ALL SANITARY SEWER PIPE MATERIALS AND JOINTS (AND STORM SEWER PIPE MATERIALS AND JOINTS IN A COMBINED SEWER AREA) SHALL CONFORM TO THE FOLLOWING:

- <u>PIPE MATERIAL</u> PIPE SPECIFICATIONS JOINT SPECIFICATIONS VITRIFIED CLAY PIPE ASTM C-700 ASTM C-425 REINFORCED CONCRETE SEWER PIPE ASTM C-76 ASTM C-443 CAST IRON SOIL PIPE ASTM A-74 ASTM C-564 DUCTILE IRON PIPE ANSI A21.51 ANSI A21.11 POLYVINYL CHLORIDE (PVC) PIPE 6-INCH TO 15-INCH DIAMETER SDR 26 ASTM D-3034 ASTM D-3212 18-INCH TO 27-INCH DIAMETER F/DY=46 ASTM F-679 ASTM D-3212 ASTM D-3261,F-2620 (HEAT FUSION) HIGH DENSITY POLYETHYLENE (HDPE) ASTM D-3350 ASTM D-3035 ASTM D-3212,F-477 (GASKETED) WATER MAIN QUALITY PVC 4-INCH TO 36-INCH ASTM D-2241 ASTM D-3139 4-INCH TO 12-INCH AWWA C900 ASTM D-3139 AWWA C905 ASTM D-3139 14-INCH TO 48-INCH
- THE FOLLOWING MATERIALS ARE ALLOWED ON A QUALIFIED BASIS SUBJECT TO DISTRICT REVIEW AND APPROVAL PRIOR TO PERMIT ISSUANCE. A SPECIAL CONDITION WILL BE ADDED TO THE PERMIT WHEN THE PIPE MATERIAL BELOW IS USED FOR SEWER CONSTRUCTION OR A CONNECTION IS MADE.

<u>PIPE MATERIAL</u> POLYPROPYLENE (PP) PIPE	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
12-INCH TO 24-INCH DOUBLE WALL	ASTM F-2736	D-3212, F-477
30-INCH TO 60-INCH TRIPLE WALL	ASTM F-2764	D3212, F-477

- 8. ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS), REQUIRES STONE BEDDING WITH STONE 1/4 "TO 1" IN SIZE, WITH MINIMUM BEDDING THICKNESS EQUAL TO 1/4 THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NOT LESS THAN FOUR (4) INCHES NOR MORE THAN EIGHT (8) INCHES. MATERIAL SHALL BE CA-7, CA-11 OR CA-13 AND SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC.
- 9. NON-SHEAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPES OF DISSIMILAR PIPE MATERIALS.
- 10. ALL MANHOLES SHALL BE PROVIDED WITH WATERTIGHT COVERS. SANITARY LIDS SHALL BE CONSTRUCTED WITH A CONCEALED PICKHOLE AND WATERTIGHT GASKET WITH THE WORD "SANITARY" CAST INTO THE LID.
- 11. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHALL BE USED:

  a) A CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SHEWER-TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUBWYE SADDLE OR HUB-TEE SADDLE.
  b) REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL) AND REPLACE WITH
- A WYE OR TEE BRANCH SECTION.
  c) WITH PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH OF PIPE FOR INSERTION
  OF PROPER FITTING, USING "BAND SEAL" OR SIMILAR COUPLINGS TO HOLD IT FIRMLY IN PLACE.
- 12. WHENEVER A SANITARY/COMBINED SEWER CROSSES UNDER A WATERMAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATERMAIN SHALL BE 18 INCHES. FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY/COMBINED SEWERS AND WATERMAINS SHALL BE MAINTAINED UNLESS: THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM 18" VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATERMAIN LOCATED AT THE OPPOSITE SIDE ON A BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM 18" VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED CANNOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATER MAIN, THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN STANDARDS OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.
- 13. ALL EXISTING SEPTIC SYSTEMS SHALL BE ABANDONED. ABANDONED TANKS SHALL BE FILLED WITH GRANULAR MATERIAL OR REMOVED.
- 14. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES, AND SHALL BE CAST IN PLACE OR PRE-CAST REINFORCED
- 15. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE PRECAST "RUBBER BOOTS" THAT CONFORM TO ASTM C-923 FOR ALL PIPE CONNECTIONS. PRECAST SECTIONS SHALL CONSIST OF MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS.
- 16. ALL ABANDONED SANITARY SEWERS SHALL BE PLUGGED AT BOTH ENDS WITH AT LEAST 2 FEET LONG NON-SHRINK CONCRETE OR MORTAR PLUG.
- 7. EXCEPT FOR FOUNDATION/FOOTING DRAINS PROVIDED TO PROTECT BUILDINGS, OR PERFORATED PIPES ASSOCIATED WITH VOLUME CONTROL FACILITIES, DRAIN TILES/FIELD TILES/UNDERDRAINS/PERFORATED PIPES ARE NOT ALLOWED TO BE CONNECTED TO OR TRIBUTARY TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS IN COMBINED SEWER AREAS. CONSTRUCTION OF NEW FACILITIES OF THIS TYPE IS PROHIBITED; AND ALL EXISTING DRAIN TILES AND PERFORATED PIPES ENCOUNTERED WITHIN THE PROJECT AREA SHALL BE PLUGGED OR REMOVED, AND SHALL NOT BE CONCENTED.
- 18. A BACKFLOW PREVENTER IS REQUIRED FOR ALL DETENTION BASINS TRIBUTARY TO COMBINED SEWERS. REQUIRED BACKFLOW PREVENTERS SHALL BE INSPECTED AND EXERCISED ANNUALLY BY THE PROPERTY OWNER TO ENSURE PROPER OPERATION, AND ANY NECESSARY MAINTENANCES SHALL BE PERFORMED TO ENSURE FUNCTIONALITY. IN THE EVENT OF A SEWER SURCHARGE INTO AN OPEN DETENTION BASIN TRIBUTARY TO COMBINED SEWERS, THE PERMITTEE SHALL ENSURE THAT CLEAN UP AND WASH OUT OF SEWAGE TAKES PLACE WITHIN 48 HOURS OF THE STORM EVENT.

E. EROSION AND SEDIMENT CONTROL

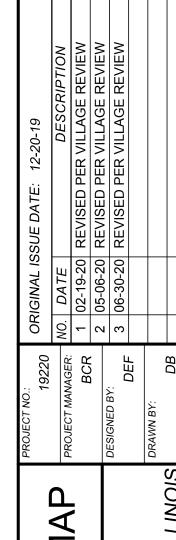
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- THE CONTRACTOR SHALL INSTALL THE EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
- 2. EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE FUNCTIONAL PRIOR TO HYDROLOGIC DISTURBANCE OF THE SITE.
- 3. ALL DESIGN CRITERIA, SPECIFICATIONS, AND INSTALLATION OF EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL.
- 4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE
- SITE AT ALL TIMES.
- 5. INSPECTIONS AND DOCUMENTATION SHALL BE PERFORMED, AT A MINIMUM:
  a) UPON COMPLETION OF INITIAL EROSION AND SEDIMENT CONTROL MEASURES, PRIOR TO ANY SOIL DISTURBANCE.
- b) ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT WITH GREATER THAN 0.5 INCH OF RAINFALL OR LIQUID EQUIVALENT PRECIPITATION.
- 6. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. IF STRIPPING, CLEARING, GRADING, OR LANDSCAPING ARE TO BE DONE IN PHASES, THE CO-PERMITTEE SHALL PLAN FOR APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL MEASURES.
- 7. A STABILIZED MAT OF CRUSHED STONE MEETING THE STANDARDS OF THE ILLINOIS URBAN MANUAL SHALL BE INSTALLED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE. SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
- 8. CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL AND SHALL BE INSTALLED PRIOR TO ANY ON SITE CONSTRUCTION ACTIVITIES INVOLVING CONCRETE
- 9. MORTAR WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ADDITION TO CONCRETE WASHOUT FACILITIES FOR ANY BRICK AND MORTAR BUILDING ENVELOPE CONSTRUCTION ACTIVITIES.
- 10. TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO DIRECT ALL RUNOFF FROM HYDROLOGICALLY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR BASIN. VOLUME CONTROL FACILITIES SHALL NOT BE USED AS TEMPORARY SEDIMENT BASINS.
- 12. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) DAYS.
- 13. ALL FLOOD PROTECTION AREAS AND VOLUME CONTROL FACILITIES SHALL, AT A MINIMUM, BE PROTECTED WITH A DOUBLE-ROW OF SILT FENCE (OR EQUIVALENT).
- 14. VOLUME CONTROL FACILITIES SHALL NOT BE CONSTRUCTED UNTIL ALL OF THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
- 15. SOIL STOCKPILES SHALL, AT A MINIMUM, BE PROTECTED WITH PERIMETER SEDIMENT CONTROLS. SOIL STOCKPILES SHALL NOT BE PLACED IN FLOOD PROTECTION AREAS OR THEIR BUFFERS.
- 16. EARTHEN EMBANKMENT SIDE SLOPES SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL
- 17. STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY APPROPRIATE SEDIMENT CONTROL MEASURES.
- 18. THE CONTRACTOR SHALL EITHER REMOVE OR REPLACE ANY EXISTING DRAIN TILES AND INCORPORATE THEM INTO THE DRAINAGE PLAN FOR THE DEVELOPMENT. DRAIN TILES CANNOT BE TRIBUTARY TO A SANITARY OR COMBINED SEWER. DRAIN TILES ALLOWED IN COMBINED SEWER AREA FOR GREEN INFRASTRUCTURE PRACTICES.
- 19. IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. DEWATERING SYSTEMS SHOULD BE INSPECTED DAILY DURING OPERATIONAL PERIODS. THE SITE INSPECTOR MUST BE PRESENT AT THE COMMENCEMENT OF DEWATERING ACTIVITIES.
- 20. THE CONTRCTOR SHALL BE RESPONSIBLE FOR TRENCH DEWATERING AND EXCAVATION FOR THE INSTALLATION OF SANITARY SEWERS, STORM SEWERS, WATERMAINS AS WELL AS THEIR SERVICES AND OTHER APPURTENANCES. ANY TRENCH DEWATERING, WHICH CONTAINS SEDIMENT SHALL PASS THROUGH A SEDIMENT SETTLING POND OR EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE. ALTERNATIVES MAY INCLUDE DEWATERING INTO A SUMP PIT, FILTER BAG OR EXISTING VEGETATED UPSLOPE AREA. SEDIMENT LADEN WATERS SHALL NOT BE DISCHARGE TO WATERWAYS, FLOOD PROTECTION AREAS OR THE COMBINED SEWER SYSTEM.
- 21. ALL PERMANENT EROSION CONTROL PRACTICES SHALL BE INITIATED WITHIN SEVEN (7) DAYS FOLLOWING THE COMPLETION OF SOIL DISTURBING ACTIVITIES.
- 22. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED ON A YEAR-ROUND BASIS DURING CONSTRUCTION AND ANY PERIODS OF CONSTRUCTION SHUTDOWN UNTIL PERMANENT STABILIZATION IS ACHIEVED.
- 23. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER PERMANENT SITE STABILIZATION.
- 24. THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, SITE INSPECTOR, OR MWRD.



EXISTING MWRD INTERCEPTOR

## **MWRD ROUTING MAP**



O NOTES AND ROUTING

323 3anes Avende Noodridge, IL 60517 330.724.9200 phone www.v3co.com



DRAWING NO.

1.2

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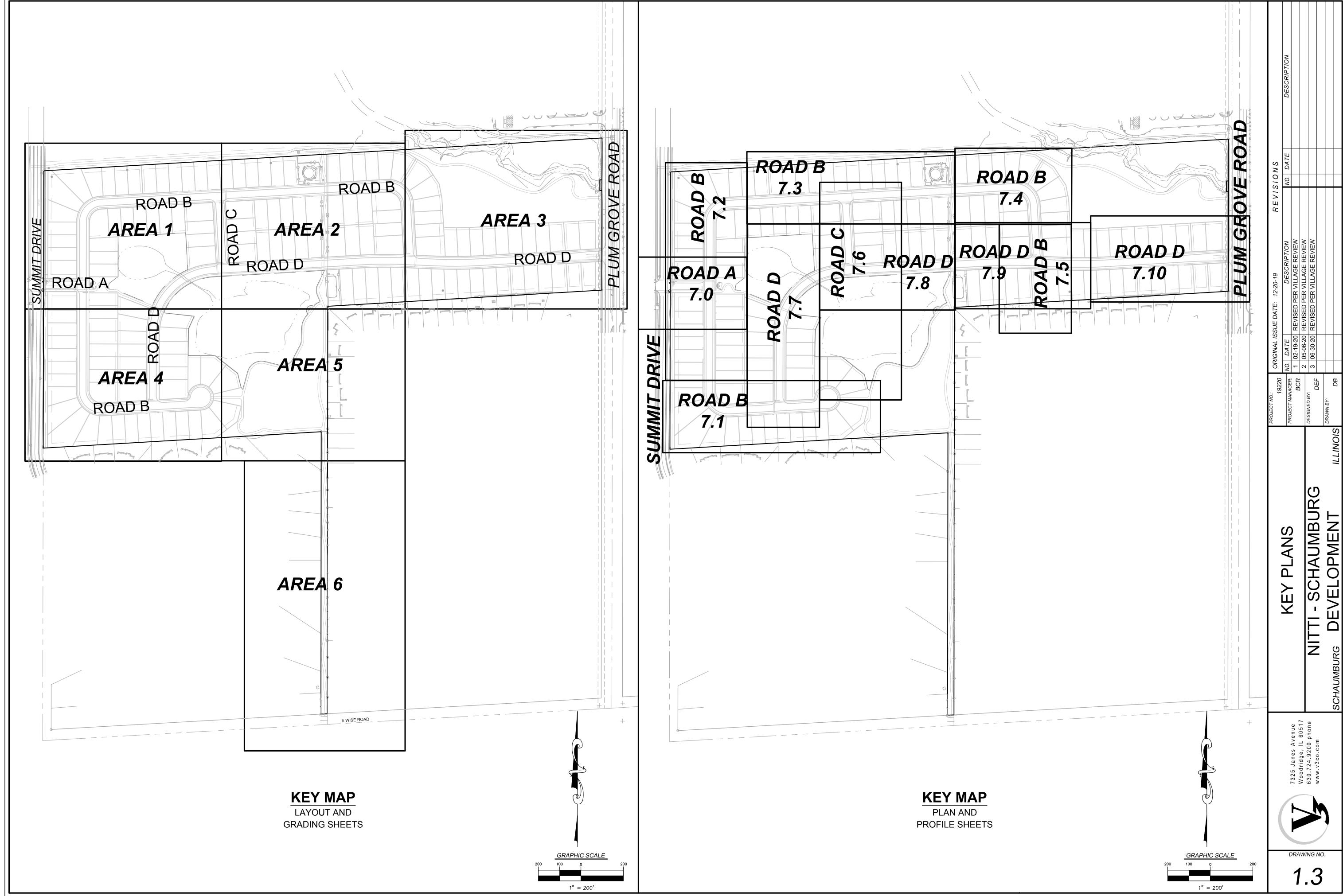
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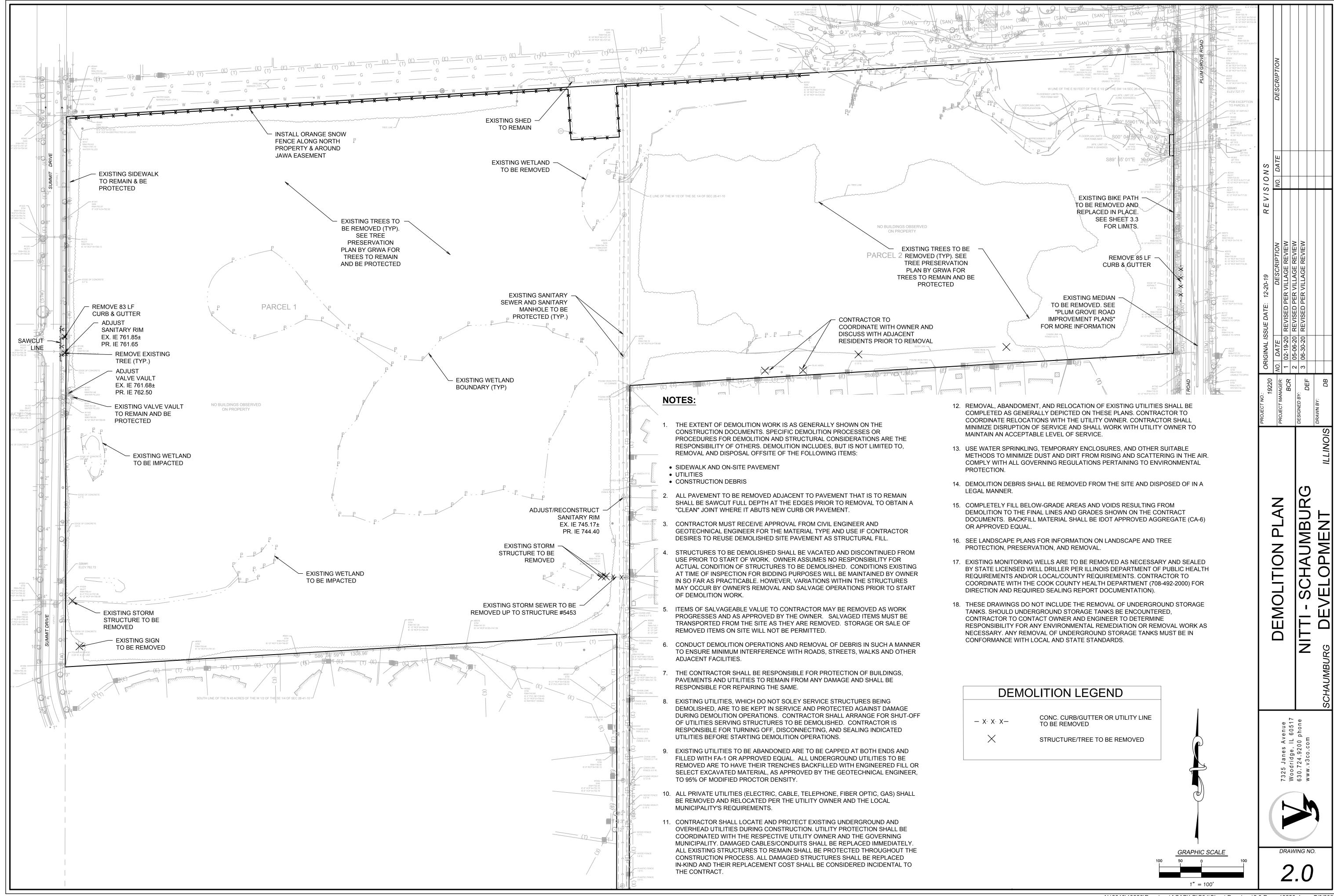
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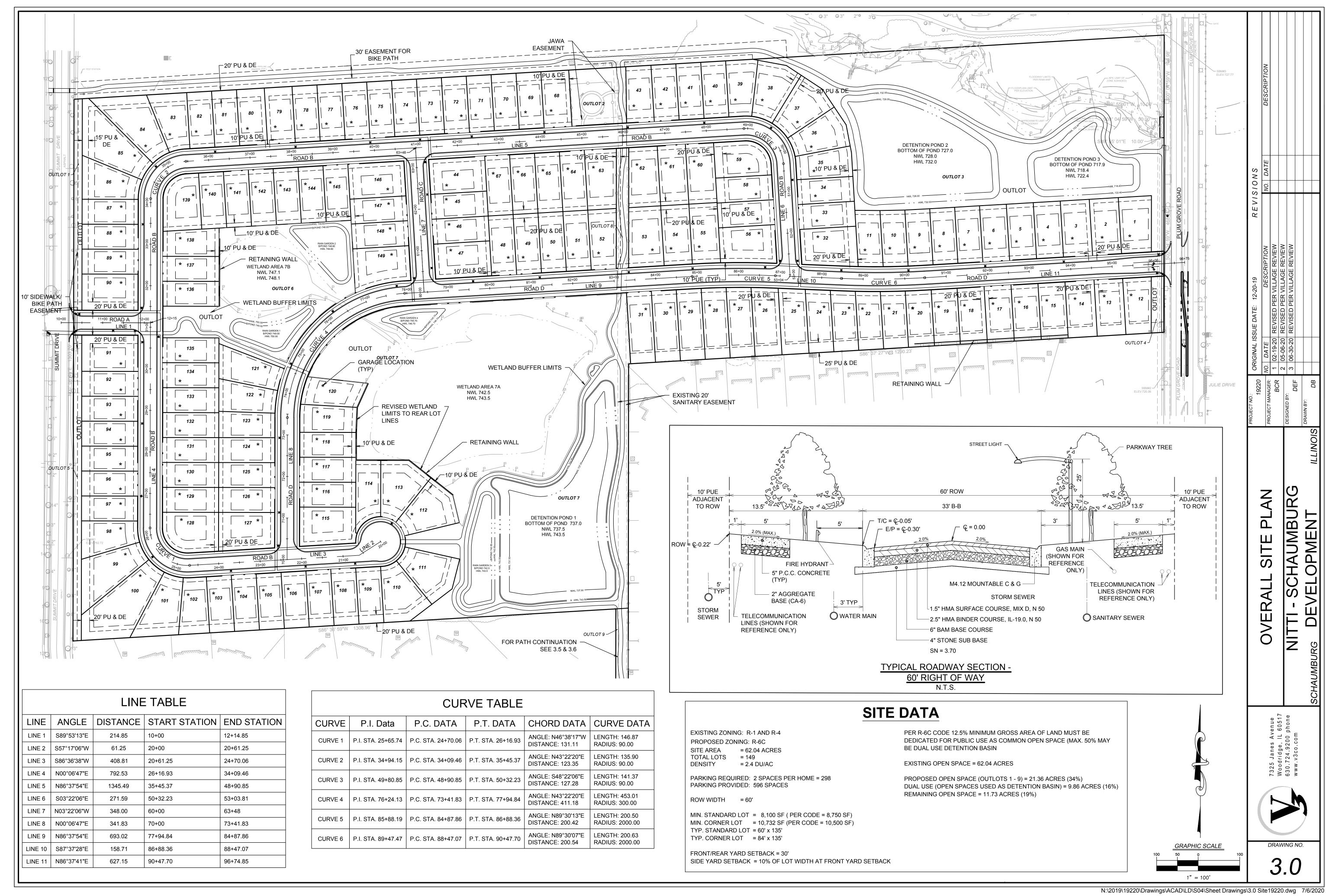
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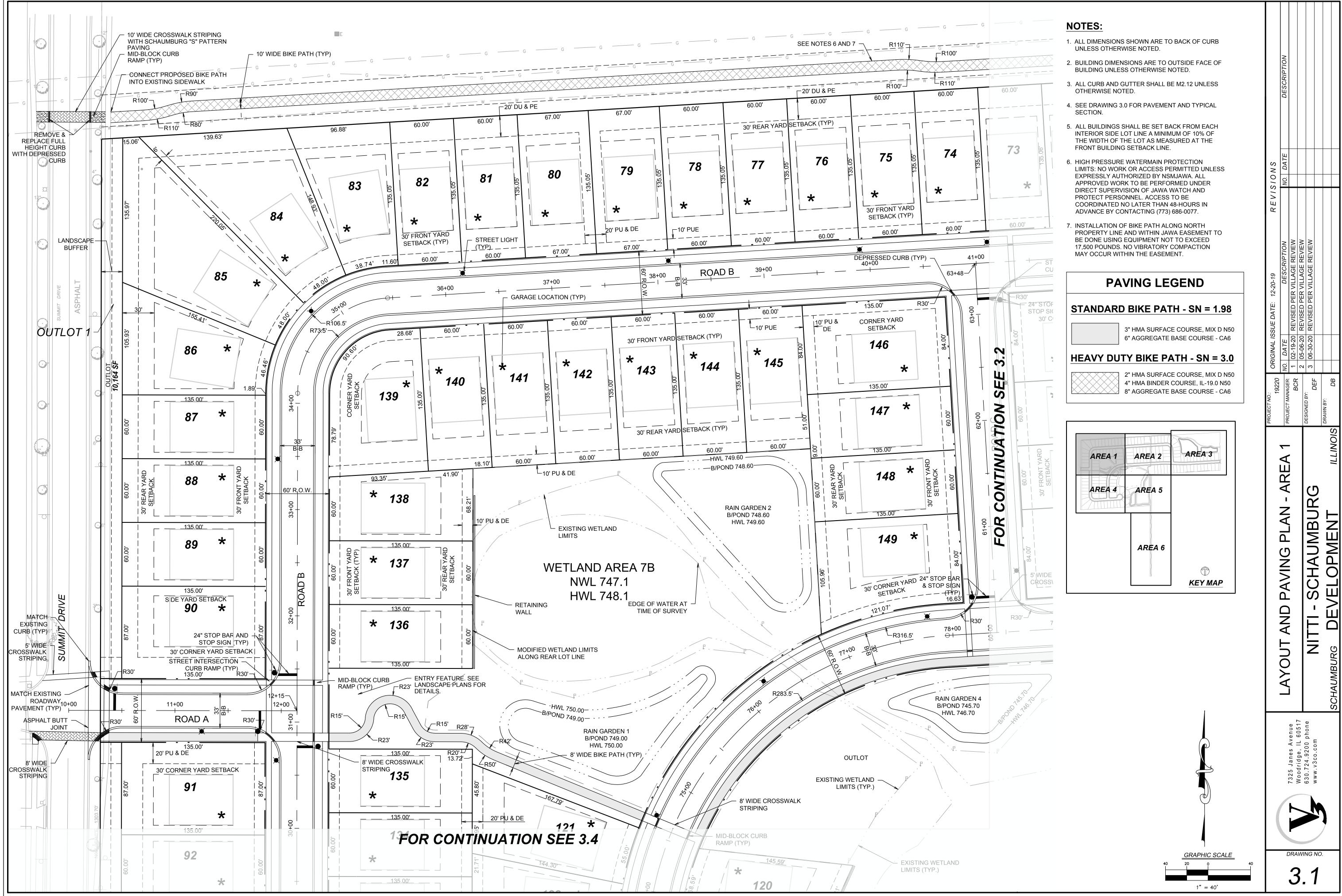
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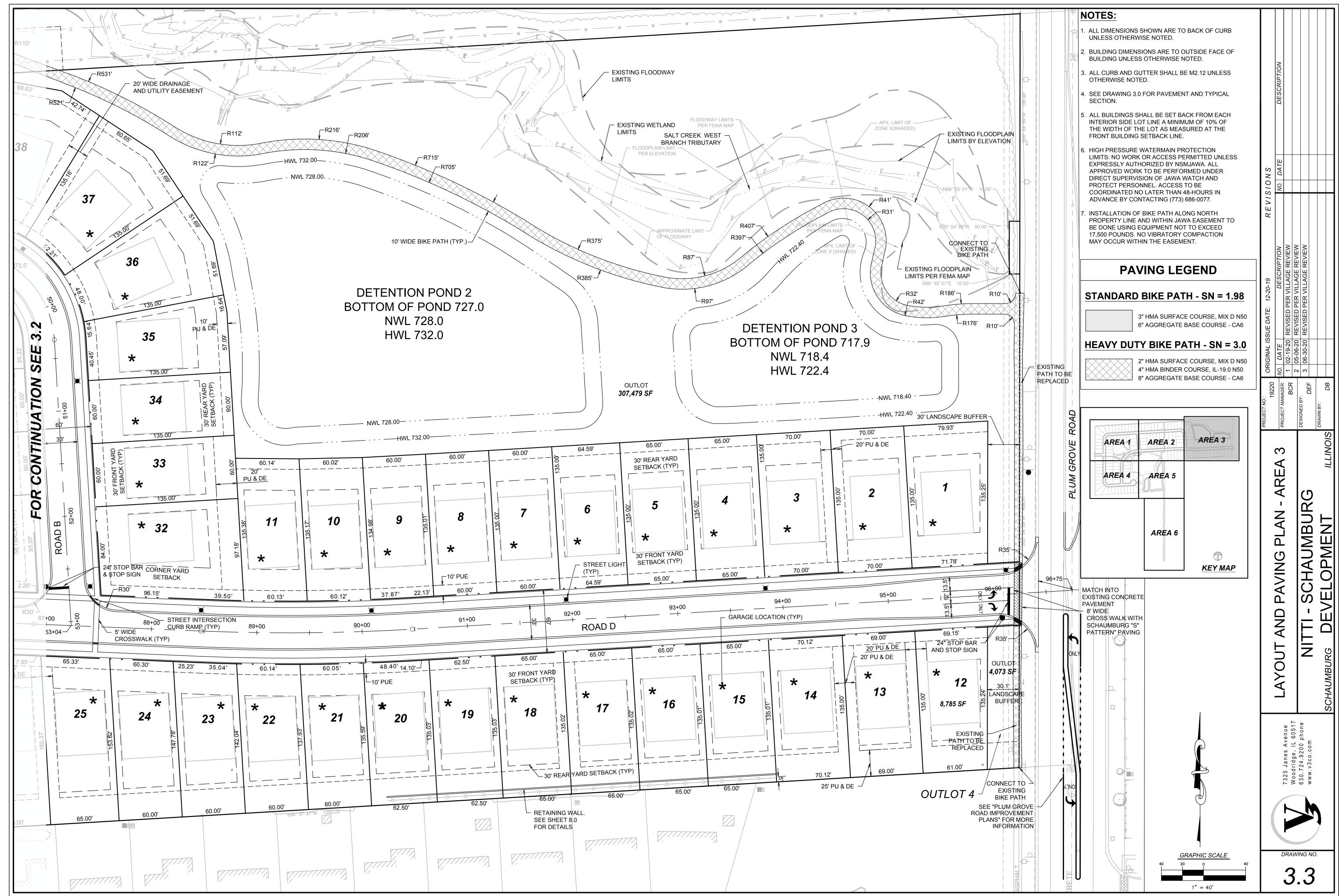


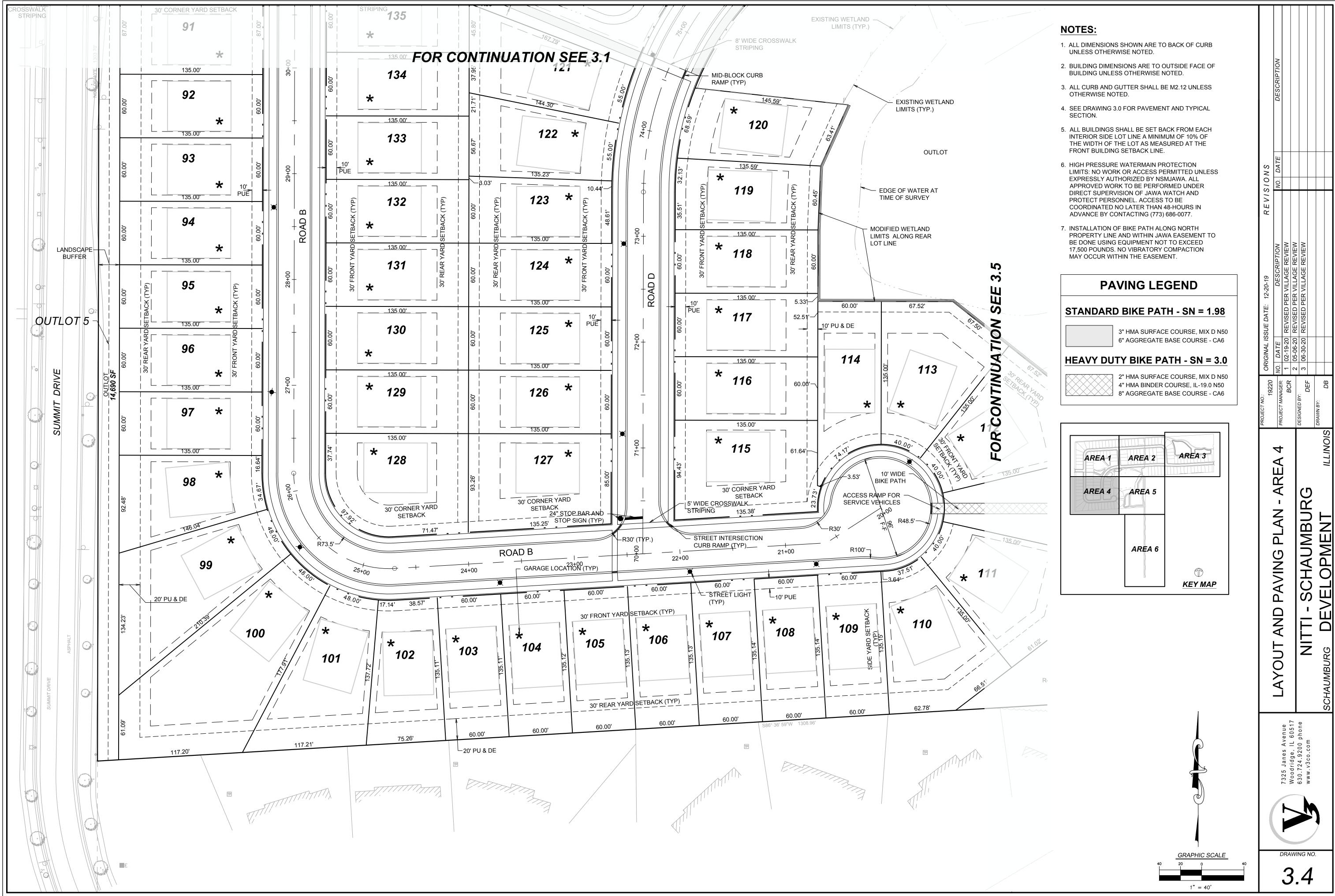


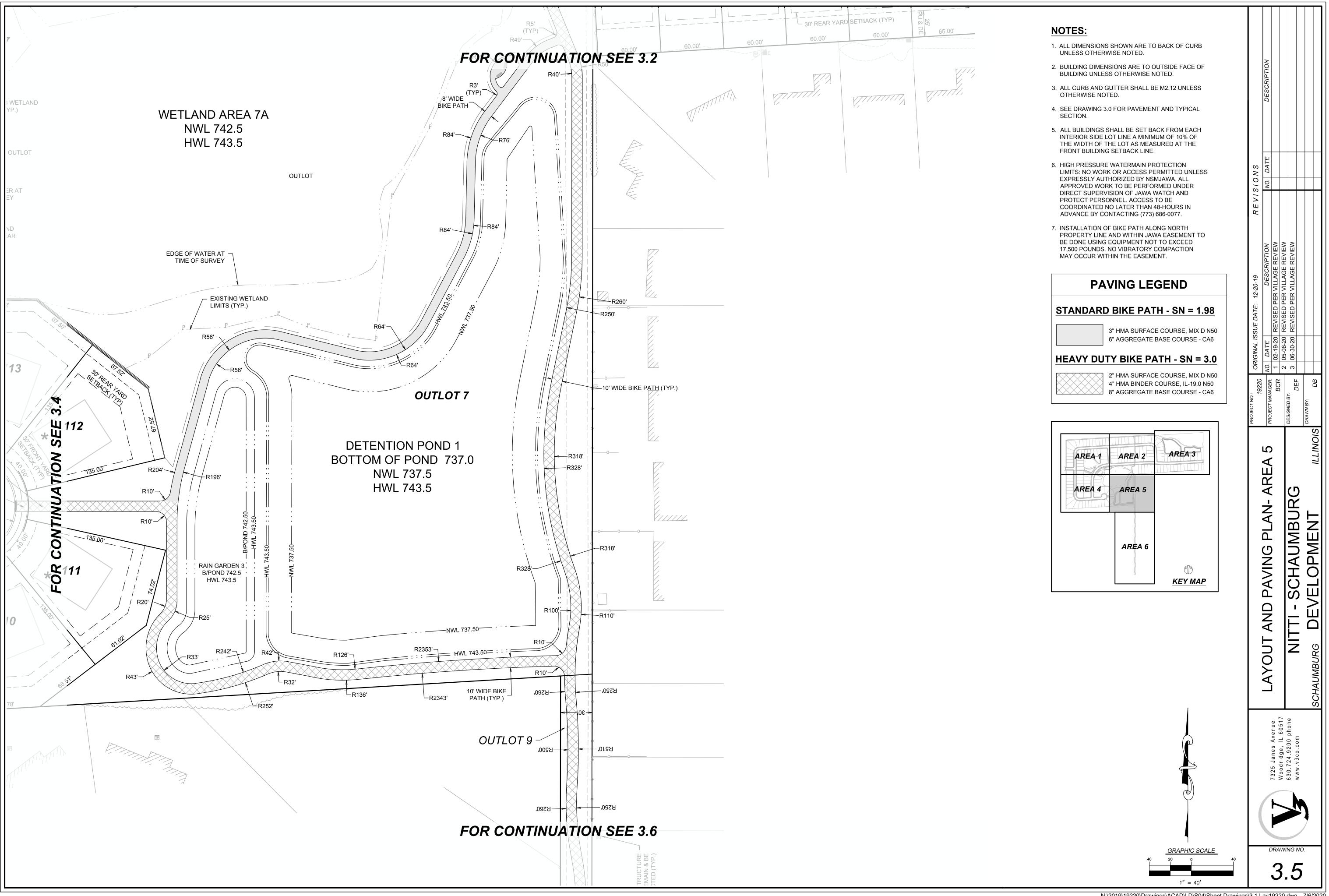


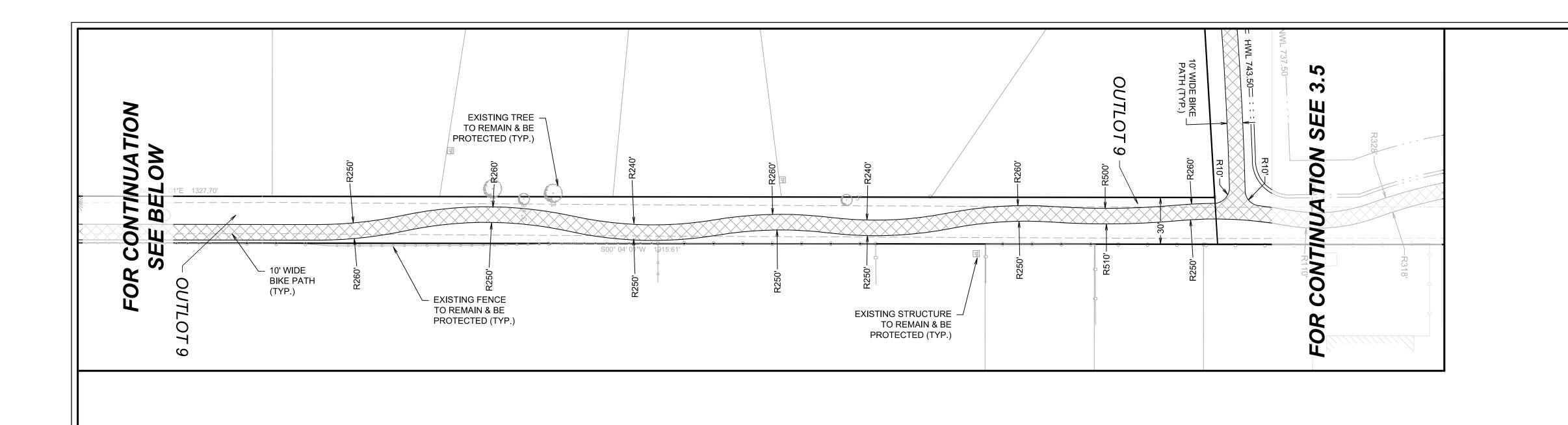


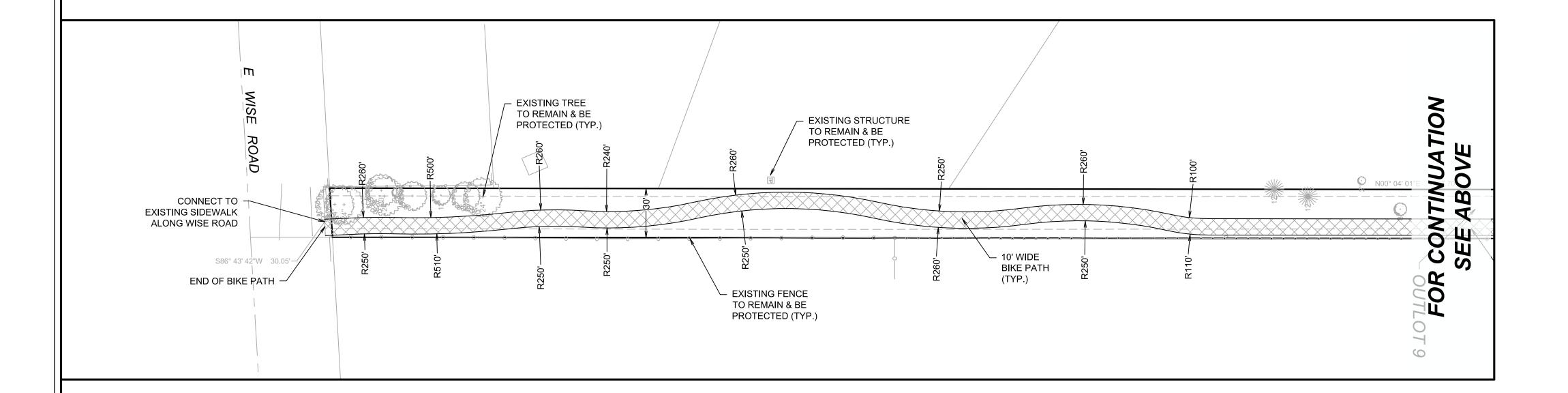












## NOTES:

- ALL DIMENSIONS SHOWN ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.
- 2. BUILDING DIMENSIONS ARE TO OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
- 3. ALL CURB AND GUTTER SHALL BE M2.12 UNLESS OTHERWISE NOTED.
- 4. SEE DRAWING 3.0 FOR PAVEMENT AND TYPICAL SECTION.
- 5. ALL BUILDINGS SHALL BE SET BACK FROM EACH INTERIOR SIDE LOT LINE A MINIMUM OF 10% OF THE WIDTH OF THE LOT AS MEASURED AT THE FRONT BUILDING SETBACK LINE.
- 6. HIGH PRESSURE WATERMAIN PROTECTION
  LIMITS: NO WORK OR ACCESS PERMITTED UNLESS
  EXPRESSLY AUTHORIZED BY NSMJAWA. ALL
  APPROVED WORK TO BE PERFORMED UNDER
  DIRECT SUPERVISION OF JAWA WATCH AND
  PROTECT PERSONNEL. ACCESS TO BE
  COORDINATED NO LATER THAN 48-HOURS IN
  ADVANCE BY CONTACTING (773) 686-0077.
- 7. INSTALLATION OF BIKE PATH ALONG NORTH PROPERTY LINE AND WITHIN JAWA EASEMENT TO BE DONE USING EQUIPMENT NOT TO EXCEED 17,500 POUNDS. NO VIBRATORY COMPACTION MAY OCCUR WITHIN THE EASEMENT.

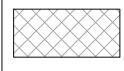
## **PAVING LEGEND**

## STANDARD BIKE PATH - SN = 1.98

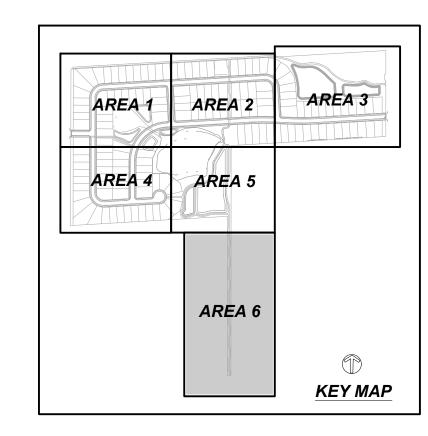


3" HMA SURFACE COURSE, MIX D N50 6" AGGREGATE BASE COURSE - CA6

## **HEAVY DUTY BIKE PATH - SN = 3.0**



2" HMA SURFACE COURSE, MIX D N50 4" HMA BINDER COURSE, IL-19.0 N50 8" AGGREGATE BASE COURSE - CA6



LAYOUT AND PAVING PLAN - ARE,

NITTI - SCHAUMBURG

SCHAUMBURG DEVELOPMENT

DRAWING NO.

3.6

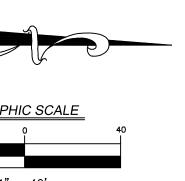
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DESCRIPTION

REVISED PER VILLAGE REVIEW

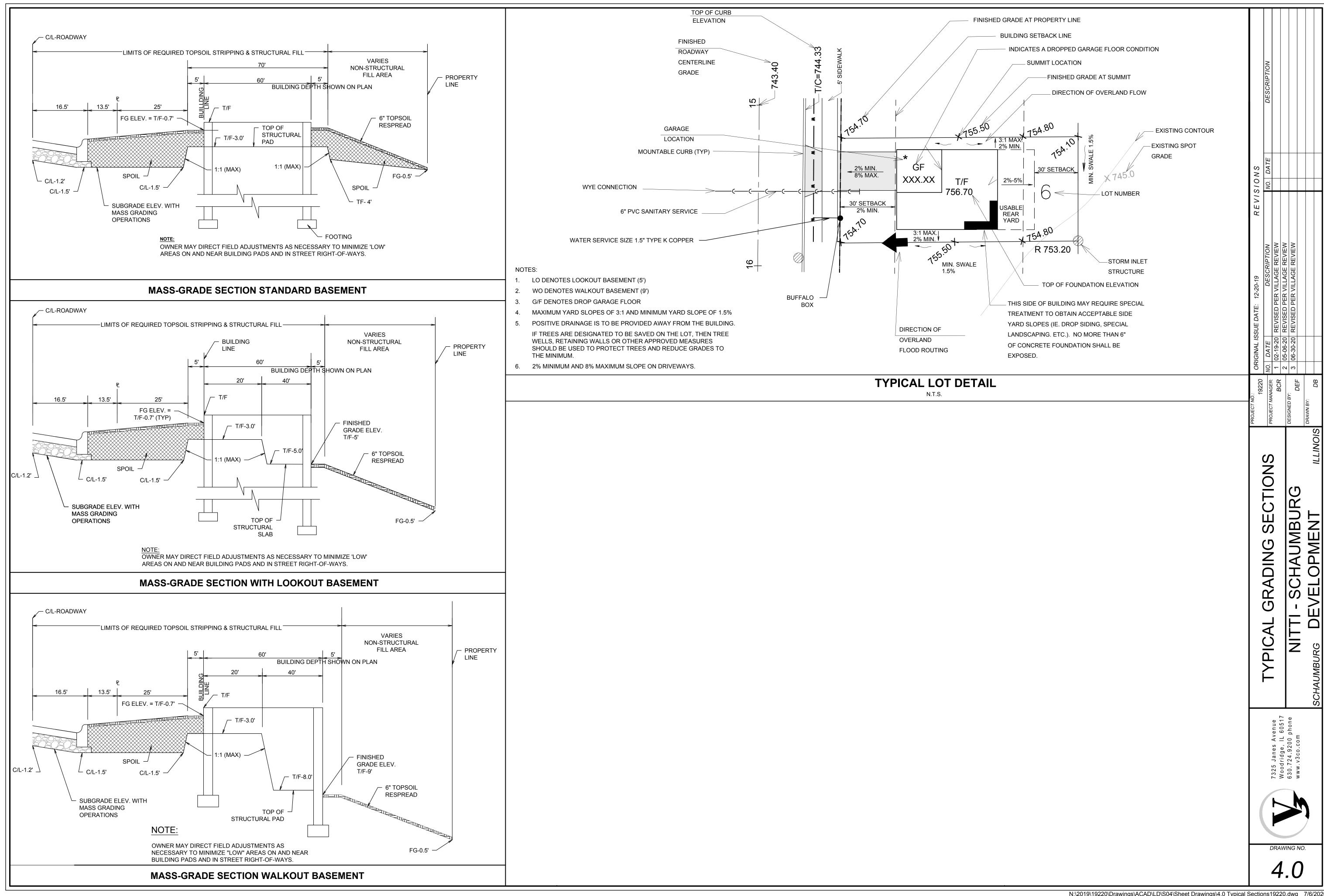
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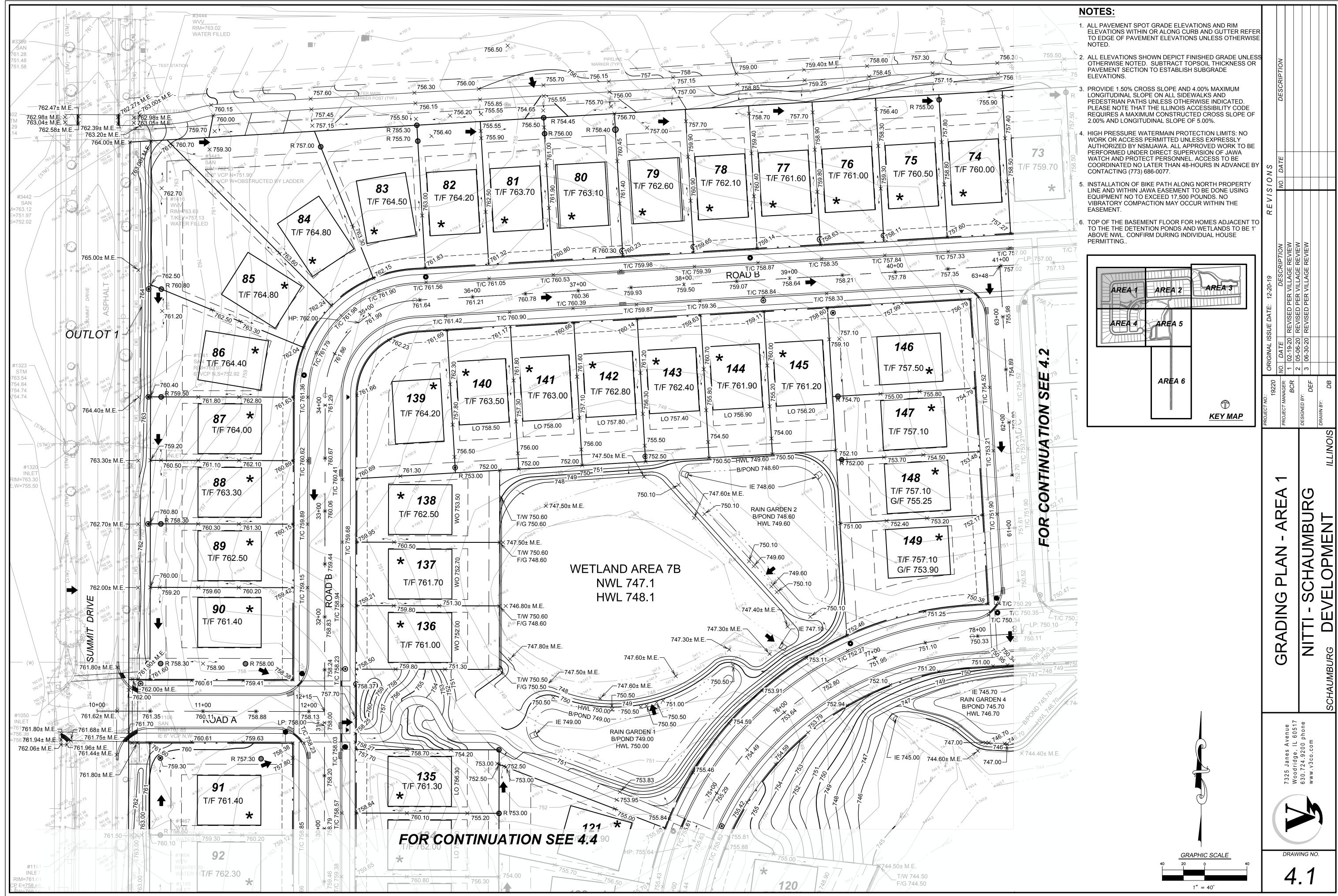
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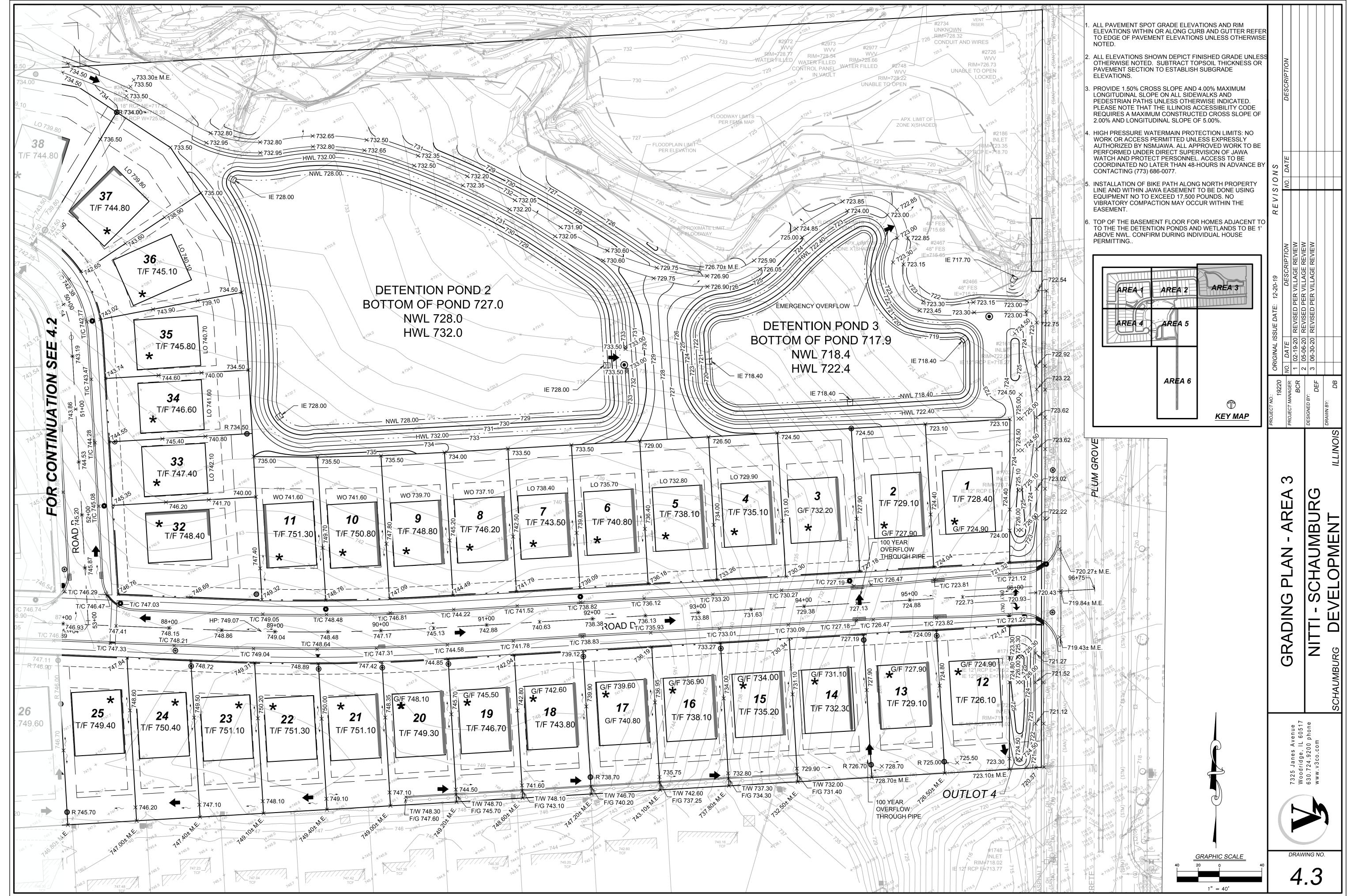
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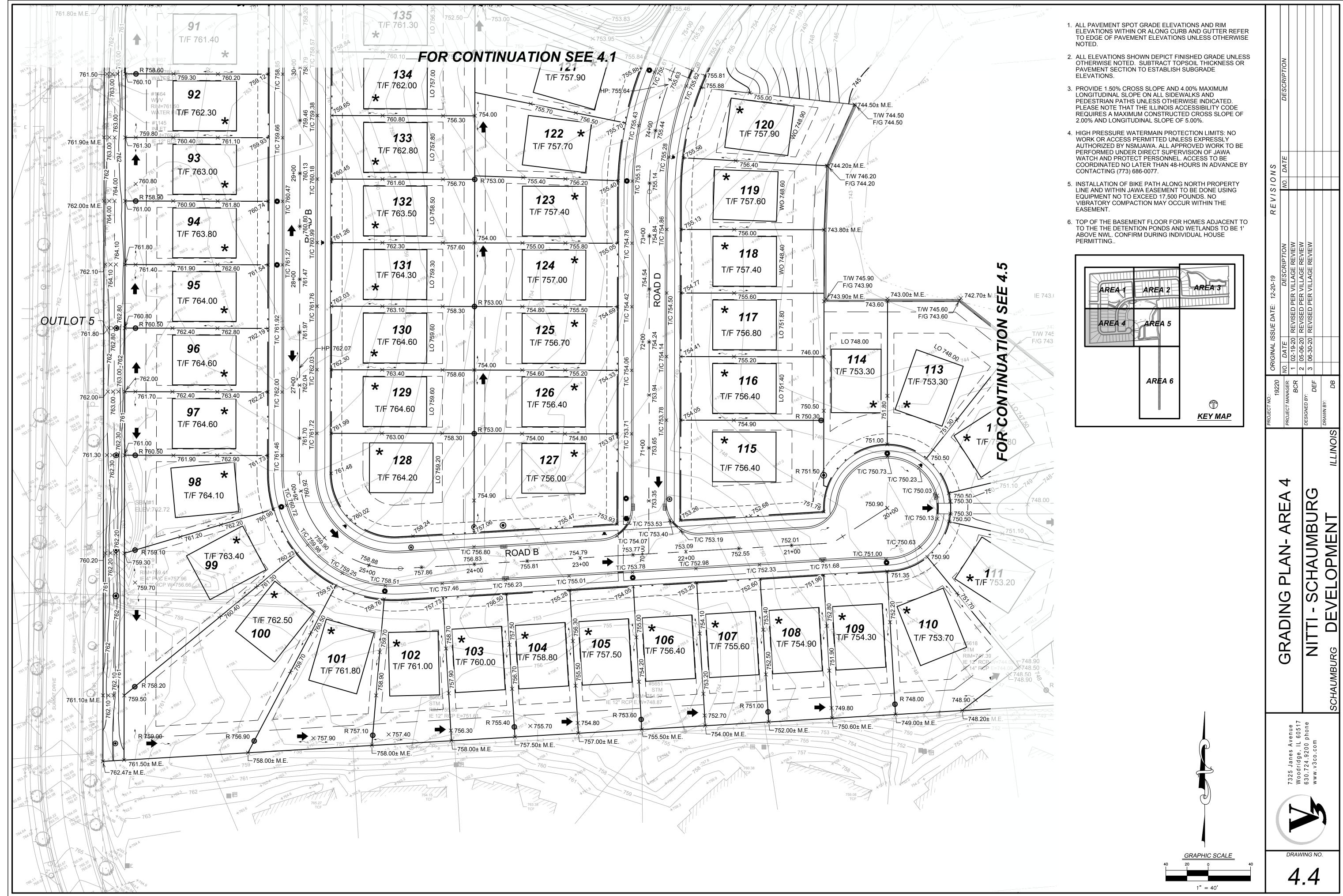
1" = 40'

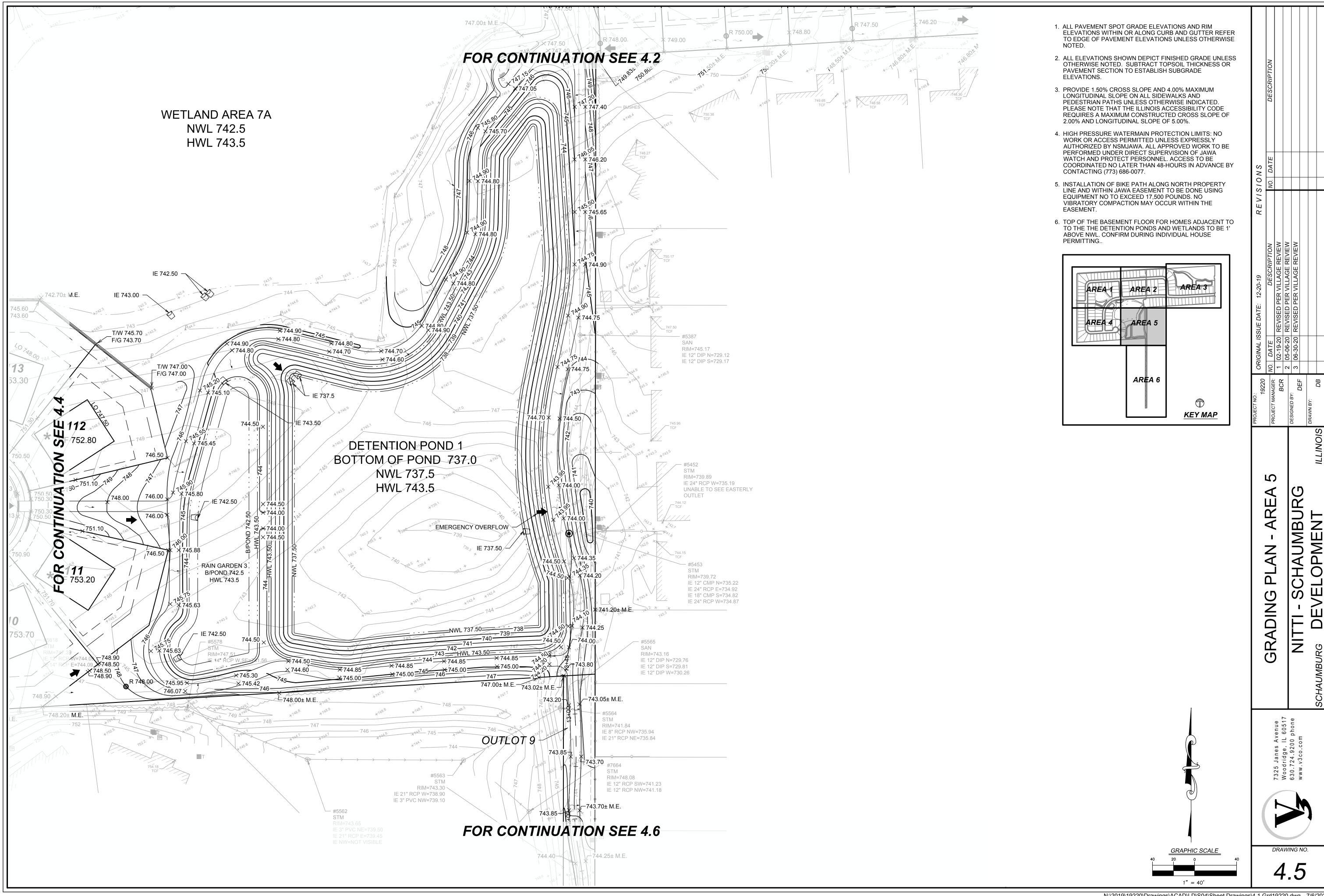


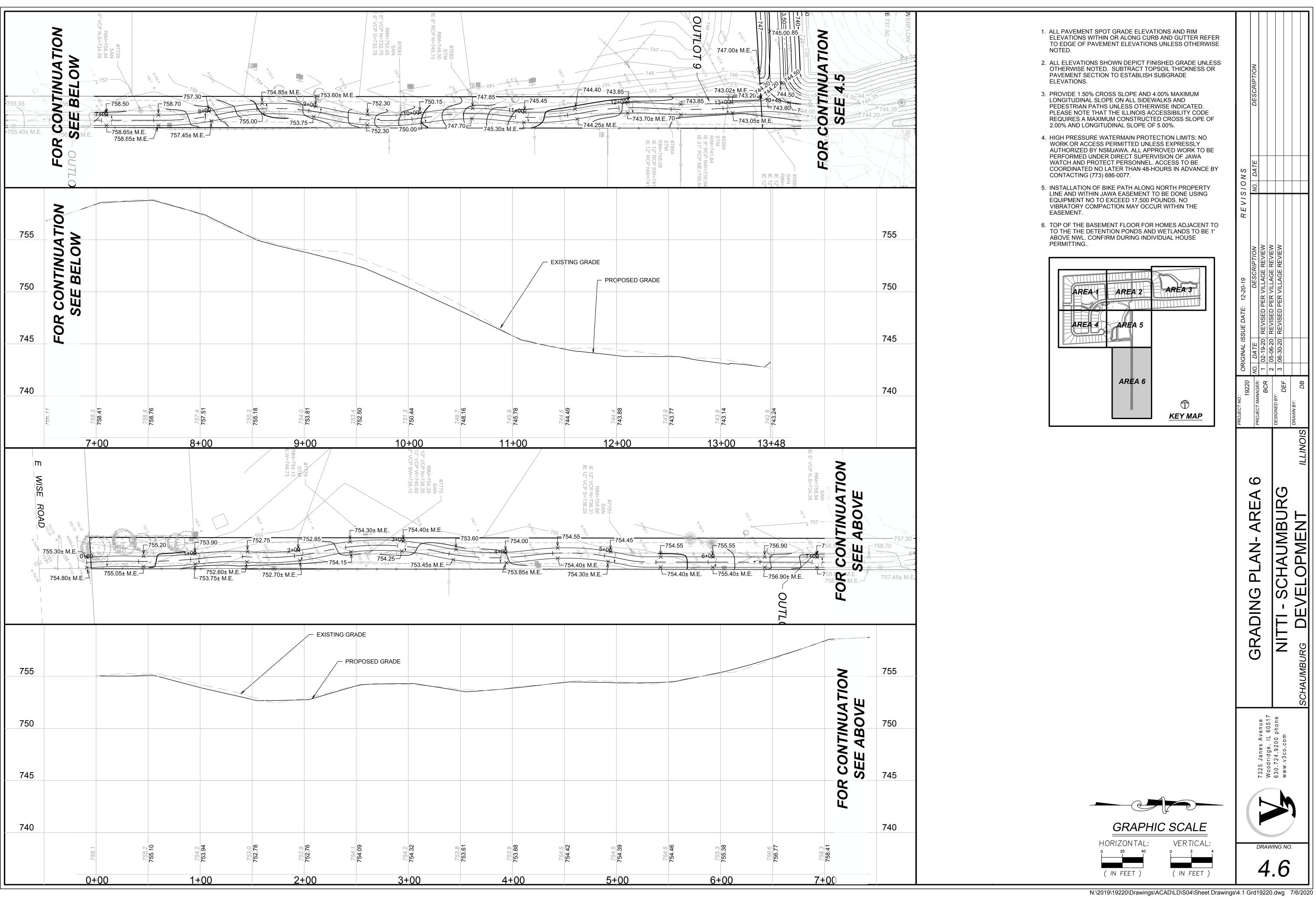


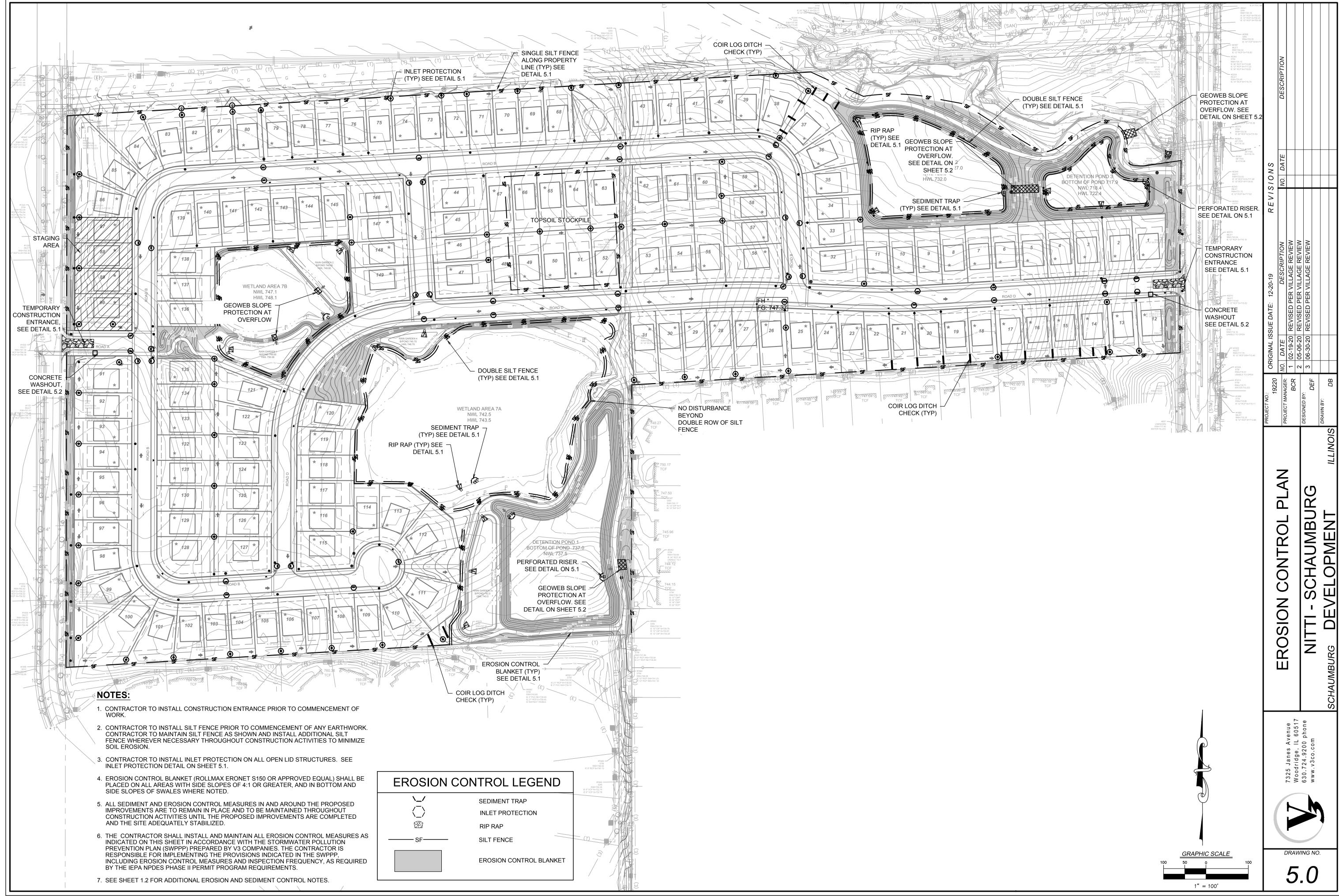


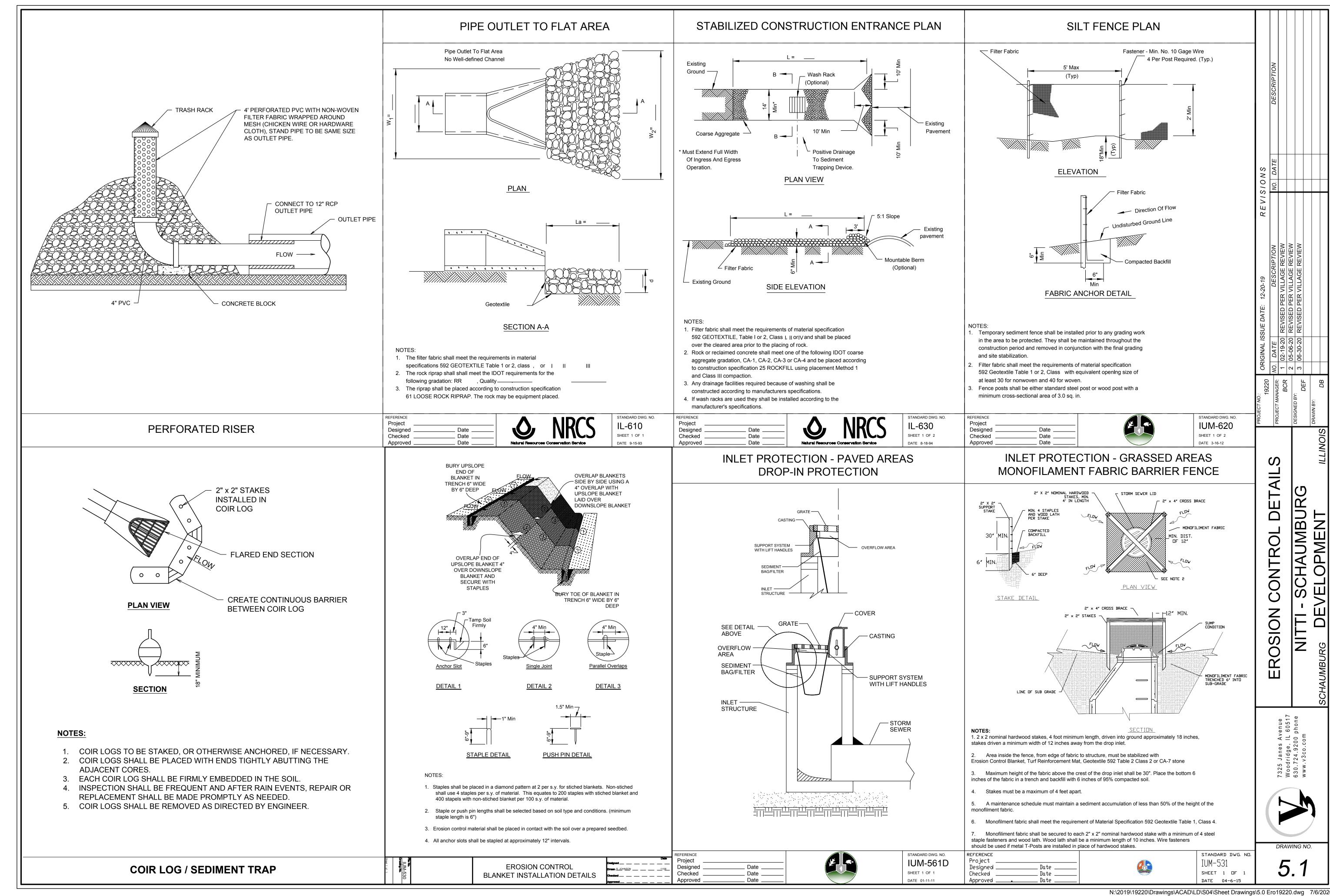


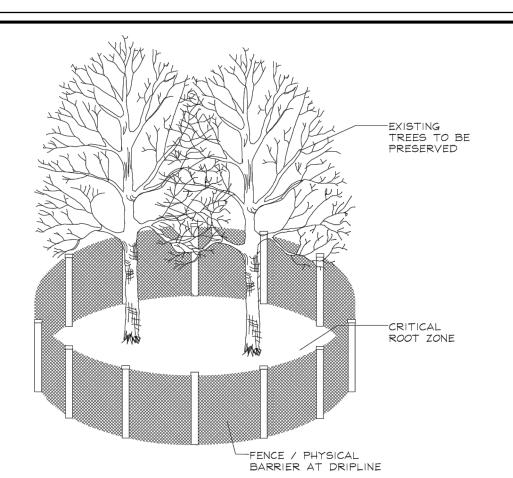








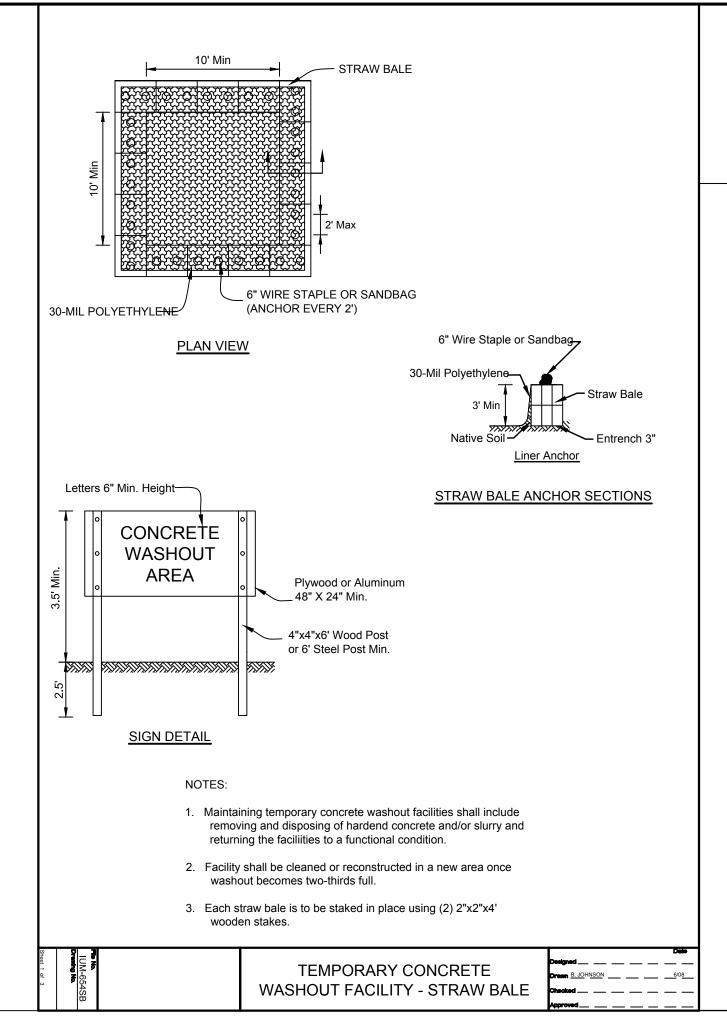


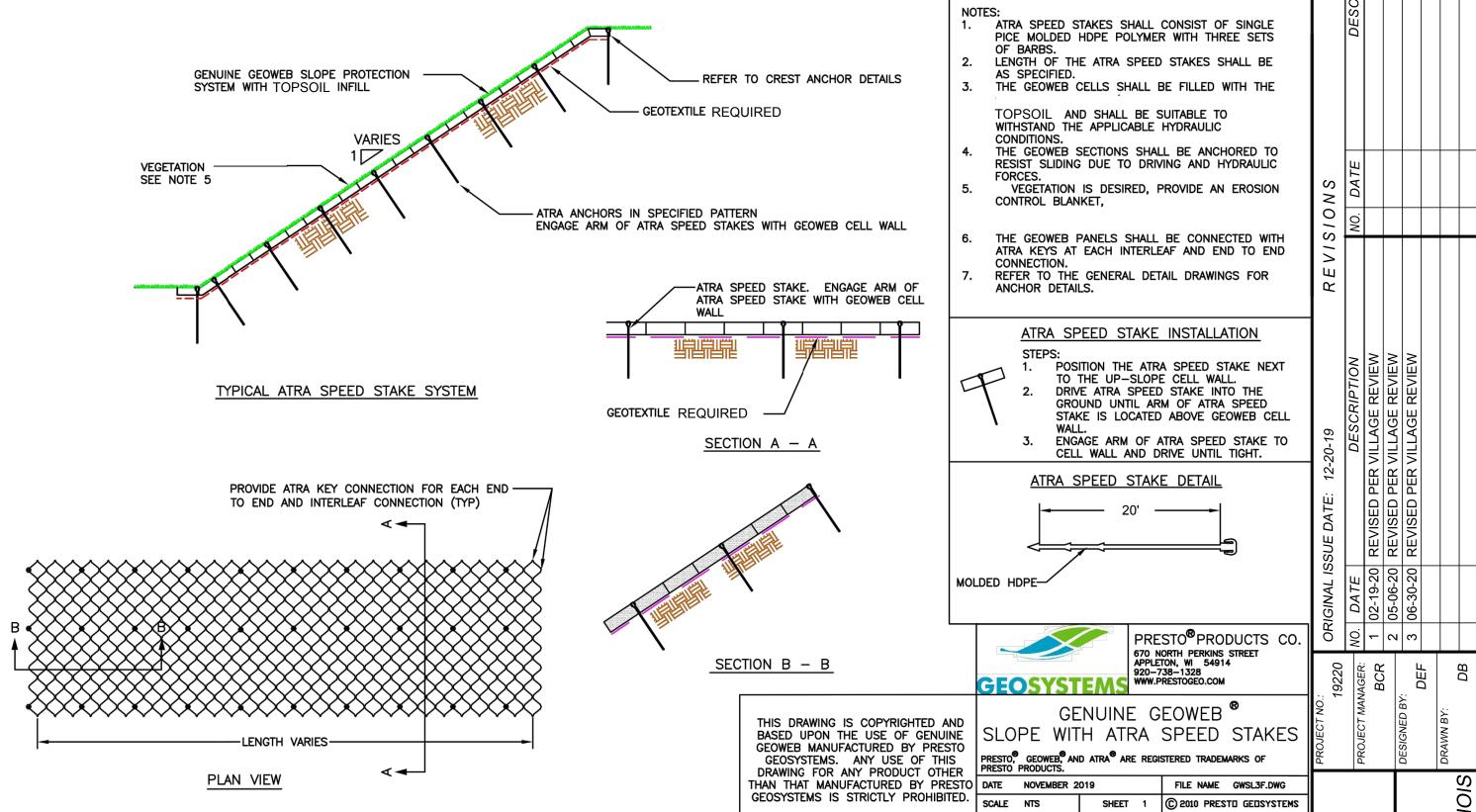


## TREE PRESERVATION DETAIL

## TREE PRESERVATION NOTES

- 48" high snow fence or wood barriers shall extend to the dripline of the tree or tree mass whenever possible, shall be installed before construction begins, and should not be removed until the completion of construction.
- 2. All accidental damage to existing trees that are to be preserved shall be promptly treated as required in accordance with recognized horticultural practices and the instructions of the professional Arborist, Landscape Architect or Horticulturist.
- 3. Broken or badly bruised branches shall be removed with a clean cut. If recommended by the professional Arborist, Landscape Architect or Horticulturist.
- Care shall be exercised by the contractors to protect all overhead limbs and branches from damage by contact with material, machinery or equipment and by damage from engine exhaust.
- 5. Contractors shall protect trees and vegetation against spills or discharge of fuels, lubricating oils, hydraulic fluids, anti-freeze and coolants, calcium chloride, lime and all other similar hydrocarbons, organic chemicals, and other materials which can be harmful.
- When underground utilities are proposed within 5' of a preserved tree trunk, they must be augered if possible.





EROSION CONTROL DETAILS
NITTI - SCHAUMBURG

7325 Janes Avenue Woodridge, IL 60517 630.724.9200 phone



5.2