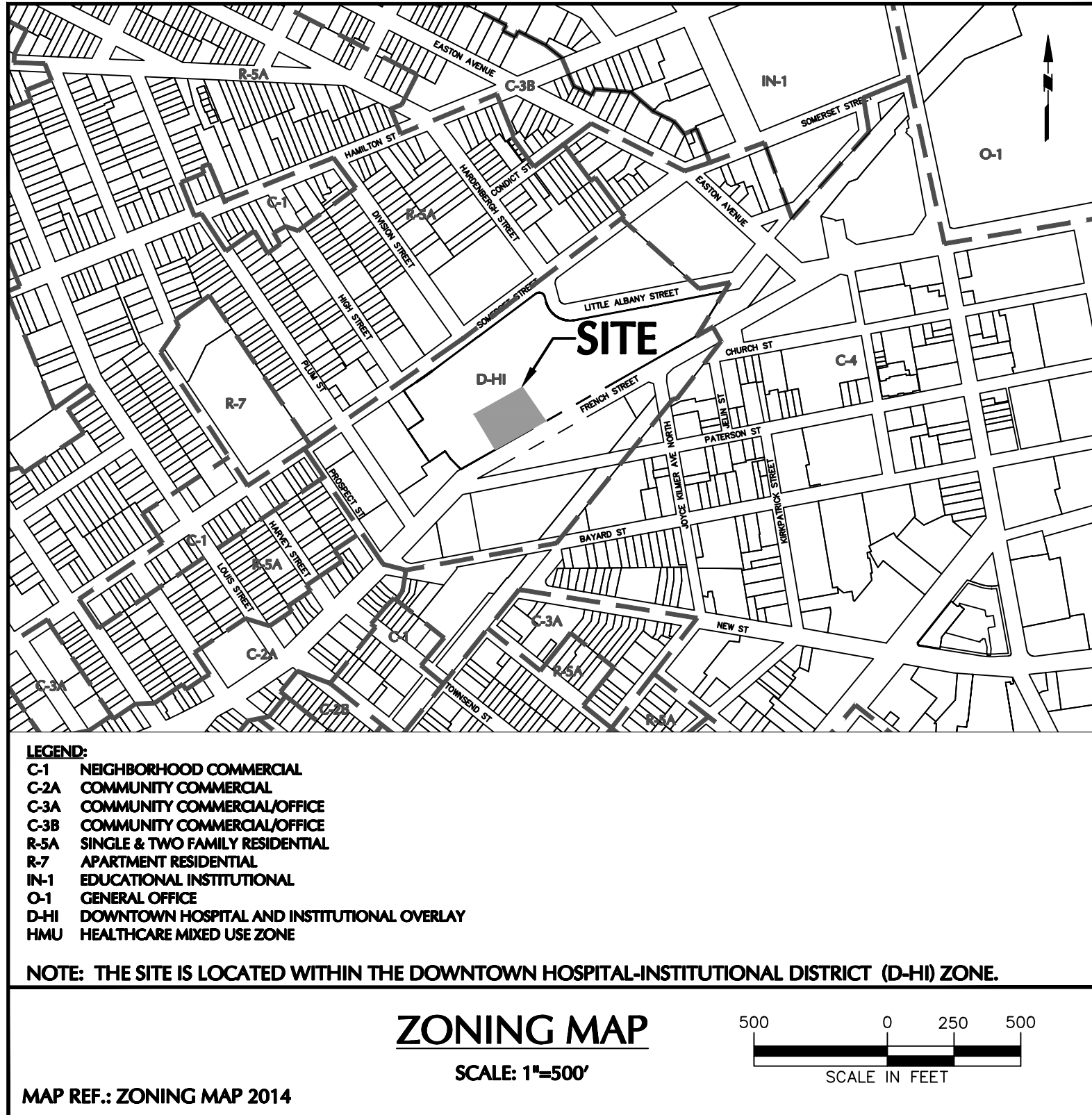
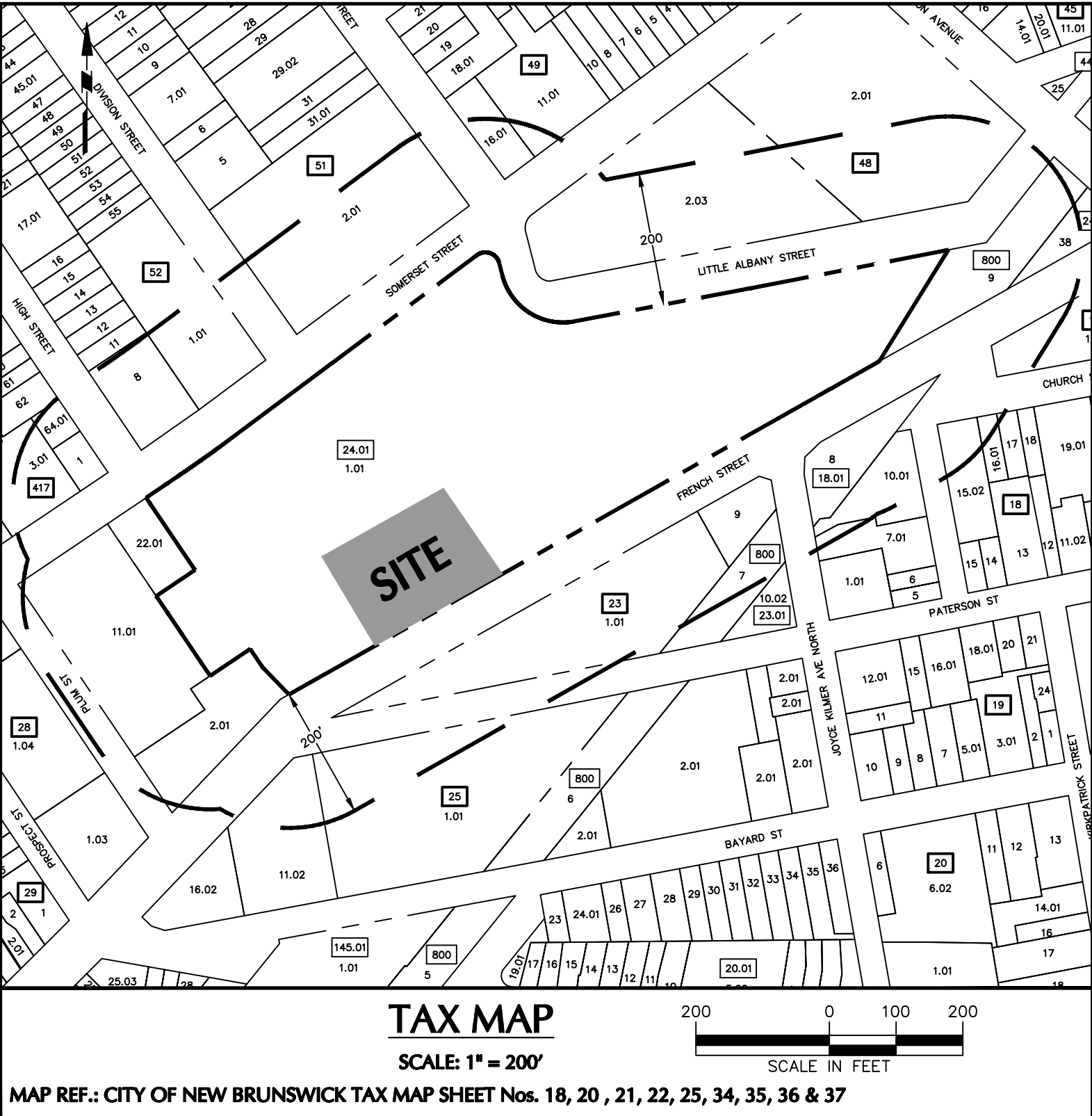
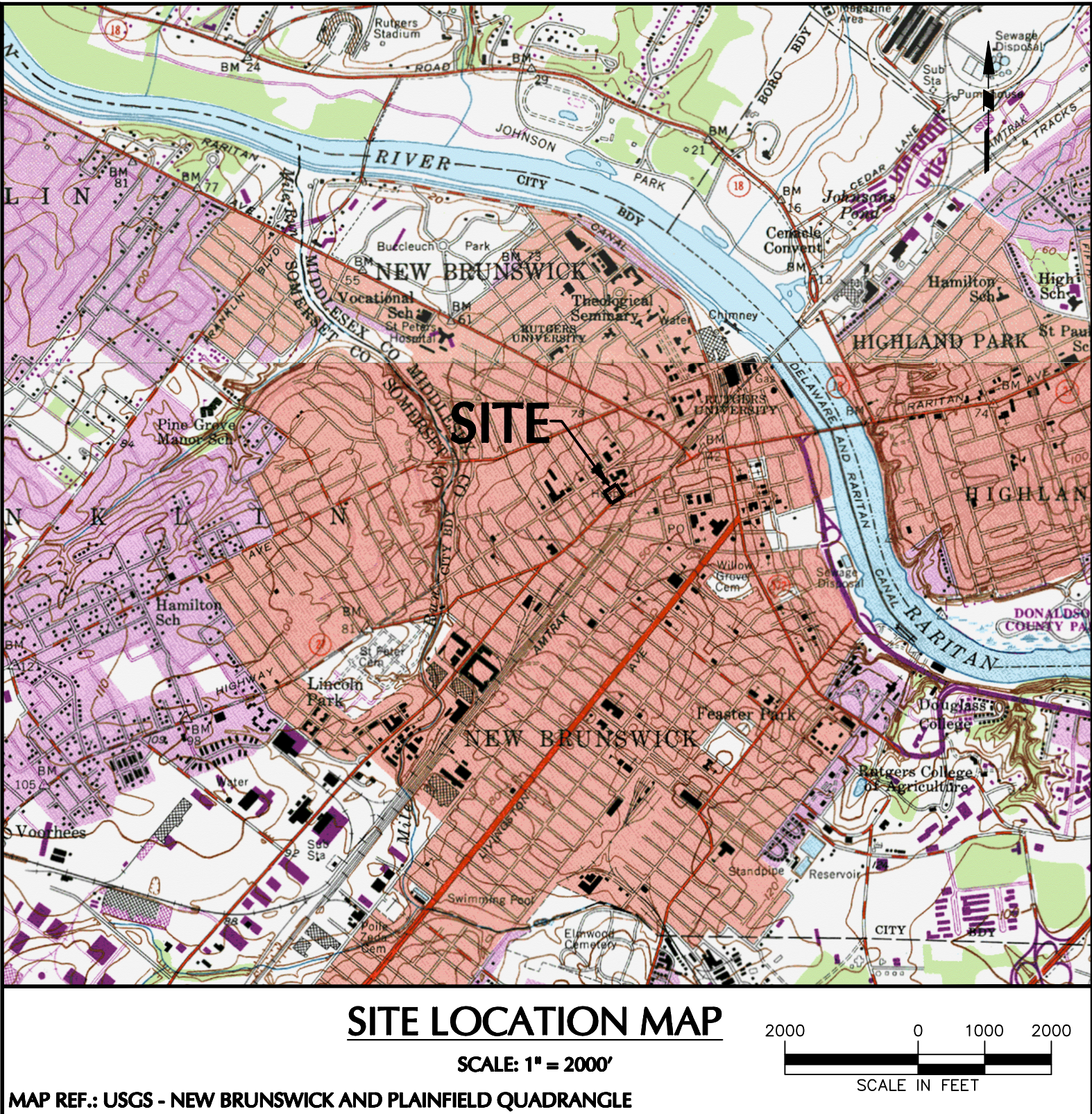


PRELIMINARY AND FINAL SITE PLAN APPLICATION
FOR
RWJ BARNABAS HEALTH SOUTH BUILDING EXPANSION
BLOCK 24.01, LOT 1.01
CITY OF NEW BRUNSWICK, MIDDLESEX COUNTY, NEW JERSEY
24 MAY 2019

CERTIFIED PROPERTY OWNERS LIST WITHIN 200 FT OF BLOCK 24.01 LOT 1.01 (PER THE CITY OF NEW BRUNSWICK PRINCIPAL PLANNER DATED 6 SEPTEMBER 2015.)			
BLOCK	LOT	OWNERS NAME AND ADDRESS	PROPERTY ADDRESS
17	1.01	NEW BRUNSWICK PARKING AUTHORITY 106 SOMERSET ST - 6TH FLR NEW BRUNSWICK, NJ 08901	2 FRENCH ST
18.02	1.02	NEW BRUNSWICK PARKING AUTHORITY 106 SOMERSET ST - 6TH FLR NEW BRUNSWICK, NJ 08901	100 KIRKPATRICK ST
23	1.01	RWJ PROPERTY HOLDING CORP./ACCT 120 ALBANY ST TW2 7TH FLR NEW BRUNSWICK, NJ 08901	125 PATERSON ST
23	9	RWJ PROPERTY HOLDING CORP./ACCT 120 ALBANY ST TW2 7TH FLR NEW BRUNSWICK, NJ 08901	48 FRENCH ST
23.01	10.02	CAPPELLETTI PROPERTIES, LLC 18 DENHERDER DR SOMERSET, NJ 08873	101 PATERSON ST
24.01	11.01	RWJ UNIVERSITY HOSPITAL, INC. / A/P 150 NEW PROVIDENCE RD MOUNTAINSIDE, NJ 07092	9 PLUM ST
24.01	11.01	DEVCO / CHILD HEALTH INSTITUTE 120 ALBANY ST, 7TH FLR NEW BRUNSWICK, NJ 08901	9 PLUM ST
24.01	2.01	DEVCO / CHILD HEALTH INSTITUTE 120 ALBANY ST, 7TH FLR NEW BRUNSWICK, NJ 08901	89 FRENCH ST
24.01	22.01	RWJ UNIVERSITY HOSPITAL, INC. / A/P 150 NEW PROVIDENCE RD MOUNTAINSIDE, NJ 07092	200 SOMERSET ST
24.02	38	AMTRAK NATIONAL RR PASSENGER CORP. 30TH & MARKET ST PHILADELPHIA, PA 19104	1 FRENCH ST
25	1.02	RWJ PROPERTY HOLDING CORP. (NBPA) 120 ALBANY ST TW2 7TH FLR NEW BRUNSWICK, NJ 08901	150 PATERSON ST
417	1	RWJ PROPERTY HOLDING CORP. / ACCT 120 ALBANY ST TW2 7TH FLR NEW BRUNSWICK, NJ 08901	193 SOMERSET ST
417	3.01	ST. LADISLAUS OF NB CATHOLIC SCHOOL 40 PLUM ST NEW BRUNSWICK, NJ 08901	197 SOMERSET ST
417	62	LOWENHAR, EDWARD 29 LIVINGSTON DR BELLE MEAD, NJ 08602	6 HIGH ST
417	64.01	MURRAY, BRENDAN, & SEAN 6 YARDLEY PL MENDHAM, NJ 07945	2 HIGH ST
48	2.01	NEW BRUNSWICK HOUSING AUTHORITY 7 VAN DYKE AVE NEW BRUNSWICK, NJ 08901	30 EASTON AVE
48	2.01	RUTGERS, THE STATE UNIVERSITY / NBHA 82 STREET 1603 PISCATAWAY, NJ 08854	30 EASTON AVE
48	2.03	RWJ PROPERTY HOLDING CORP. / (CI) 120 ALBANY ST TW2 7TH FLR NEW BRUNSWICK, NJ 08901	196 LITTLE ALBANY ST
49	11.01	RWJ PROPERTY HOLDING CORP. / ACCT 120 ALBANY ST TW2 7TH FLR NEW BRUNSWICK, NJ 08901	145 SOMERSET ST
49	16.01	POLANSKY, FRANK & ANASTASIA 153 SOMERSET ST NEW BRUNSWICK, NJ 08901	153 SOMERSET ST
51	2.01	BOARD OF EDUCATION PO BOX 2683 NEW BRUNSWICK, NJ 08901	166 SOMERSET ST
52	1.01	MAGYAR REFORMED CHURCH 175 SOMERSET ST NEW BRUNSWICK, NJ 08901	179 SOMERSET ST
52	1.01	MAGYAR REFORMED CHURCH 175 SOMERSET ST NEW BRUNSWICK, NJ 08901	177 SOMERSET ST
52	1.01	MAGYAR REFORMED CHURCH 175 SOMERSET ST NEW BRUNSWICK, NJ 08901	176 SOMERSET ST
52	8	RWJ UNIVERSITY HOSPITAL, INC. 1 ROBERT WOOD JOHNSON PL NEW BRUNSWICK, NJ 08901	181 SOMERSET ST
800	7	AMTRAK NATIONAL RR PASSENGER CORP. 30TH & MARKET ST PHILADELPHIA, PA 19104	1 RAILROAD AVE
800	8	AMTRAK NATIONAL RR PASSENGER CORP. 30TH & MARKET ST PHILADELPHIA, PA 19104	20 FRENCH ST
800	9	AMTRAK NATIONAL RR PASSENGER CORP. 30TH & MARKET ST PHILADELPHIA, PA 19104	3 FRENCH ST

NOTE: A 200-FT PROPERTY OWNERS REQUEST FORM WAS SUBMITTED TO THE CITY OF NEW BRUNSWICK IN MAY 2019. THIS LIST WILL BE UPDATED UPON RECEIPT OF THE NEW LIST.



UTILITIES	
Cablevision of Raritan Valley 275 Centennial Avenue CN 6805 Piscataway, NJ 08855-6805 Attn: Margurite Prenderville, Construction Department	Middlesex County Utilities Authority 2571 Main Street PO Box 159 Sayreville, NJ 08872 Attn: Richard Fitamant, Executive Director
Public Service Electric & Gas 80 Park Plaza, T6B Newark, NJ 07102 Attn: General Manager - Corporate Properties	Verizon 6000 Hadley Road South Plainfield, NJ 07080 Tel. (732) 846-9942
Colonial Pipeline Company 1185 Sanctuary Parkway, Suite 100 Alpharetta, GA 30004 Attn: Corporate and Public Affairs	New Brunswick Public Works (Sewer) 400 Jersey Avenue New Brunswick NJ 08903 Tel. (732) 745-5101
Harbor Pipeline Co. c/o Sunoco Pipeline LP 525 Fritztown Road Sinking Spring, PA 19608 Attn: Jomarie Jenkins - One Call Supervisor	New Brunswick Water Utility 78 Bayard Street New Brunswick NJ 08903 Tel. (732) 745-5103
Sunoco Pipeline LP 525 Fritztown Road Sinking Spring, PA 19608 Attn: James Franciscus	William Gas Pipeline - Transco 2800 Post Oak Road Houston, TX 77056 Attn: Chris Stockton - Communications Specialist

DRAWING LIST	
DRAWING NUMBER	DRAWING TITLE
SITE/CIVIL PLANS	
CS-001	COVER SHEET
VT-101	PARTIAL TOPOGRAPHIC SURVEY
DM-101	DEMOLITION PLAN
CS-101	SITE PLAN
CG-101	GRADING AND DRAINAGE PLAN
CU-101	UTILITY PLAN
CE-101	SOIL EROSION AND SEDIMENT CONTROL PLAN
CE-501	SOIL EROSION AND SEDIMENT CONTROL NOTES
CE-502	SOIL EROSION AND SEDIMENT CONTROL DETAILS
CS-501	CONSTRUCTION DETAILS
CS-502	CONSTRUCTION DETAILS
ARCHITECTURAL PLANS	
A-1F0	LEVEL FS - SOUTH INFILL FLOOR PLAN
A-1G1	LEVEL G1 - SOUTH INFILL FLOOR PLAN
A-112	PHASE I SOUTH INFILL FLOOR PLAN
A-120	LEVEL 02 SOUTH INFILL FLOOR PLAN
A-130	LEVEL 03 SOUTH INFILL FLOOR PLAN
A-200	OVERALL BUILDING ELEVATION

ZONING SUMMARY			
Downtown Hospital - Institutional District (D-HI Zone)			
	Required /Allowable	Proposed	Variance
Use	Medical Related Facilities	Medical Related Facilities	-
Minimum Lot Size	40,000 SF (See Note 3)	363,886 SF	-
Minimum Lot Width	100 FT	995 FT	-
Minimum Lot Depth	100 FT	434 FT	-
Front Setback	10 FT	0 FT	EN
Rear Setback	10 FT	0 FT	EN
One Side Setback	5 FT	3.8 FT	EN
Total Side Setback	10 FT	3.8 FT	EN
Maximum Building Height	150 FT	80 FT	-
Maximum Building Coverage	70%	80%	EN
Maximum Impervious Coverage	95%	97%	EN
Maximum F.A.R.	12	8.3	-

Notes:
1) Bulk Requirements were taken from the City of New Brunswick Zoning Ordinance.
2) EN = Existing Nonconformance
3) Per Ordinance Section 17.04.040.E.3.e.iii, the minimum lot size for construction of any hospital related facility shall be forty thousand square feet.
4) The portion of Block 24.01, Lot 1.01 to be developed as part of this application does not front on a rear or side property line. The 0 FT rear and 3.8 FT side setbacks are existing non conformance which were approved as part of the East Tower Project. The South Building Expansion project will not have an impact on rear and side setbacks.

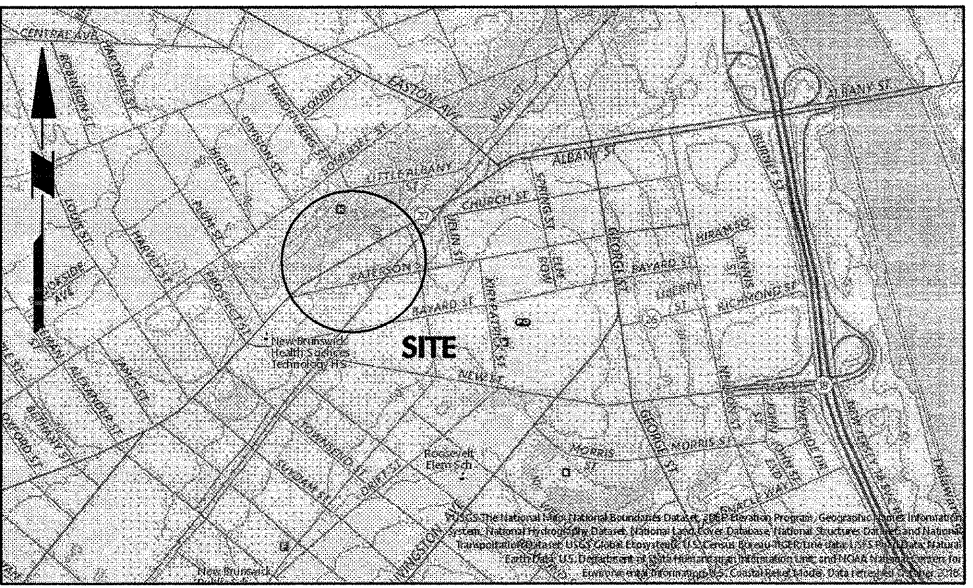
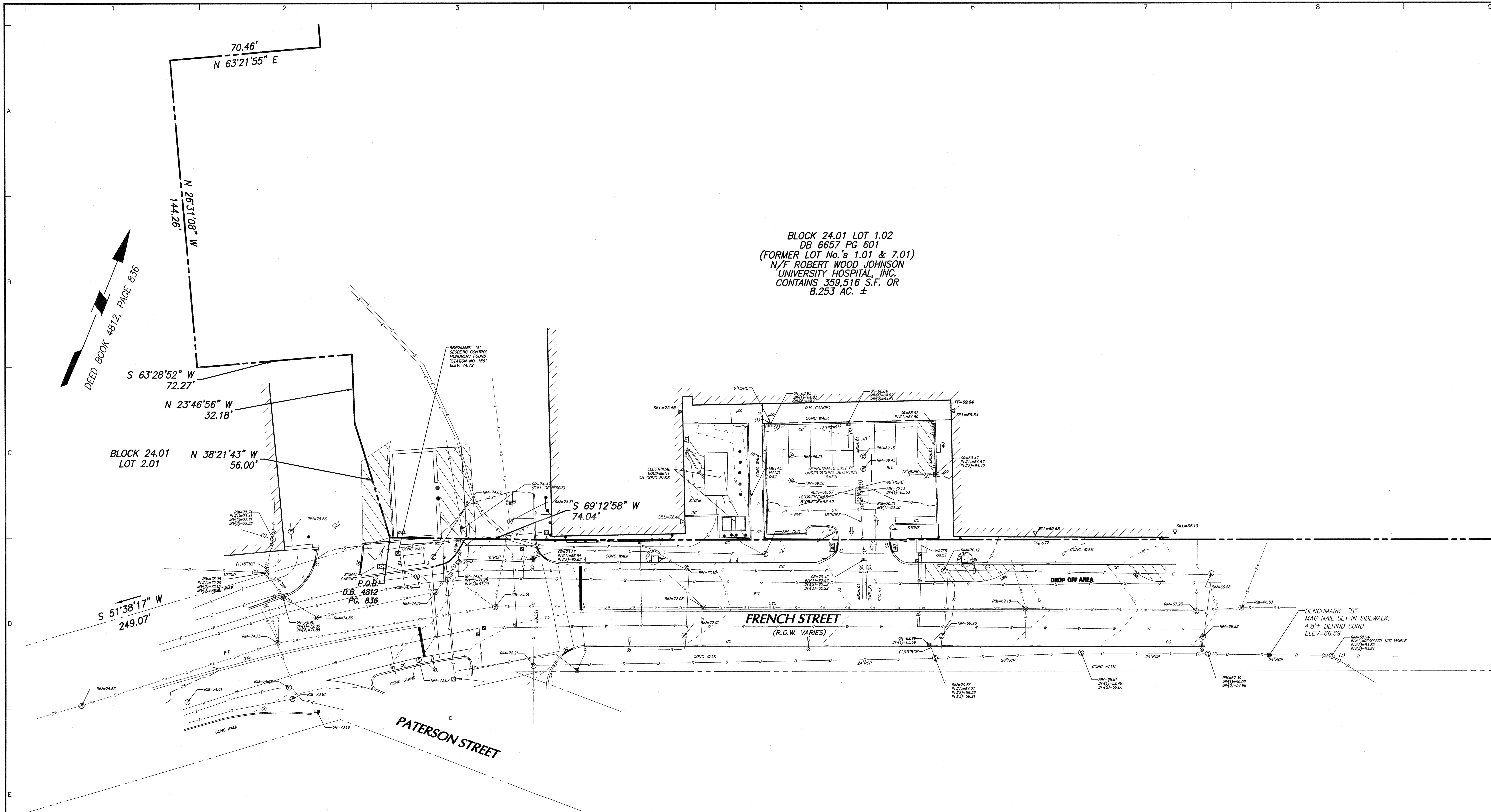
PROJECT CONTACTS	
APPLICANT/OWNER: RWJ BARNABAS HEALTH ONE ROBERT WOOD JOHNSON PLACE NEW BRUNSWICK, NJ 08901 CONTACT: FAITH ORSINI	
ARCHITECT: STANTEC 1500 SPRING GARDEN, SUITE 1100 PHILADELPHIA, PA 19130 (215) 665 - 7083 CONTACT: MEGAN HOLMES	
SITE/CIVIL ENGINEER: LANGAN 989 LENOX DRIVE, SUITE 124 LAWRENCEVILLE, NJ 08648 (609) 282-8000 CONTACT: CHRISTIAN M. ROCHE, P.E.	

CALL BEFORE YOU DIG TO LOCATE UNDERGROUND UTILITIES
1 (800) 272-1000
FOR FREE MARKOUTS TO LOCATE UNDERGROUND UTILITIES
CALL AT LEAST 3 DAYS PRIOR TO GROUND DISTURBANCE



CALL BEFORE YOU DIG

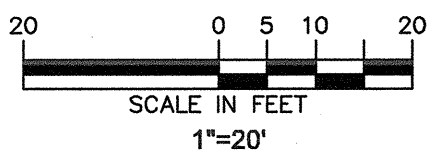
Date	Description	No.
REVISIONS		
 CHRISTIAN M. ROCHE DATE SIGNED NJ PROFESSIONAL ENGINEER NJ LICENSE No. 246E04988100		
LANGAN Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. 989 Lenox Drive, Suite 124 Lawrenceville, NJ 08648 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION No. 246A27986400		
Project RWJ BARNABAS HEALTH SOUTH BUILDING EXPANSION BLOCK 24.01, LOT 1.01 CITY OF NEW BRUNSWICK MIDDLESEX COUNTY NEW JERSEY		
Drawing Title COVER SHEET		
Project No. 130141101	CS-001	
Date 05/24/2019		
Drawn By GGB		
Checked By CMR		
Sheet 1 of 11		



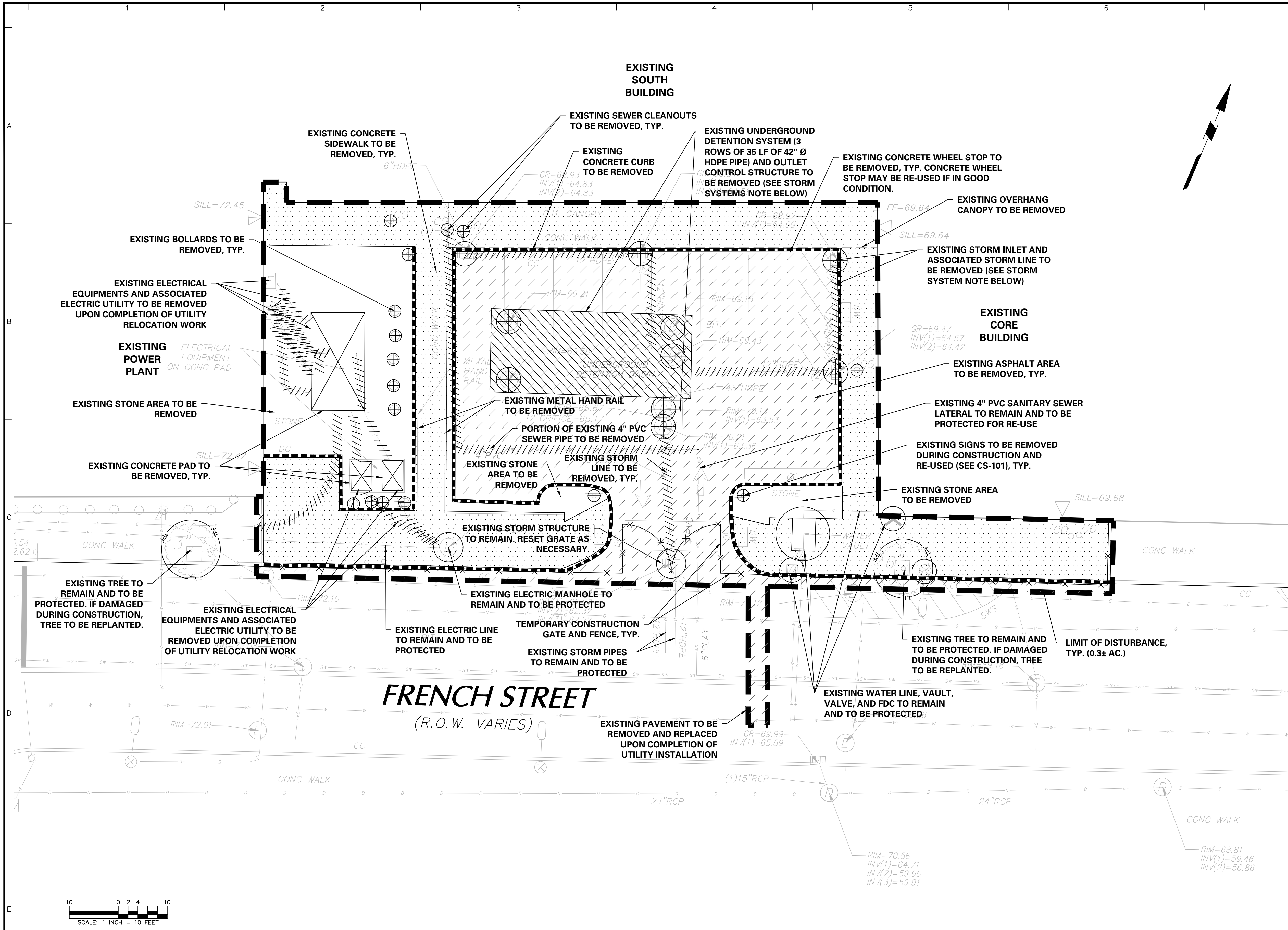
- NOTES:**
- THIS SURVEY IS BASED UPON PHYSICAL CONDITIONS FOUND AT THE SUBJECT SITE, AND THE FOLLOWING REFERENCES:
 - MAP ENTITLED "RWJ UNIV HOSPITAL, SOUTH TOWER, NEW BRUNSWICK, NJ," PREPARED BY SOTDIG UNDERGROUND SERVICES, INC., DATED MAY 1, 2019, PROJECT NUMBER: 192760.
 - MAP ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY," BLOCK 24.01, LOT 7.01 AND PORTION OF LOT 1.01, PREPARED BY LANGAN ENGINEERING & ENVIRONMENTAL SERVICES, INC., DATED 12/4/2012, PROJECT NUMBER 130089301.
 - THE SURVEYED PROPERTY IS SUBJECT BUT NOT LIMITED TO THE FOLLOWING FACTS AS REVEALED BY THE HEREON REFERENCED INFORMATION. THE INFORMATION SHOWN HEREON DOES NOT CONSTITUTE A TITLE SEARCH BY THE SURVEYOR. ALL INFORMATION THAT MAY AFFECT THE QUALITY OF TITLE TO BOTH THE SUBJECT AND ADJOINING PARCELS SHOULD BE VERIFIED BY AN ACCURATE AND CURRENT TITLE REPORT.
 - THE MERIDIAN OF THIS SURVEY IS REFERENCED TO DEED BOOK 4812 PAGE 836.
 - VERTICAL DATUM IS BASED ON A LOCAL SITE DATUM.
BENCHMARK "A" - A GEODETIC CONTROL MONUMENT, STATION 156, FOUND IN THE SIDEWALK ON THE NORTHERLY SIDE OF FRENCH STREET. ELEVATION = 74.72.
BENCHMARK "B" - SURVEY NAIL SET IN THE SIDEWALK ON THE SOUTHERLY SIDE OF FRENCH STREET. ELEVATION = 66.69.
 - STREET NAMES, RIGHT OF WAY WIDTHS, BLOCK AND LOT NUMBERS ARE SHOWN IN ACCORDANCE WITH THE CITY TAX MAPS AND MAP REFERENCED IN NOTE 1B.
 - PLANIMETRIC INFORMATION SHOWN HEREON HAS BEEN OBTAINED FROM GROUND SURVEYS BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, INC. DURING APRIL AND MAY 2019.
 - PER THE MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, MIDDLESEX COUNTY, NEW JERSEY (ALL JURISDICTIONS), PANEL 127 OF 286, MAP NUMBER 3402300127F, EFFECTIVE DATE: JULY 6, 2012," THE ENTIRE SUBJECT PROPERTY LIES WITHIN ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.
 - OFFSETS (IF SHOWN) ARE FOR SURVEY REFERENCES ONLY AND SHOULD NOT BE USED IN CONSTRUCTION OF ANY TYPE. LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, INC. RECOMMENDS THE PLACEMENT OF SURVEY MARKERS.
 - BOUNDARY SURVEY, WETLANDS, ENVIRONMENTAL AND/OR HAZARDOUS MATERIALS LOCATION, IF ANY, NOT COVERED UNDER THIS CONTRACT.
 - UNLESS SPECIFICALLY NOTED HEREON, STORM AND SANITARY SEWER INFORMATION (INCLUDING PIPE INVERT, PIPE MATERIAL, AND PIPE SIZE) WAS OBSERVED AND MEASURED AT FIELD LOCATED STRUCTURES (MANHOLES/CATCH BASINS, ETC.). CONDITIONS CAN VARY FROM THOSE ENCOUNTERED AT THE TIMES WHEN AND THE LOCATIONS WHERE DATA WAS OBTAINED. DESPITE MEETING THE REQUIRED STANDARD OF CARE, THE SURVEYOR CANNOT AND DOES NOT WARRANT THAT PIPE MATERIAL AND/OR PIPE SIZE THROUGHOUT THE PIPE RUN ARE THE SAME AS THOSE OBSERVED AT EACH STRUCTURE, OR THAT THE PIPE RUN IS STRAIGHT BETWEEN THE LOCATED STRUCTURES.
- ADDITIONAL UTILITY (WATER, GAS, ELECTRIC ETC.) DATA MAY BE SHOWN FROM FIELD LOCATED SURFACE MARKINGS (BY OTHERS), EXISTING STRUCTURES, AND/OR FROM EXISTING DRAWINGS.
- UNLESS SPECIFICALLY NOTED HEREON THE SURVEYOR HAS NOT EXCAVATED TO PHYSICALLY LOCATE THE UNDERGROUND UTILITIES. THE SURVEYOR MAKES NO GUARANTEES THAT THE SHOWN UNDERGROUND UTILITIES ARE EITHER IN SERVICE, ABANDONED OR SUITABLE FOR USE. NOR ARE IN THE EXACT LOCATION OR CONFIGURATION INDICATED HEREON.
- PRIOR TO ANY DESIGN OR CONSTRUCTION THE PROPER UTILITY AGENCIES MUST BE CONTACTED FOR VERIFICATION OF UTILITY TYPE AND FOR FIELD LOCATIONS.
- UNLESS NOTED BELOW SUPPLEMENTAL DOCUMENTS WERE NOT USED TO COMPLETE THE SUBSURFACE UTILITY INFORMATION SHOWN HEREON.
- A: MAP PREPARED BY SOTDIG REFERENCED IN NOTE 1A.
- THIS PLAN NOT VALID UNLESS EMBOSSED WITH THE SEAL OF THE PROFESSIONAL.

LEGEND (NOT SHOWN TO SCALE)

	HYDRANT		BOLLARD		STORM DRAIN
	STREET LIGHT		PEDESTRIAN WALK SIGNAL		SANITARY LINE
	AREA LIGHT		DOOR		COMB. UTILITY LINE
	SIGNAL POLE		OVERHEAD DOOR		UNKNOWN UTILITY LINE
	POLE		PARKING METER		GAS LINE
	GUY WIRE		METAL COVER		WATER LINE
	ANCHOR POLE		ELECTRIC BOX		ELECTRIC LINE
	MANHOLE		SOIL BORING		TELEPHONE LINE
	MANHOLE (DRAINAGE)		MONITORING WELL		CABLE TV LINE
	MANHOLE (SANITARY SEWER)		TEST PIT		STEAM LINE
	MANHOLE (ELECTRIC)		BENCHMARK		FORCE MAIN
	MANHOLE (WATER)		ROOF DRAIN		FIBER OPTIC
	MANHOLE (NATURAL GAS)		SPOT ELEVATION		REFERENCED UTILITY LINE (TYPE AS NOTED) BASED ON RECORD MAPPING
	MANHOLE (TELEPHONE)		CONCRETE CURB		OVERHEAD WIRE
	MANHOLE (FORCE MAIN)		CONCRETE PAD		GUIDE RAIL (TYPE AS NOTED)
	MANHOLE (STEAM)		DETECTABLE PAD		CHAIN LINK FENCE
	MANHOLE (UNKNOWN UTILITY)		DROP CURB		WOOD/STOCKADE FENCE
	WATER VALVE		BROKEN WHITE STRIPE		WIRE FENCE
	GAS VALVE		SINGLE YELLOW STRIPE		IRON FENCE
	CATCH BASIN		DOUBLE YELLOW STRIPE		TREE LINE
	CLEAN OUT		SINGLE WHITE STRIPE		EASEMENT LINE
	TREE		REINFORCED CONCRETE PIPE		PROPERTY LINE
	SIGN		DUCTILE IRON PIPE		RIGHT-OF-WAY LINE
			CORRUGATED METAL PIPE		CONTOUR LINE
			NO VISIBLE PIPE		
			EDGE OF PAVEMENT		
			LANDSCAPED AREA		
			SURVEYED BEARING & DISTANCE		
			DEED BEARING & DISTANCE		



Date	Description	No.
REVISIONS		
1. hereby state that this plan is based on a field survey made by me or under my immediate supervision in accordance with N.J.S.A. 15:27-2. Information of this survey, and the plan, is true and correct to the best of my knowledge and belief, and in my professional opinion, accurately represents the conditions found on the date of the field survey at the subject property.		
		5-24-19
JOSEPH E. ROMANO		DATE SIGNED
PROFESSIONAL LAND SURVEYOR		
NJ LICENSE No. 246S03627300		
LANGAN		
Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.		
989 Lenox Drive, Suite 124 Lawrenceville, NJ 08848		
T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION No. 246A0708600		
Project		
RWJ BARNABAS HEALTH SOUTH BUILDING EXPANSION BLOCK 24.01, LOT 1.01 CITY OF NEW BRUNSWICK		
MIDDLESEX COUNTY NEW JERSEY		
Drawing Title		
PARTIAL TOPOGRAPHIC SURVEY		
Project No.	Drawing No.	
130141101	VT-101	
Date	05/24/19	
Drawn By	RKWH	
Checked By	JER	
Sheet		1 of 1



- DEMOLITION NOTES:**
- CONTRACTOR IS REQUIRED TO PERFORM ALL ON-SITE DEMOLITION REQUIRED TO CONSTRUCT THE PROJECT AS ILLUSTRATED IN CONSTRUCTION DRAWINGS.
 - THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON VARIOUS RECORDS AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING COMPLETE OR EXACT. THE CONTRACTOR MUST NOTIFY ALL APPROPRIATE UTILITY COMPANIES BEFORE ANY DEMOLITION OR EXCAVATION.
 - ALL DEMOLITION WORK TO BE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
 - THE CONTRACTOR SHALL INSPECT THE SITE THOROUGHLY AND FIELD-VERIFY THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES. CONTRACTORS USING THESE PLANS FOR DEMOLITION OR CONSTRUCTION SHALL CONFIRM ALL UTILITIES IN THE FIELD TO ESTABLISH LOCATIONS, SIZES, MATERIALS, AND ELEVATIONS. ANY DISCREPANCIES SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE OWNER AND THE ENGINEER.
 - THE CONTRACTOR SHALL INCLUDE IN HIS BID ALL TEMPORARY FACILITIES AND SERVICES NECESSARY TO SATISFY FEDERAL, STATE AND LOCAL REQUIREMENTS INCLUDING BUT NOT NECESSARILY LIMITED TO BRACING, SHORING, PAVEMENT REPAIR, FENCING, PEDESTRIAN AND VEHICLE ACCESS, ETC.
 - CONTRACTOR TO PROVIDE APPROVED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO THE START OF WORK.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY DEMOLITION-ASSOCIATED PERMITS.
 - THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONARY AND PROTECTIVE MEASURES, INCLUDING BUT NOT LIMITED TO SIGNS, LIGHTS, FENCES, BARRIERS, AND PEDESTRIAN AND TRAFFIC CONTROL MEASURES.
 - ALL UTILITY SERVICES TO BE REMOVED/RELOCATED BY THE CONTRACTOR SHALL BE TERMINATED AND CERTIFIED PRIOR TO THE START OF THE DEMOLITION WORK. CONTRACTOR IS TO CONTACT THE APPROPRIATE UTILITY COMPANIES FOR ALL WORK WITH EXISTING UTILITIES. DISCONNECTS OF WATER AND SEWER ARE TO BE PERFORMED IN ACCORDANCE WITH CITY STANDARDS.
 - ITEMS OF SALVAGEABLE VALUE TO THE CONTRACTOR MAY BE REMOVED FROM THE SITE. STORAGE OR SALE OF REMOVED ITEMS WILL NOT BE PERMITTED AND SALVAGE OPERATIONS SHALL NOT INTERFERE WITH THE SCHEDULE OR ANY WORK SPECIFIED IN THE CONSTRUCTION DOCUMENTS.
 - THE OWNER RESERVES THE RIGHT TO REMOVE EQUIPMENT FROM THE SITE AS NECESSARY PRIOR TO DEMOLITION. ALL EQUIPMENT AND FURNISHINGS NOT SALVAGED BY THE OWNER SHALL BE REMOVED AND PROPERLY DISPOSED OF OFF-SITE BY THE CONTRACTOR AS PART OF THIS WORK. DISPOSAL SHALL BE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.
 - THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF ANY UNEXPECTED UNDERGROUND UTILITY SYSTEMS, INCLUDING UNDERGROUND STORAGE TANKS, ARE ENCOUNTERED.
 - THE CONTRACTOR SHALL REMOVE AND PROPERLY BACKFILL UNDERGROUND UTILITIES AND STORM DRAINS AS INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE UPSTREAM SOURCE, IF APPLICABLE, FOR ALL UTILITIES TO BE REMOVED OR RELOCATED. THE CONTRACTOR SHALL MAINTAIN ANY UPSTREAM EXISTING UTILITIES TO REMAIN UNTIL THE RELOCATED SERVICE HAS BEEN INSTALLED.
 - CONCRETE DEMOLITION DEBRIS SHALL BE REMOVED AND DISPOSED OF OFF-SITE IN ACCORDANCE WITH REGULATORY REQUIREMENTS.
 - REMOVED UTILITIES, PIPES, SIDEWALKS, CURBS, AND ALL OTHER DEMOLITION DEBRIS THAT ARE TO BE REMOVED (NOT SALVAGED OR RELOCATED) SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL LOCAL, COUNTY, STATE AND FEDERAL REGULATIONS.
 - SOIL MATERIAL REMOVAL (EXCLUDING DEMOLITION DEBRIS, PAVEMENT, UTILITY PIPING, ETC.) WILL BE REQUIRED. SOIL MATERIAL DISPOSAL TO BE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR ENVIRONMENTAL TESTING NECESSARY TO DISPOSE OF THE MATERIAL OFF SITE.
 - IF LEAD, ASBESTOS, OR OTHER ENVIRONMENTAL CONCERNS ARE ENCOUNTERED DURING DEMOLITION WORK, CONTRACTOR IS TO IMMEDIATELY NOTIFY THE OWNER AND ENGINEER.
 - PRIOR TO REMOVAL, ALL UTILITIES AND SEWERS SHALL BE PROPERLY PURGED AND EVACUATED OF ALL RESIDUAL GASES, OILS, ETC. OR DE-ENERGIZED IN THE CASE OF ELECTRIC, TELEPHONE OR OTHER COMMUNICATIONS SERVICES. ALL PURGING AND TESTING SHALL BE APPROVED BY LOCAL UTILITY OR SEWER COMPANIES AND GOVERNING AUTHORITIES HAVING JURISDICTION.
 - ALL UNDERGROUND UTILITY LATERAL REMOVALS SHALL BE PROPERLY BACKFILLED AND ALL DISTURBED PAVEMENTS WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE RESTORED PER MIDDLESEX COUNTY STANDARDS. THIS INCLUDES THE RESTORATION OF CONCRETE PAVEMENT, CONCRETE CURBING, AND ASPHALT PAVEMENT WITHIN THE PUBLIC RIGHT-OF-WAY. ALL PAVEMENT AND CURBING SHALL BE SAW CUT PRIOR TO EXCAVATION IN ORDER TO PRODUCE A CLEAN AND NEAT EDGE. REPLACEMENT PAVEMENT AND CURBING SHALL BE PER MIDDLESEX COUNTY STANDARDS AND AS DIRECTED BY OWNER AND/OR THE LOCAL AUTHORITY HAVING JURISDICTION. ALL RESTORATION WORK SHALL BE PERFORMED IMMEDIATELY FOLLOWING UTILITY REMOVAL AND BACKFILL COMPLETION.
 - DURING DEMOLITION AND DEBRIS REMOVAL OPERATIONS, CONTRACTOR SHALL CONTINUALLY USE WATER SPRINKLING AND OTHER SUITABLE METHODS TO MINIMIZE THE AMOUNT OF DUST AND DIRT, RISING AND SCATTERING IN THE AIR, TO THE LOWEST PRACTICAL LEVEL POSSIBLE.
 - EXCAVATIONS MADE TO REMOVE SITE FEATURES AND BELOW-GRADE UTILITIES SHALL BE BACKFILLED WITH APPROVED, COMPACTED FILL.

A STREET OPENING PERMIT SHALL BE OBTAINED PRIOR TO ANY WORK WITHIN THE COUNTY RIGHT-OF-WAY.

CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SAFE PEDESTRIAN ACCESS ON FRENCH STREET AT ALL TIMES DURING CONSTRUCTION.

CONTRACTOR TO NOTIFY THE CITY AND COUNTY ENGINEERS AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

A LOGISTICS PLAN SHALL BE SUBMITTED TO THE CITY AND COUNTY ENGINEERS FOR APPROVAL PRIOR TO ANY DEMOLITION WORK.

AN AS-BUILT SURVEY OF THE PROJECT SHALL BE PROVIDED TO THE CITY ENGINEER UPON COMPLETION OF CONSTRUCTION.

ALL ROADWAY OR DIRECTIONAL SIGNAGE TO BE IMPACTED DURING CONSTRUCTION SHALL BE REPLACED WITH TEMPORARY SIGNAGE AND BE RESTORED UPON COMPLETION OF CONSTRUCTION. TEMPORARY SIGNAGE TO BE APPROVED BY CITY AND COUNTY ENGINEER.

ALL SITE FEATURES AND VEGETATION WITHIN THE LIMITS OF DEMOLITION ARE TO BE CLEARED / REMOVED UNLESS NOTED OTHERWISE. SITE FEATURES INCLUDE CURBS, ASPHALT, BOLLARDS, ETC.

DAMAGED OR DEFICIENT SIDEWALKS, CURBS, AND PAVEMENT WITHIN THE PUBLIC RIGHT-OF-WAY CONTIGUOUS TO THE PROJECT SITE, SHALL BE REPLACED PER COUNTY STANDARDS AND TO THE LIMITS DIRECTED BY THE CITY AND COUNTY ENGINEERS.

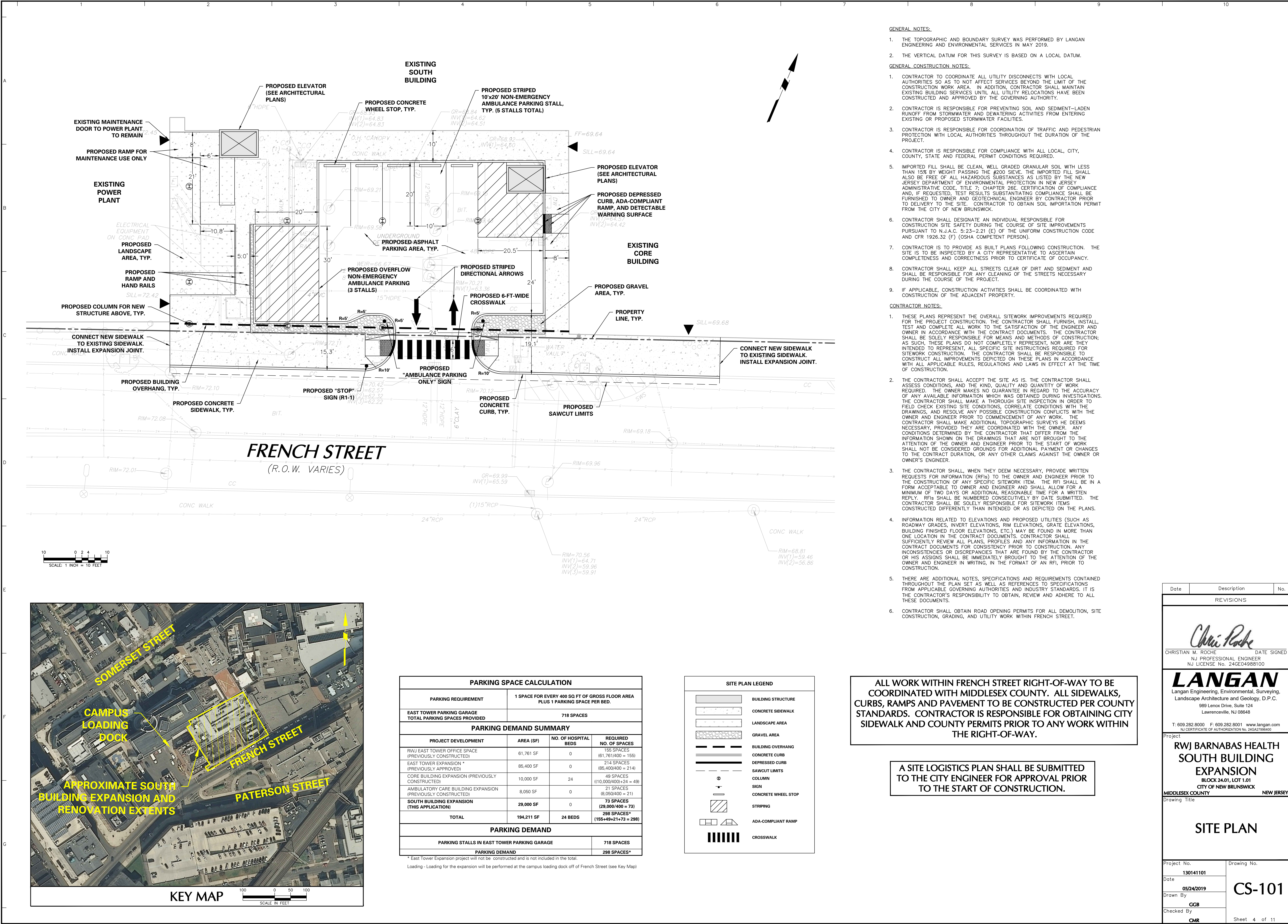
ALL BELOW GRADE PORTIONS OF SITE FEATURES SHALL BE REMOVED IN THEIR ENTIRETY (I.E. BUILDING FOUNDATIONS, BOLLARDS ETC.).

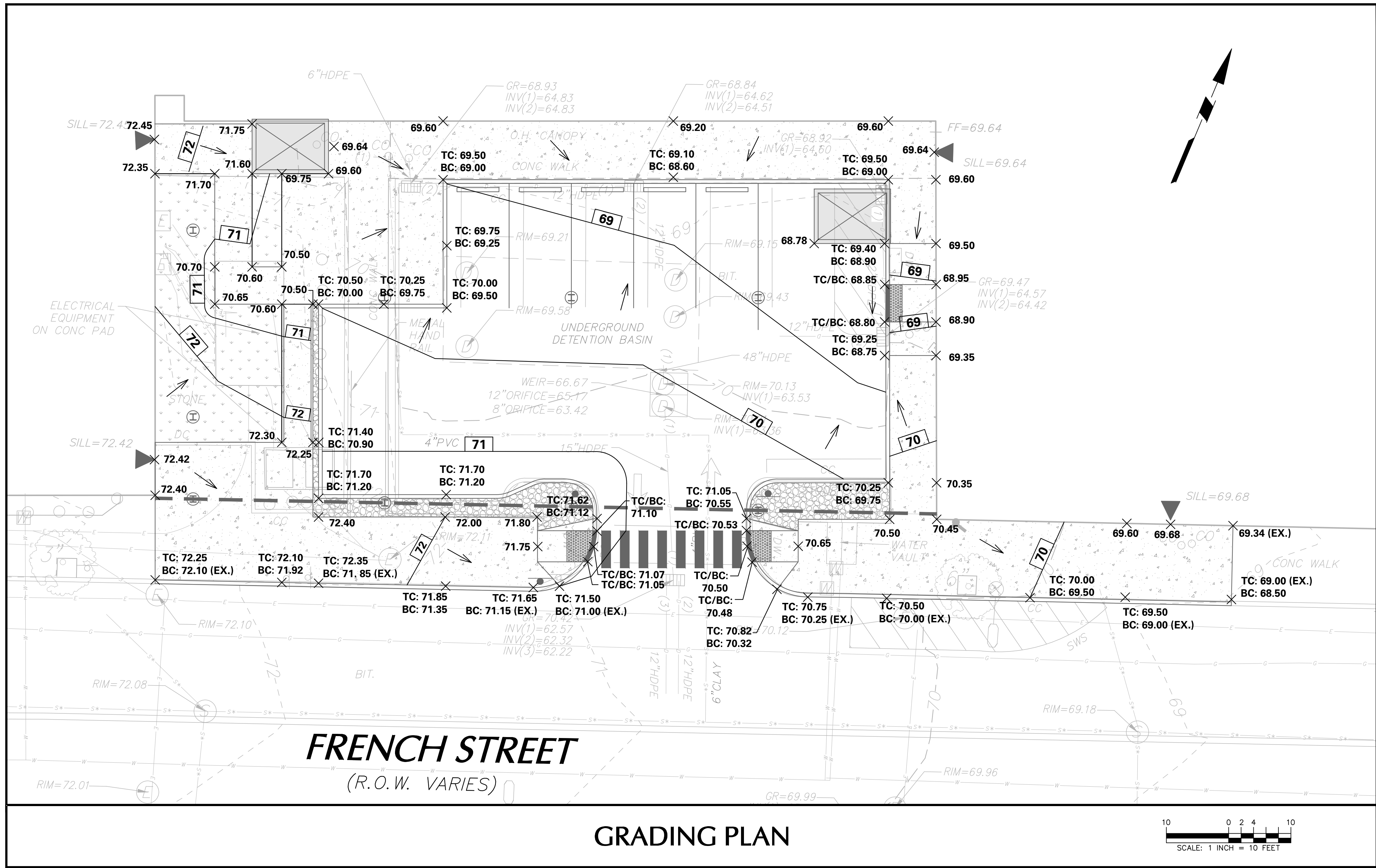
ALL UTILITIES ARE TO REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION UNLESS NOTED OTHERWISE. ALL UTILITY DISCONNECTS SHOULD BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY, THE COUNTY AND THE CITY OF NEW BRUNSWICK. SAFETY SHALL TAKE THE HIGHEST PRIORITY DURING ALL DEMOLITION WORK.

STORM SYSTEM - THE EXISTING ON-SITE STORM SYSTEM IS LESS THAN TWO YEARS OLD. COMPONENTS OF THE EXISTING SYSTEM (STRUCTURES, PIPES, ETC.) MAY BE RE-USED PENDING ENGINEER APPROVAL.

DEMOLITION PLAN LEGEND	
	LIMITS OF DISTURBANCE
	TEMPORARY FENCE
	CURB TO BE REMOVED
	UTILITY LINE TO BE REMOVED
	TREE PROTECTION FENCE
	SITE FEATURES TO REMAIN
	SITE FEATURES TO BE REMOVED
	CONCRETE PAD TO BE REMOVED
	CONCRETE SIDEWALK TO BE REMOVED
	ASPHALT PAVEMENT TO BE REMOVED

Date	Description	No.
REVISIONS		
CHRISTIAN M. ROCHE DATE SIGNED NJ PROFESSIONAL ENGINEER NJ LICENSE No. 24604988100		
LANGAN Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. 989 Lenox Drive, Suite 124 Lawrenceville, NJ 08648 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION No. 246A27986409		
Project RWJ BARNABAS HEALTH SOUTH BUILDING EXPANSION BLOCK 24.01, LOT 1.01 CITY OF NEW BRUNSWICK MIDDLESEX COUNTY NEW JERSEY		
Drawing Title DEMOLITION PLAN		
Project No. 130141101		DM-101
Date 05/24/2019		
Drawn By GGB		
Checked By CMR		
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GRADING PLAN



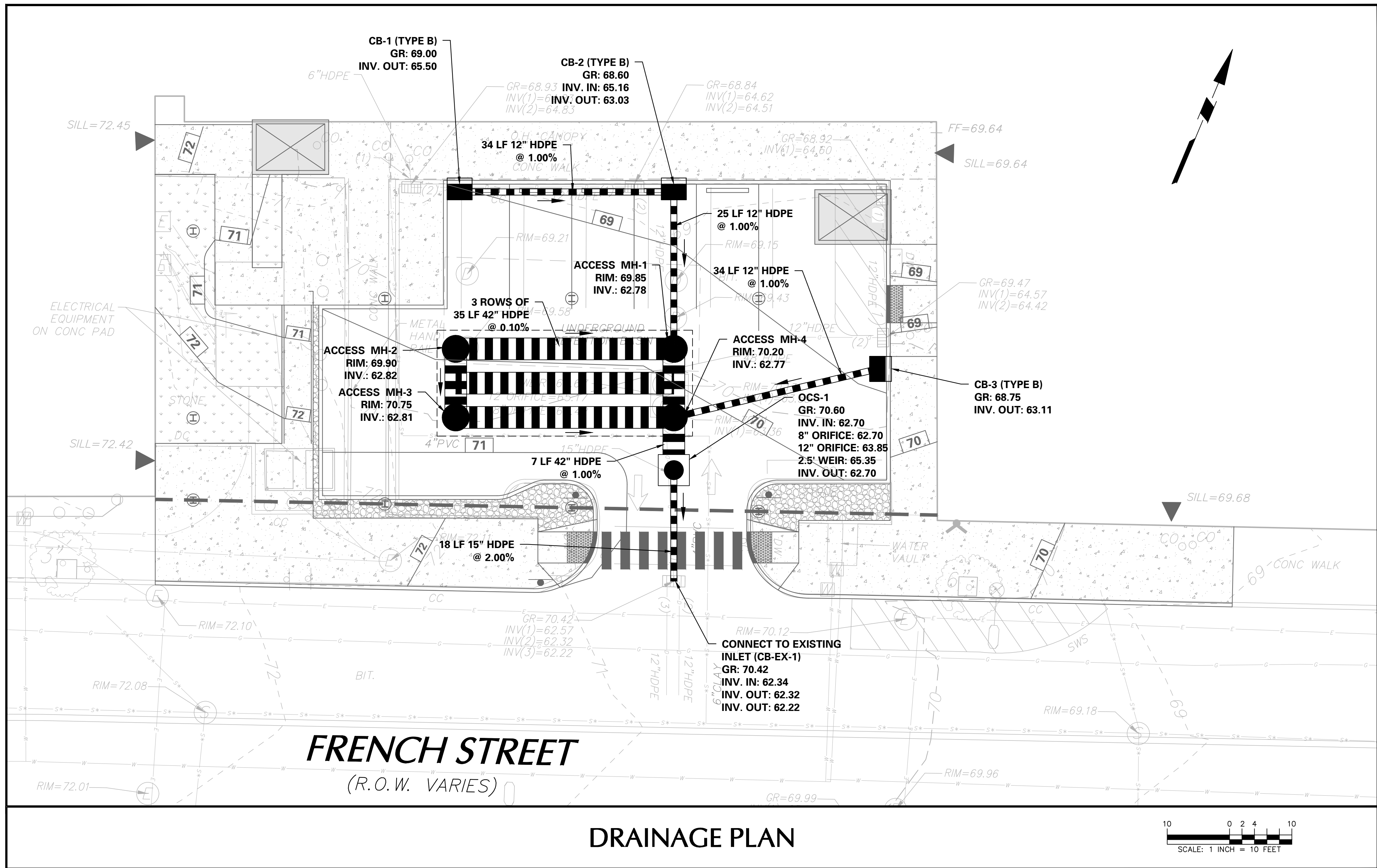
GRADING AND DRAINAGE NOTES:

- ALL GRADING, DRAINAGE, AND UTILITY INSTALLATION AND/OR CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS OR LOCAL REQUIREMENTS. SHOULD A DIFFERENCE IN REQUIREMENTS OCCUR, THE STRICTER OF THE TWO REGULATIONS WILL APPLY.
- ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC LOADING AND BE INSTALLED ACCORDINGLY.
- SITE GRADING SHALL NOT PROCEED UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
- LENGTHS OF STORM PIPES SHOWN ARE CENTER-TO-CENTER LENGTHS BETWEEN DRAINAGE STRUCTURES.
- CONTRACTOR SHALL REVIEW ALL DRAINAGE CONNECTIONS TO MANHOLES AND CATCH BASINS AND INCREASE THE INLET BOX SIZES AS NECESSARY TO ACCOMMODATE THE PROPOSED INLET AND OUTLET PIPES.
- ALL GRADING IS TO PROMOTE POSITIVE DRAINAGE AWAY FROM THE BUILDING.
- CURB ELEVATIONS INDICATED "BC" ARE BOTTOM OF CURB ELEVATIONS, CURB ELEVATIONS INDICATED AS "TC" ARE TOP OF CURB.
- EXISTING FRAMES, COVERS, AND GRATES IN AREAS WHERE GRADES WILL BE REVISED BY FILLING OR CUTTING, OR PAVEMENT OVERLAY, MUST BE RESET TO MATCH FINAL GRADE. THIS INCLUDES MANHOLES, HANDHOLES, VALVE BOXES, INLETS, VAULT, ETC.). IN AREAS OF CUT, CONTRACTORS SHALL PROVIDE REQUIRED COVERAGE OF UTILITY AND STORMWATER LINES AS SPECIFIED BY THE UTILITY PURVEYOR. RELOCATION OF UTILITY AND STORMWATER LINES MAY BE REQUIRED.

THE PROPOSED SITE IMPROVEMENTS HAVE BEEN DESIGNED AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE US ACCESS BOARD'S ADA ACCESSIBILITY GUIDELINES (ADAAG) AND PUBLIC RIGHTS-OF-WAY (PROWAG).

ALL EXISTING STORMWATER MANAGEMENT FEATURES ON THE PROPERTY AND ALONG THE PROJECT'S FRONTAGE ON FRENCH STREET SHALL BE INSPECTED, CLEANED, AND REPAIRED AS NECESSARY DURING CONSTRUCTION UNDER THE SUPERVISION OF THE CITY ENGINEER.

STORM SYSTEM - THE EXISTING ON-SITE STORM SYSTEM IS LESS THAN TWO YEARS OLD. COMPONENTS OF THE EXISTING SYSTEM (STRUCTURES, PIPES, ETC.) MAY BE RE-USED PENDING ENGINEER APPROVAL.



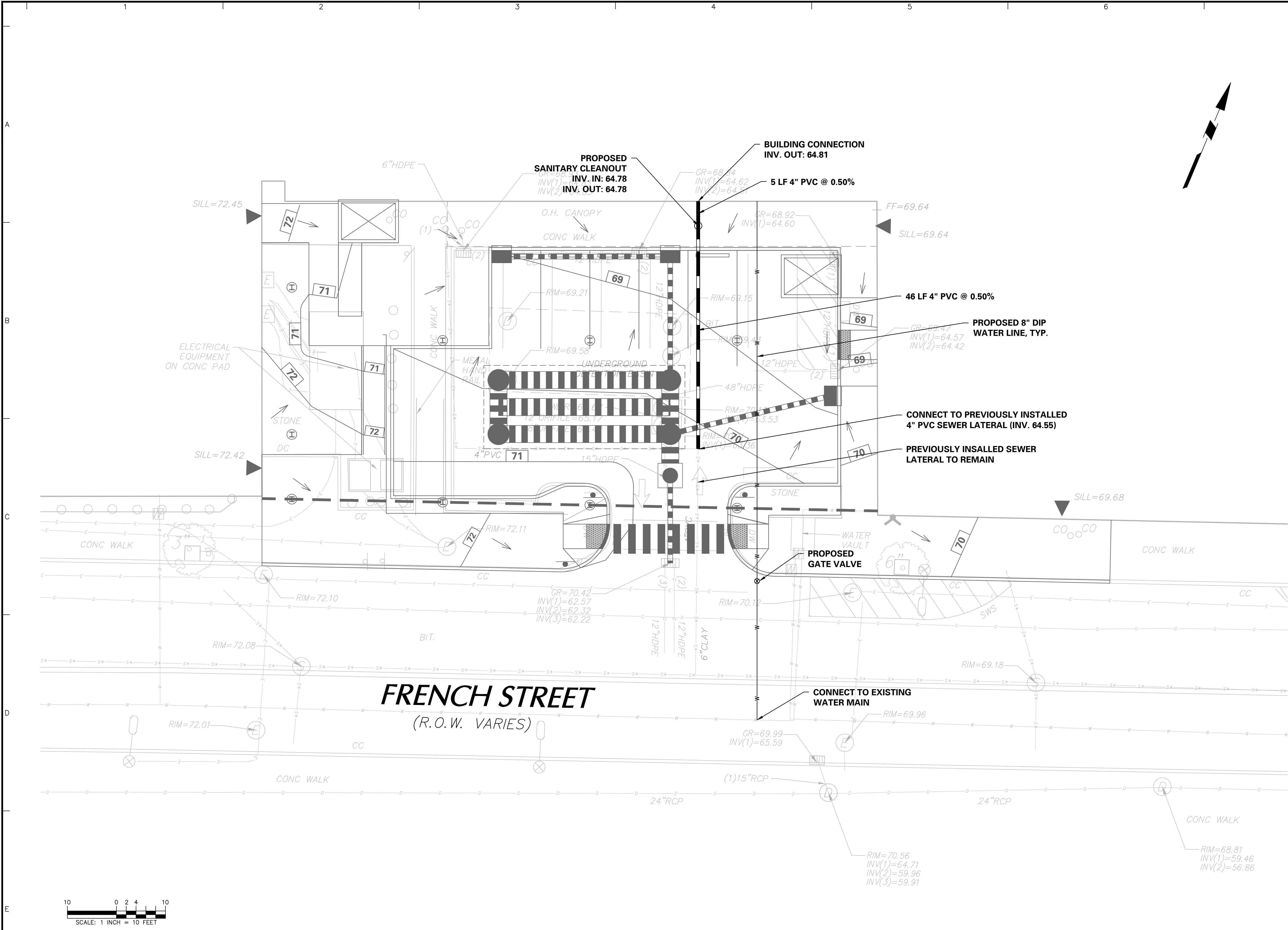
DRAINAGE PLAN



GRADING PLAN LEGEND	
	70 CONTOUR
	70.60 SPOT ELEVATION
	70.25 TOP OF CURB ELEVATION
	69.75 BOTTOM OF CURB ELEVATION
	SLOPE ARROW

DRAINAGE PLAN LEGEND	
	STORM PIPE
	STORM INLET
	ACCESS MANHOLE
	OUTLET CONTROL STRUCTURE
	PIPE FLOW ARROW

Date	Description	No.
REVISIONS		
		
CHRISTIAN M. ROCHE		DATE SIGNED
NJ PROFESSIONAL ENGINEER		
NJ LICENSE No. 24GE04988100		
LANGAN		
Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. 989 Lenox Drive, Suite 124 Lawrenceville, NJ 08648		
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Project		
RWJ BARNABAS HEALTH SOUTH BUILDING EXPANSION BLOCK 24.01, LOT 1.01 CITY OF NEW BRUNSWICK		
MIDDLESEX COUNTY		NEW JERSEY
Drawing Title		
GRADING AND DRAINAGE PLAN		
Project No.		Drawing No.
130141101		CG-101
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05/24/2019		
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GGB		
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- UTILITY NOTES:**
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS IN A MANNER WHICH WILL NOT NEGATIVELY AFFECT ANY EXISTING USERS OF THESE UTILITIES.
 - CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATIONS OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, WATER SERVICE, ELECTRICAL, TELEPHONE, GAS AND CABLE SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND ASSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH THE REGULATORY AGENCY AS TO LOCATION AND SCHEDULING OF CONNECTIONS TO THEIR FACILITIES.
 - THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, UTILITY LOCATIONS AND INVERTS PRIOR TO CONSTRUCTION. ANY CONDITIONS FOUND TO DIFFER FROM THOSE SHOWN BY THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
 - ALL SANITARY SEWER AND WATER LINE WORK SHALL BE IN ACCORDANCE WITH MUNICIPAL REQUIREMENTS AND SPECIFICATIONS OF THE CITY OF NEW BRUNSWICK.
 - ALL WATER MAINS AND SANITARY OR INDUSTRIAL SEWER LINES SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 10 FEET. IF SUCH LATERAL SEPARATION IS NOT POSSIBLE, THE WATER AND SEWER LINES SHALL BE IN SEPARATE TRENCHES (STEP TRENCHES ARE PROHIBITED) WITH THE TOP OF THE SEWER LINE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN OR WITH SUCH OTHER SEPARATION EXPRESSLY APPROVED BY THE DEPARTMENT. AT CROSSINGS OF SEWER LINES AND WATER MAINS, THE TOP OF THE SEWER LINES SHALL BE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN (SEWER SERVICE LATERALS ARE NOT SUBJECT TO THIS REQUIREMENT). IF SUCH VERTICAL SEPARATION IS NOT POSSIBLE, THE SEWER LINE SHALL BE OF WATERTIGHT CONSTRUCTION (THAT IS, DUCTILE IRON OR REINFORCED CONCRETE PIPE), WITH WATERTIGHT JOINTS THAT ARE A MINIMUM OF 10 FEET FROM THE WATER MAIN.
 - EXISTING FRAMES, COVERS, AND GRATES IN AREAS WHERE GRADES WILL BE REVISED BY FILLING OR CUTTING, OR PAVEMENT OVERLAY, MUST BE RESET TO MATCH FINAL GRADE. THIS INCLUDES MANHOLES, HANDHOLES, VALVE BOXES, INLETS, ETC.). IN AREAS OF CUT, CONTRACTORS SHALL PROVIDE REQUIRED COVERAGE OF UTILITY AND STORMWATER LINES AS SPECIFIED BY THE UTILITY PURVEYOR. LIMITED RELOCATION OF UTILITY AND STORMWATER LINES MAY BE REQUIRED.

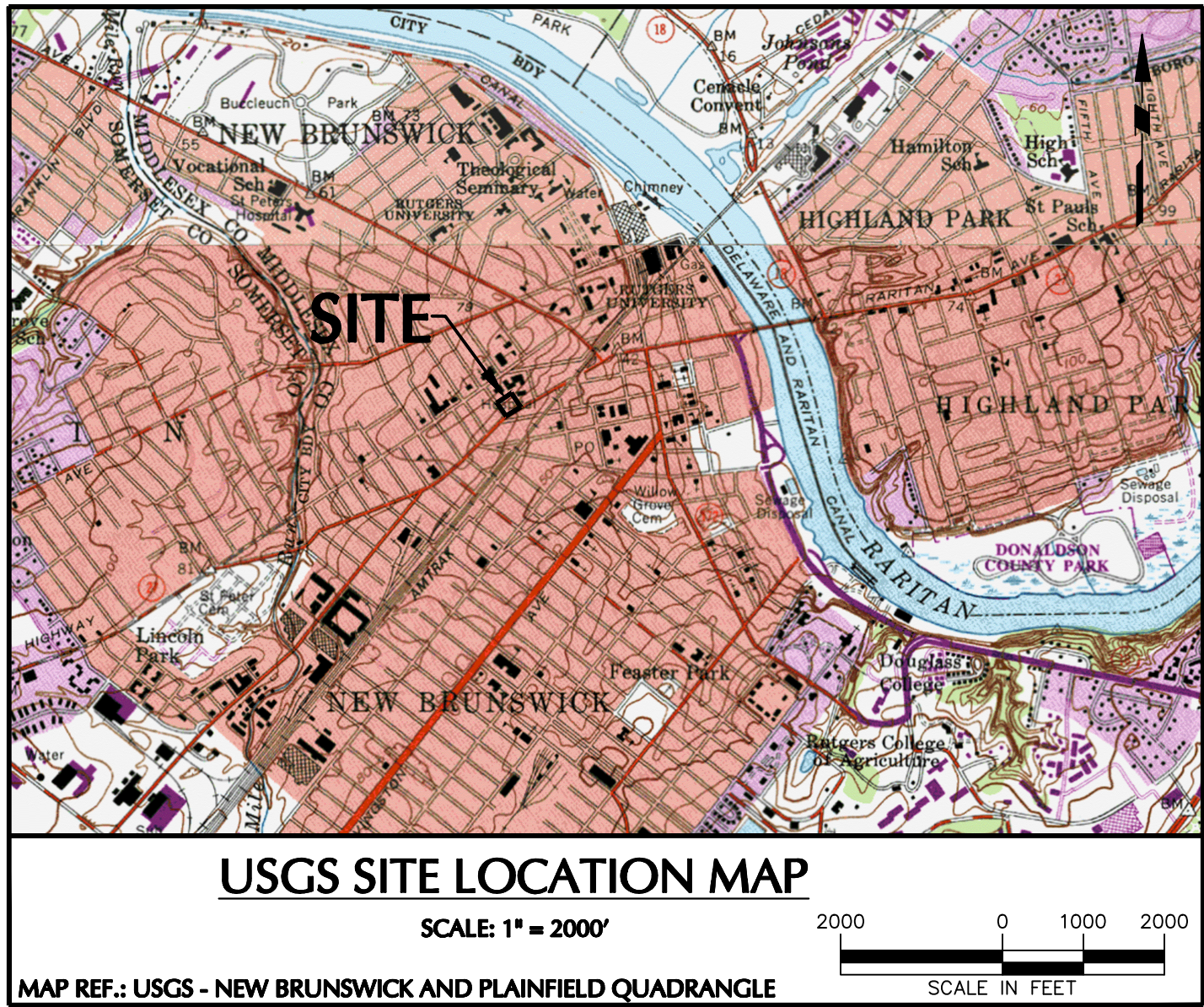
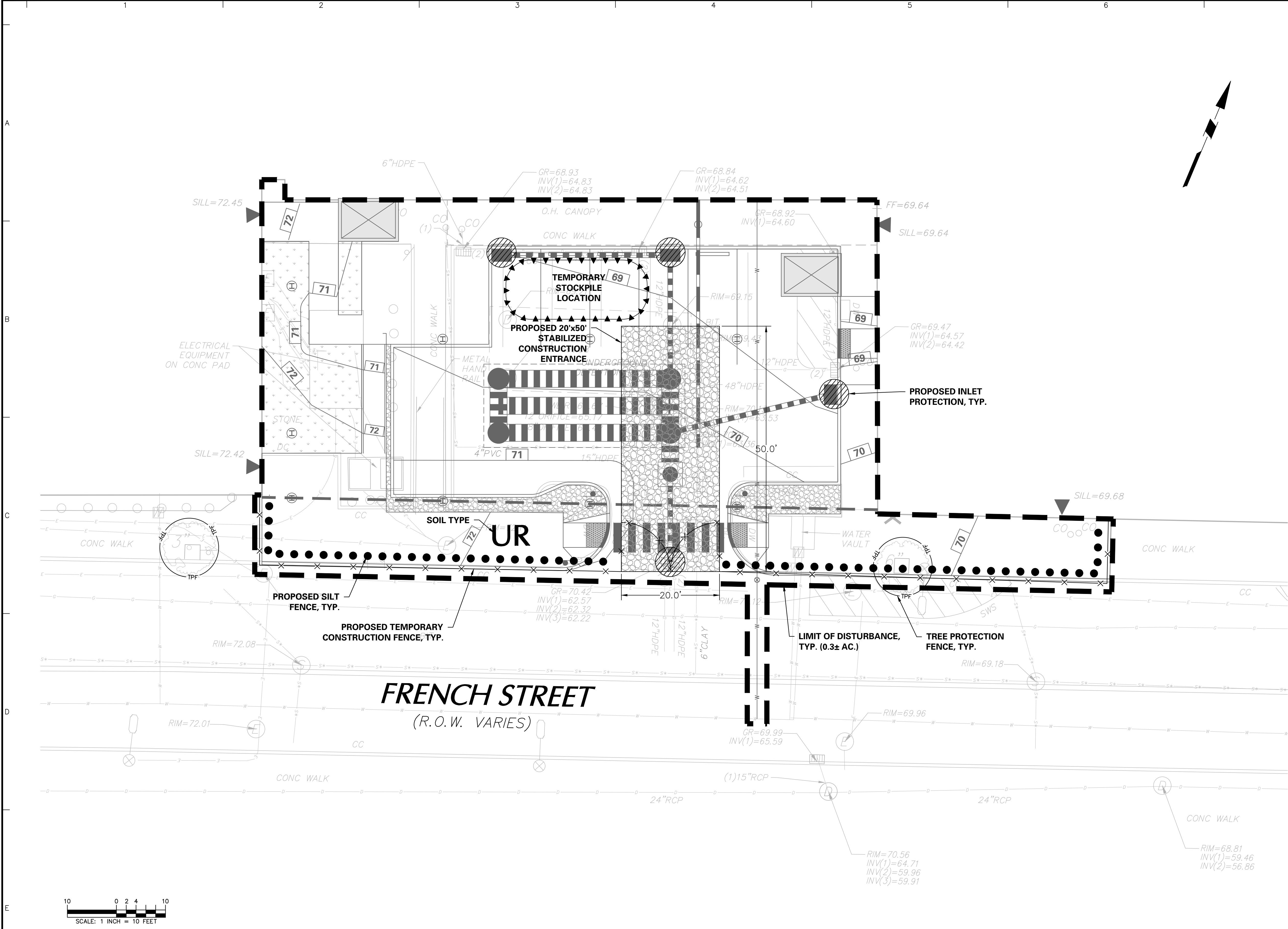
ALL WORK WITHIN FRENCH STREET RIGHT-OF-WAY TO BE COORDINATED WITH MIDDLESEX COUNTY. ALL SIDEWALKS, CURBS, RAMPS AND PAVEMENT TO BE CONSTRUCTED PER COUNTY STANDARDS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING COUNTY PERMITS PRIOR TO ANY WORK WITHIN THE RIGHT-OF-WAY.

OTHER UTILITIES SUCH AS GAS SERVICE, WATER, ELECTRIC, AND TELEPHONE SERVICE WILL BE PROVIDED INTERNALLY FROM THE EXISTING BUILDING.

CONTRACTOR TO PERFORM A CLOSED-CIRCUIT VIDEO INSPECTION ON THE EXISTING SANITARY SEWER MAIN ON LITTLE ALBANY STREET PRIOR TO CONSTRUCTION. RESULTS OF THE INSPECTION SHALL BE SUBMITTED TO THE CITY/COUNTY ENGINEER FOR REVIEW AND APPROVAL.

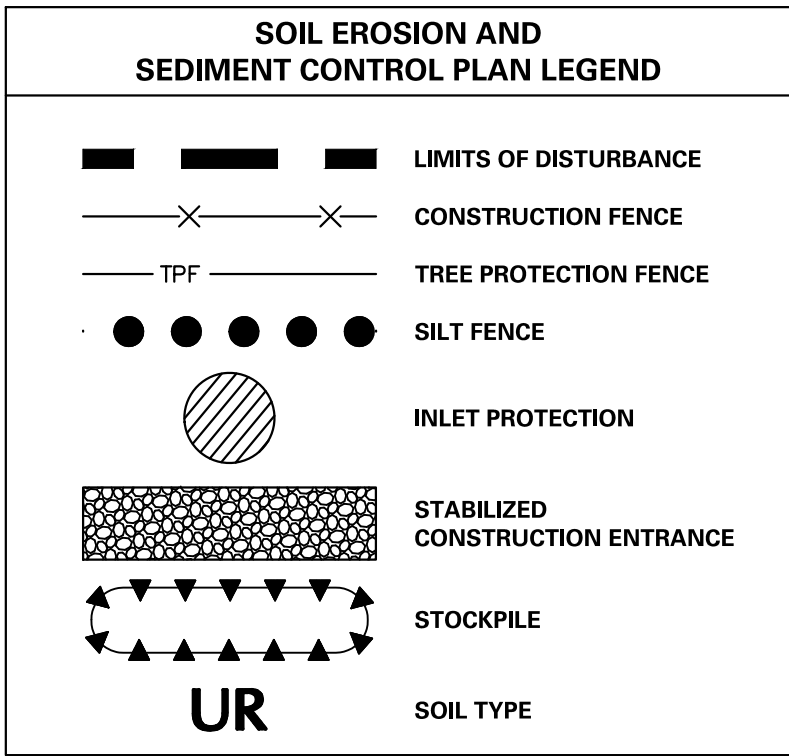
AN AS-BUILT SURVEY OF THE PROJECT SHALL BE PROVIDED TO THE CITY ENGINEER UPON COMPLETION OF CONSTRUCTION.

Date	Description	No.
REVISIONS		
 CHRISTIAN M. ROCHE DATE SIGNED NJ PROFESSIONAL ENGINEER NJ LICENSE No. 24GE04988100		
LANGAN Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. 989 Lenox Drive, Suite 124 Lawrenceville, NJ 08648 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION No. 24GAZ7986400		
Project		
RWJ BARNABAS HEALTH SOUTH BUILDING EXPANSION BLOCK 24.01, LOT 1.01 CITY OF NEW BRUNSWICK MIDDLESEX COUNTY NEW JERSEY		
Drawing Title		
UTILITY PLAN		
Project No.		Drawing No.
130141101		CU-101
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Checked By		Sheet 6 of 11
CMR		



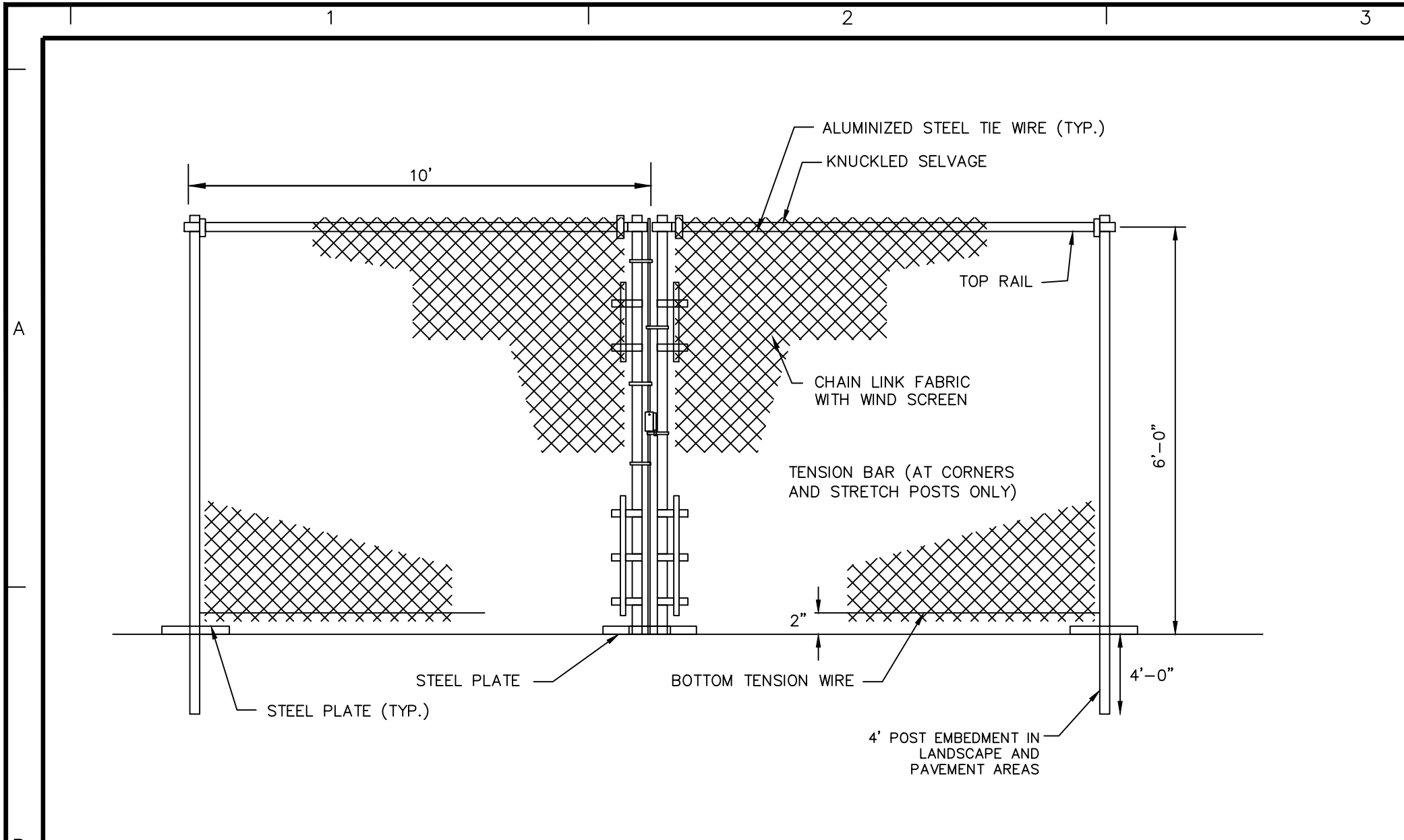
SOIL EROSION AND SEDIMENT CONTROL NOTES:

1. THE SITE SOILS ARE CLASSIFIED AS UR, URBAN LAND. EXISTING HYDROLOGIC SOIL GROUP IS ASSUMED TO BE TYPE D.
2. ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE RESTORED WITH PERMANENT STABILIZATION MEASURES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING TOPSOIL, IF SUITABLE TOPSOIL DOES NOT EXIST ON SITE.
4. SURROUNDING PAVED AREAS SHALL BE CLEANED OF DIRT, MUD, OR DEBRIS ON A DAILY BASIS DURING CONSTRUCTION. CONTRACTOR SHALL IMMEDIATELY REMOVE ALL SEDIMENT WASHED, DROPPED, TRACKED OR SPILLED ONTO PAVED SURFACES.

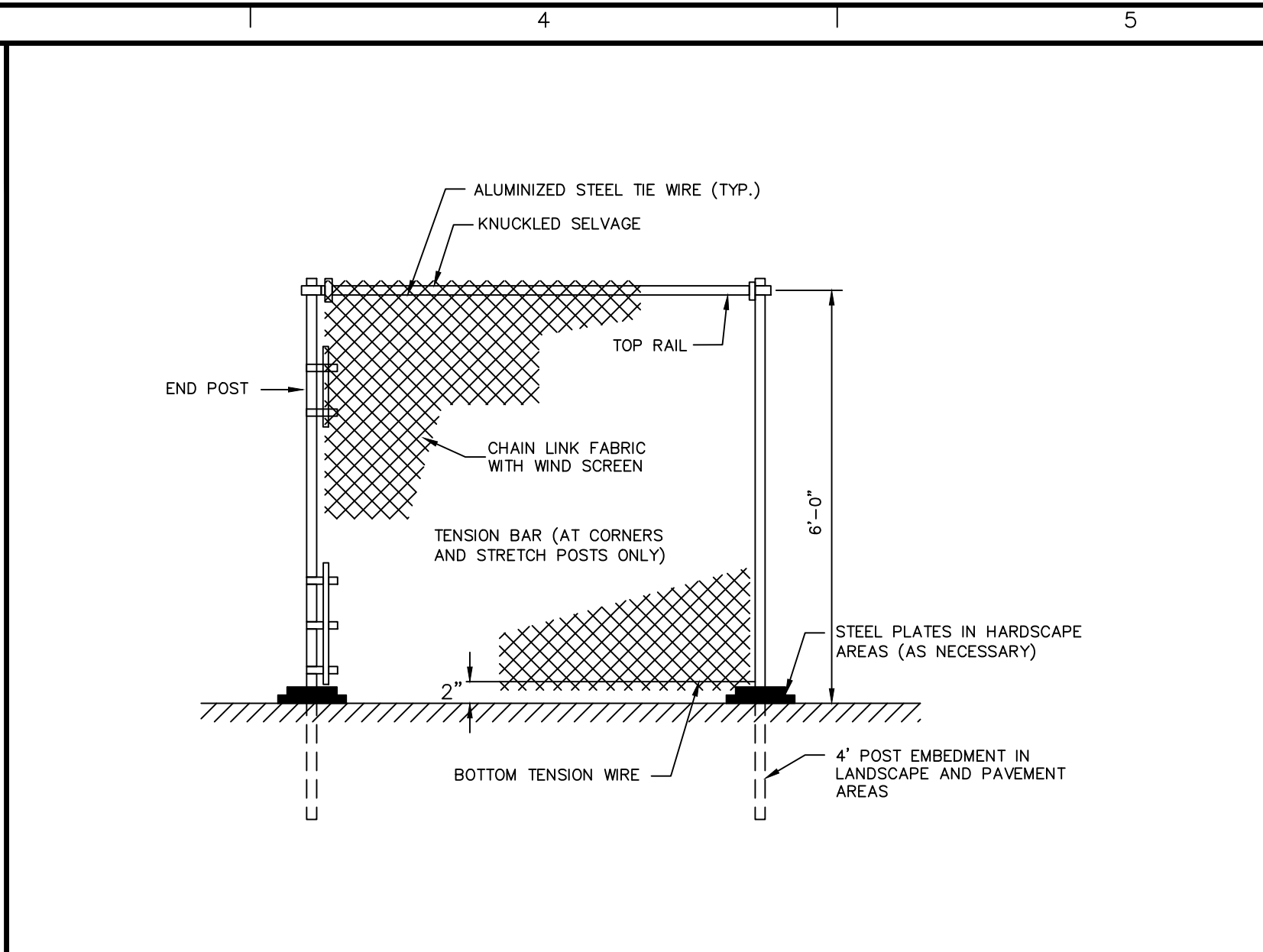


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 CHRISTIAN M. ROCHEDATE SIGNED NJ PROFESSIONAL ENGINEER NJ LICENSE No. 24GE04988100		
LANGAN Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. 989 Lenox Drive, Suite 124 Lawrenceville, NJ 08648 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION No. 24GA07986400		
Project		
RWJ BARNABAS HEALTH SOUTH BUILDING EXPANSION BLOCK 24.01, LOT 1.01 CITY OF NEW BRUNSWICK		
MIDDLESEX COUNTY		NEW JERSEY
Drawing Title		
SOIL EROSION AND SEDIMENT CONTROL PLAN		
Project No.		Drawing No.
130141101		
Date		
05/24/2019		
Drawn By		
GGB		CE-101
Checked By		
CMR		
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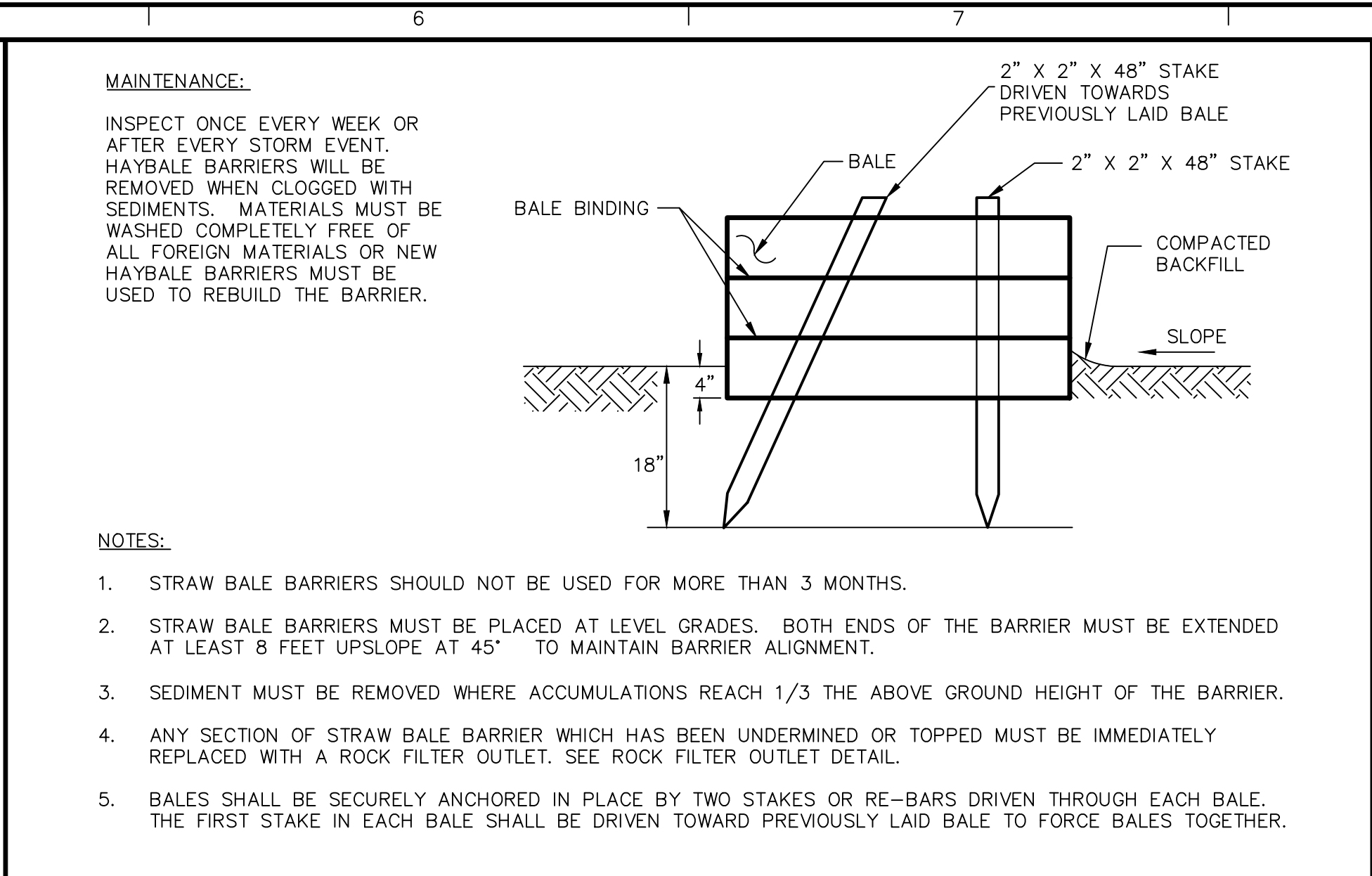
A	1. THE FREEHOLD SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY SOIL DISTURBING ACTIVITY. 2. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED. 3. ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLANS WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RE-CERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT STATE SOIL EROSION AND SEDIMENT CONTROL STANDARDS. 4. N.J.S.A. 4:24-39 ET. SEQ. REQUIRES THAT NO CERTIFICATES OF OCCUPANCY BE ISSUED BEFORE THE DISTRICT DETERMINES THAT A PROJECT OR PORTION THEREOF IS IN FULL COMPLIANCE WITH THE CERTIFIED PLAN AND STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY AND A REPORT OF COMPLIANCE HAS BEEN ISSUED. UPON WRITTEN REQUEST FROM THE APPLICANT, THE DISTRICT MAY ISSUE A REPORT OF COMPLIANCE WITH CONDITIONS ON A LOT-BY-LOT OR SECTION-BY-SECTION BASIS PROVIDED THAT THE PROJECT OR PORTION THEREOF IS IN SATISFACTORY COMPLIANCE WITH THE SEQUENCE OF DEVELOPMENT AND TEMPORARY MEASURES FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN IMPLEMENTED, INCLUDING PROVISIONS FOR STABILIZATION AND SITE WORK. 5. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN SIXTY (60) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF 2 TO 2 1/2 TONS PER ACRE, ACCORDING TO STATE STANDARD FOR STABILIZATION WITH MULCH ONLY. 6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AND A MULCH ANCHOR, IN ACCORDANCE WITH STATE STANDARDS. 7. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS TO STABILIZE STREETS, ROADS, DRIVEWAYS, AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN FIFTEEN (15) DAYS OF THE PRELIMINARY GRADING. 8. THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A PAD OF CLEAN CRUSHED STONE AT POINTS WHERE TRAFFIC WILL BE ACCESSING THE CONSTRUCTION SITE. AFTER INTERIOR ROADWAYS ARE PAVED, INDIVIDUAL LOTS REQUIRE A STABILIZED CONSTRUCTION ENTRANCE CONSISTING OF ONE INCH TO TWO INCH (1"-2") STONE FOR A MINIMUM LENGTH OF TEN FEET (10') EQUAL TO THE LOT ENTRANCE WIDTH. ALL OTHER ACCESS POINTS SHALL BE BLOCKED OFF. 9. ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF-WAYS WILL BE REMOVED IMMEDIATELY. 10. PERMANENT VEGETATION IS TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING. 11. AT THE TIME THAT SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT IT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED. 12. IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, ANY SOIL HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT THE RATE OF 10 TONS/ACRE, (OR 450 LBS/SF OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12" OF SETTLED SOIL WITH A PH OF 5 OR MORE, OR TWENTY-FOUR (24) WHERE TREES OR SHRUBS ARE TO BE PLANTED. 13. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL. 14. UNFILTERED DEWATERING IS NOT PERMITTED. NECESSARY PRECAUTIONS MUST BE TAKEN DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH THE STANDARD FOR DEWATERING. 15. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SOIL SURFACE IS WET. TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED AS REQUIRED BY THE STANDARD FOR DUST CONTROL. 16. STOCKPILE AND STAGING LOCATIONS ESTABLISHED IN THE FIELD SHALL BE PLACED WITHIN THE LIMIT OF DISTURBANCE ACCORDING TO THE CERTIFIED PLAN. STAGING AND STOCKPILES NOT LOCATED WITHIN THE LIMIT OF DISTURBANCE WILL REQUIRE CERTIFICATION OF A REVISED SOIL EROSION AND SEDIMENT CONTROL PLAN. CERTIFICATION OF A NEW SOIL EROSION AND SEDIMENT CONTROL PLAN MAY BE REQUIRED FOR THESE ACTIVITIES IF AN AREA GREATER THAN 5,000 SQUARE FEET IS DISTURBED. 17. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH SOIL EROSION AND SEDIMENT CONTROL NOTE #6. 18. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFFSITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.	PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION PERMANENT SEEDING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY." THE FOLLOWING SEEDING SCHEDULE SHOULD BE USED FOR PERMANENT STABILIZATION: 1. SITE PREPARATION A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. B. IMMEDIATELY PRIOR TO SEEDING AND TOPSOIL APPLICATION, THE SUBSOIL SHALL BE EVALUATED FOR COMPACTION IN ACCORDANCE WITH STANDARD FOR LAND GRADING. C. TOPSOIL SHALL BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS REQUIRED ON ALL SITES. TOPSOIL SHALL BE AMENDED WITH ORGANIC MATTER, AS NEEDED, IN ACCORDANCE WITH STANDARD FOR TOPSOILING. D. INSTALL EROSION CONTROL MEASURES AS INDICATED ON THE "SOIL EROSION AND SEDIMENT CONTROL PLAN," DRAWING CE-101 AND AS DETAILED ON DRAWINGS CE-502 AND CE-503. 2. SEEDED PREPARATION A. UNIFORMLY APPLY GROUND LIMESTONE AND FERTILIZER TO TOPSOIL WHICH HAS BEEN SPREAD AND FIRMED, ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 LBS PER ACRE OR 11 LBS/1,000 SF OF 10-10-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN. LIMING RATES SHALL BE ESTABLISHED VIA SOIL TESTING. B. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4" WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDED IS PREPARED. C. HIGH ACID PRODUCING SOIL - SOILS HAVING A pH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH MINIMUM OF 12 INCHES OF SOIL HAVING A pH OF 5 OR MORE BEFORE INITIATING SEEDED PREPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOIL. 3. SEEDING A. SEED GERMINATION SHALL HAVE BEEN TESTED WITHIN 12 MONTHS OF THE PLANTING DATE. NO SEED SHALL BE ACCEPTED WITH A GERMINATION TEST DATE MORE THAN 12 MONTHS OLD UNLESS RETESTED. B. APPLY HARD FESCUE AT A RATE OF 3 LB/1,000 SF (130 LBS/ACRE), CREWINGS FESCUE AT A RATE OF 1 LB/1,000 SF (45 LBS/ACRE), CREEPING FESCUE AT A RATE OF 1 LB/1,000 SF (45 LBS/ACRE), AND PERENNIAL RYEGRASS AT A RATE OF 0.25 LBS/1,000 SF (10 LBS/ACRE) TO A DEPTH OF 2" AS PER TABLES 4-2 AND 4-3, AND FIGURE 4-1 OF THE STATE SOIL EROSION STANDARDS. OPTIMAL PLANTING TIME OCCURS BETWEEN AUGUST 15 AND OCTOBER 15. ACCEPTABLE PLANTING TIME IS BETWEEN MARCH 1 AND APRIL 30 OR BETWEEN MAY 1 THROUGH AUGUST 14. C. SEEDING RATE SPECIFIED IS REQUIRED WHEN A REPORT OF COMPLIANCE IS REQUESTED PRIOR TO ACTUAL ESTABLISHMENT. SEEDING RATES WITH 50% REDUCTION IN RATES MAY BE USED WHEN PERMANENT VEGETATION IS ESTABLISHED PRIOR TO A REPORT OF COMPLIANCE INSPECTION. ESTABLISHING PERMANENT VEGETATION WITHIN 80% VEGETATIVE COVERAGE WITH A SPECIFIED SEED MIXTURE FOR THE SEEDED AREA AND MOWED ONCE. D. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DROP SEEDER, DRILL OR CULTIPLACKER SEEDER. EXCEPT FOR DRILLED OR CULTIPLACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL, TO A DEPTH OF 1/4" TO 1/2", BY RAKING OR DRAGGING. E. HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. F. AFTER SEEDING, FIRM THE SOIL WITH A CORRUGATED ROLLER TO ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING EMERGENCE. G. WET SEED MIX (IF REQUIRED): APPLY DEERTRONQUE AT A RATE OF 0.45 LBS/1,000 SF (20 LBS/ACRE), REDTOP AT A RATE OF 0.05 LBS/1,000 SF (2 LBS/ACRE), WILD RYE (ELYMUS) AT A RATE OF 0.35 LBS/1,000 SF (15 LBS/ACRE), AND SWITCHGRASS AT A RATE OF 0.80 LBS/1,000 SF (25 LBS/ACRE) TO A DEPTH OF 2" AS PER TABLES 4-2 AND 4-3, AND FIGURE 4-1 OF THE STATE SOIL EROSION STANDARDS. PLANT BETWEEN MARCH 1 AND APRIL 30. 4. MULCHING A. MULCHING IS REQUIRED ON ALL SEEDING TO INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND PROMOTE FASTER AND EARLIER ESTABLISHMENT. B. UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, OR SALT HAY SHALL BE APPLIED AT A RATE OF 70 TO 90 LBS/1,000 SF (1-1/2 TO 2 TONS PER ACRE). MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED DUE TO THE PRESENCE OF WEED SEEDS. C. SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 85% OF THE SOIL SURFACE WILL BE COVERED. D. ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. DRIVE 8" TO 10" WOODEN PEGS TO WITHIN 2" TO 3" OF THE SOIL SURFACE EVERY 4' IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRIS-CROSS AND SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS. 5. IRRIGATION A. IF SOIL IS MOISTURE DEFICIENT, AND MULCH IS NOT USED, SUPPLY NEW SEEDLINGS WITH ADEQUATE WATER (A MINIMUM OF 1/4" TWICE A DAY UNTIL VEGETATION IS WELL ESTABLISHED). THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE IN ABNORMALLY DRY OR HOT WEATHER OR ON DROUGHTY SITES. B. COORDINATE IRRIGATION OF SEEDED AREAS WITH PROPERTY OWNER AND MAINTENANCE PERSONNEL. 6. TOPDRESSING A. SLOW RELEASE NITROGEN FERTILIZER (WATER INSOLUBLE) IS PRESCRIBED IN 2.A. ABOVE, NO FOLLOW-UP OF TOPDRESSING IS MANDATORY. AN EXCEPTION MAY BE MADE WHERE GROSS NITROGEN DEFICIENCY EXISTS TO THE EXTENT THAT TURF FAILURE MAY DEVELOP. IN THAT INSTANCE, TOPDRESS WITH 10-10-10 OR EQUIVALENT AT 7 LBS/1,000 SF (300 LBS/ACRE) EVERY 3 TO 5 WEEKS UNTIL THE GROSS NITROGEN DEFICIENCY IN THE TURF IS AMELIORATED.	TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION DISTURBED AREAS SHALL BE MAINTAINED IN A ROUGH GRADED CONDITION AND TEMPORARILY SEEDED AND HAY MULCHED UNTIL PROPER WEATHER EXISTS FOR THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER. THE FOLLOWING SCHEDULE SHALL BE USED FOR TEMPORARY STABILIZATION: 1. SITE PREPARATION A. INSTALL EROSION CONTROL MEASURES AS INDICATED ON THE "SOIL EROSION AND SEDIMENT CONTROL PLAN," DRAWING CE-101 AND AS DETAILED ON DRAWINGS CE-502 AND CE-503. B. IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES. 2. SEEDED PREPARATION A. APPLY GROUND LIMESTONE AND FERTILIZER. FERTILIZER SHALL BE APPLIED AT A RATE OF 11 LBS/1,000 SF (500 LBS/ACRE) OF 10-20-10 OR EQUIVALENT WITH
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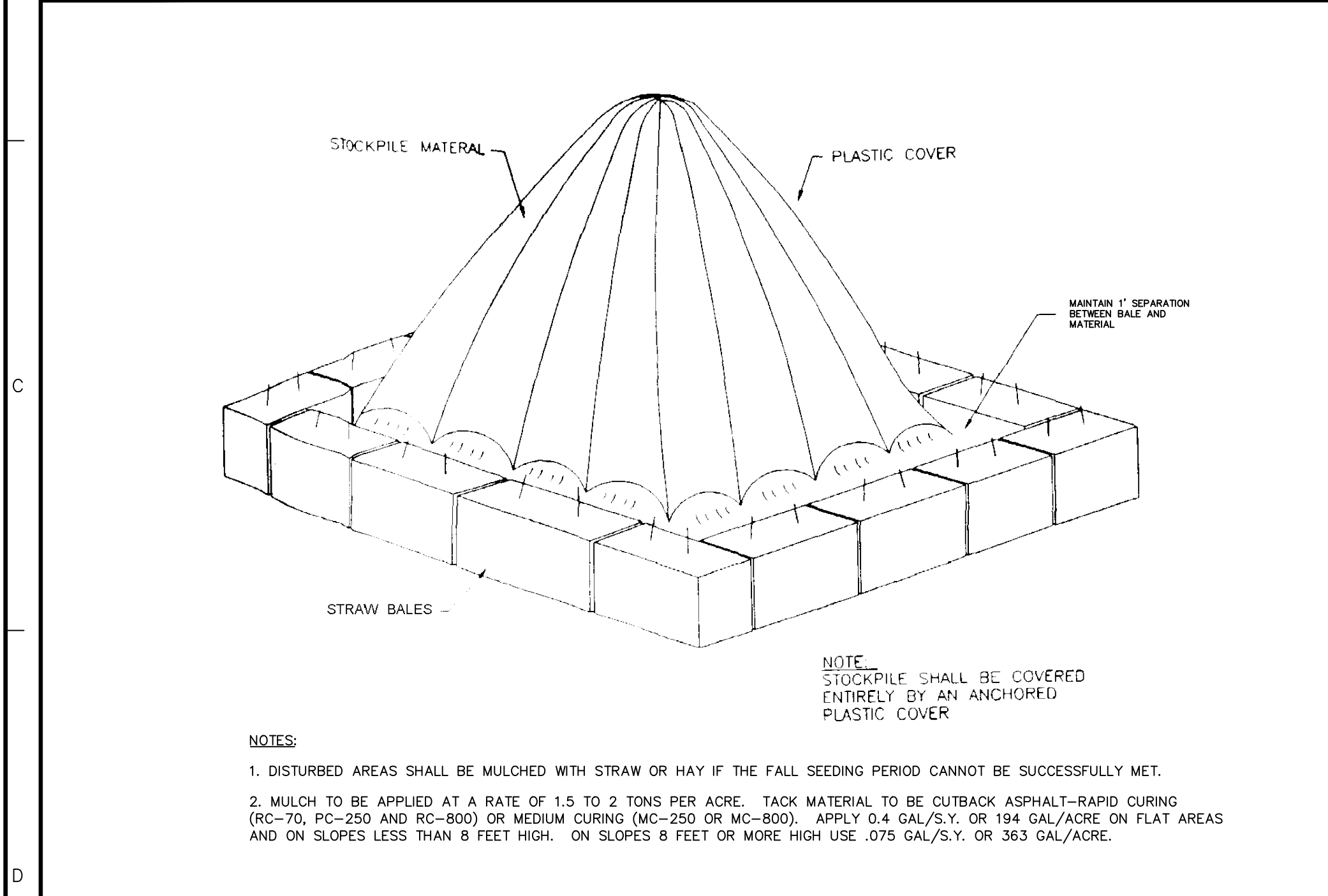
TEMPORARY CONSTRUCTION GATE



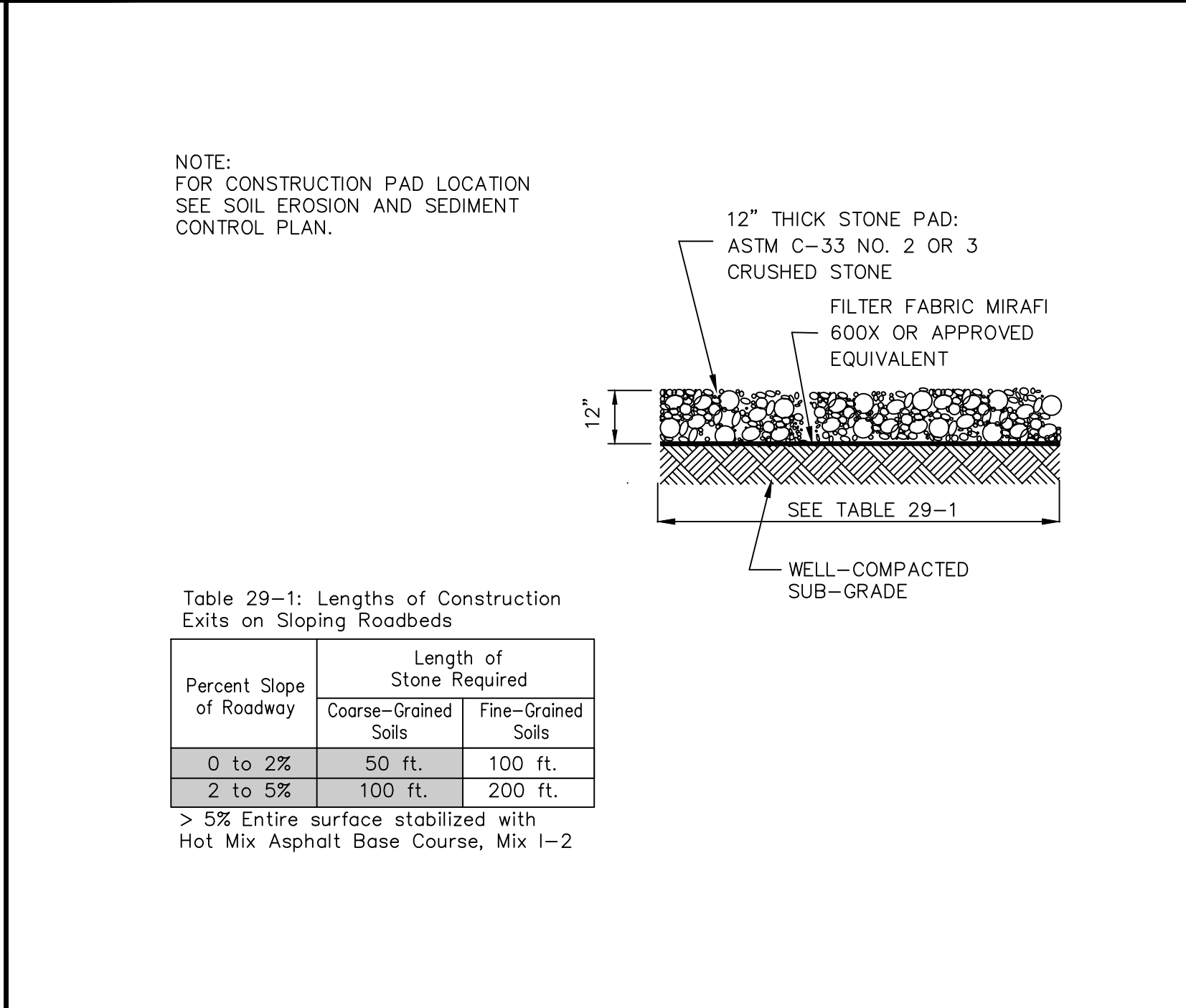
6-FT TEMPORARY CONSTRUCTION FENCE



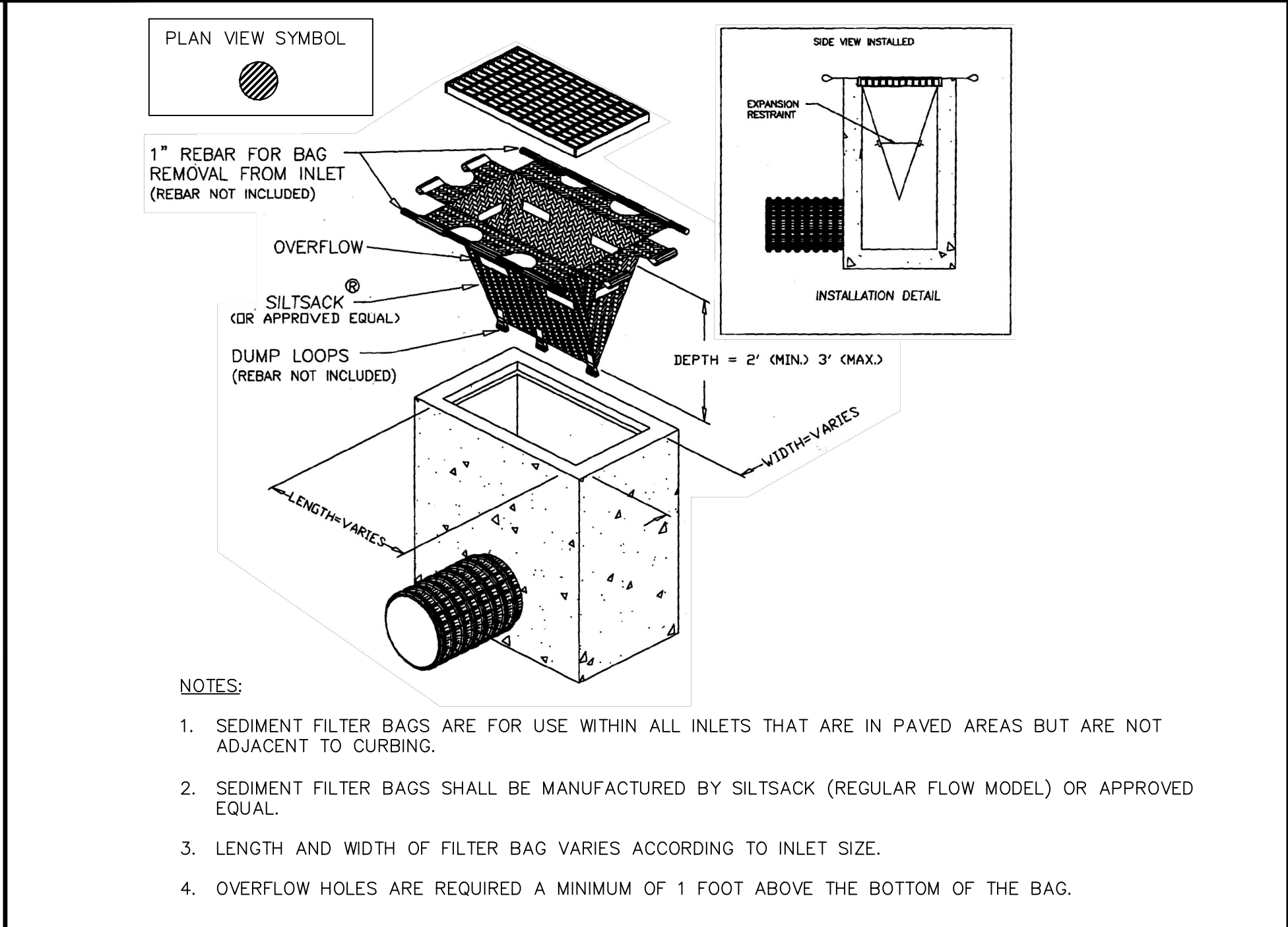
HAYBALE BARRIERS



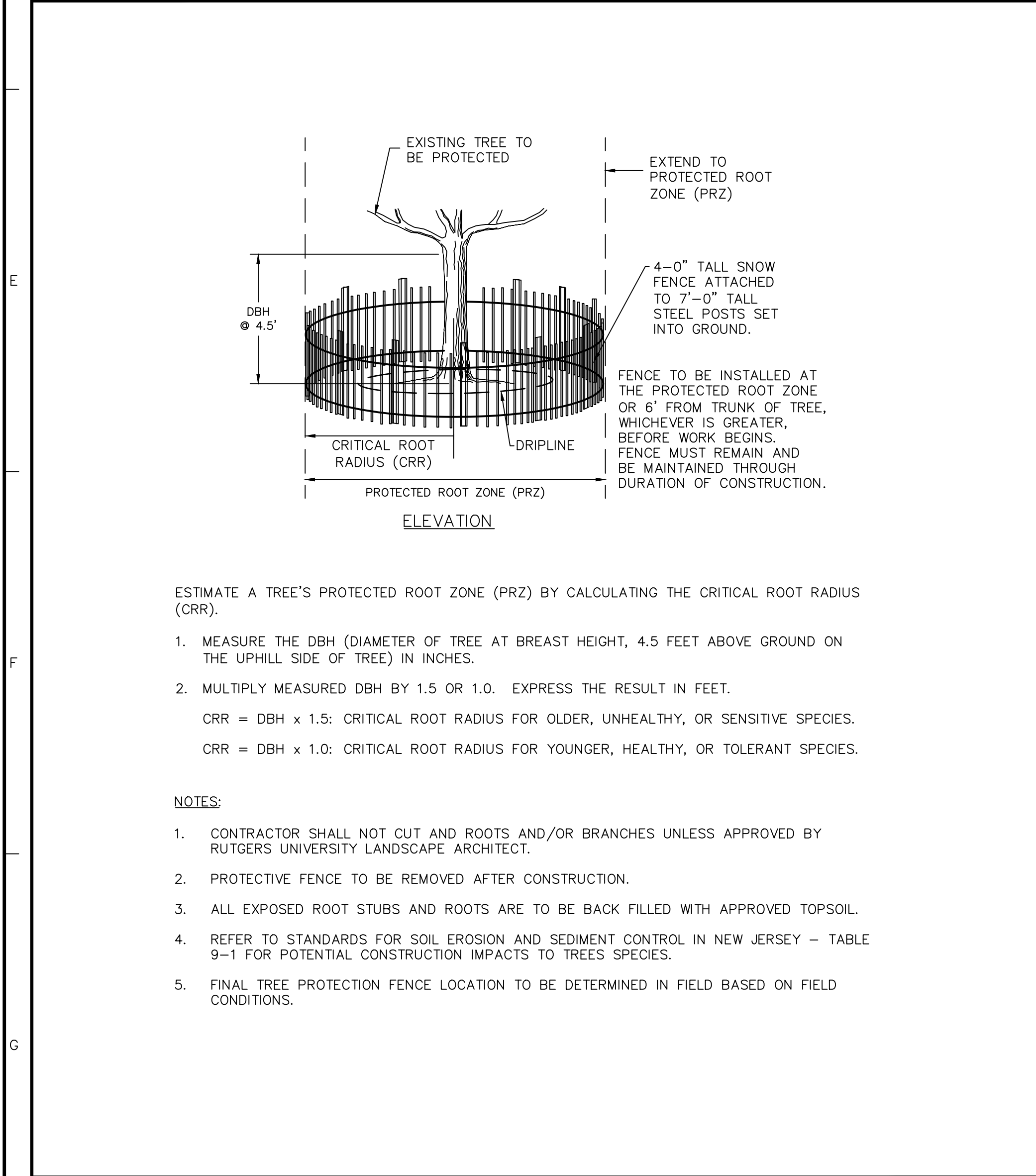
TEMPORARY SOIL / CONSTRUCTION DEBRIS STOCKPILE



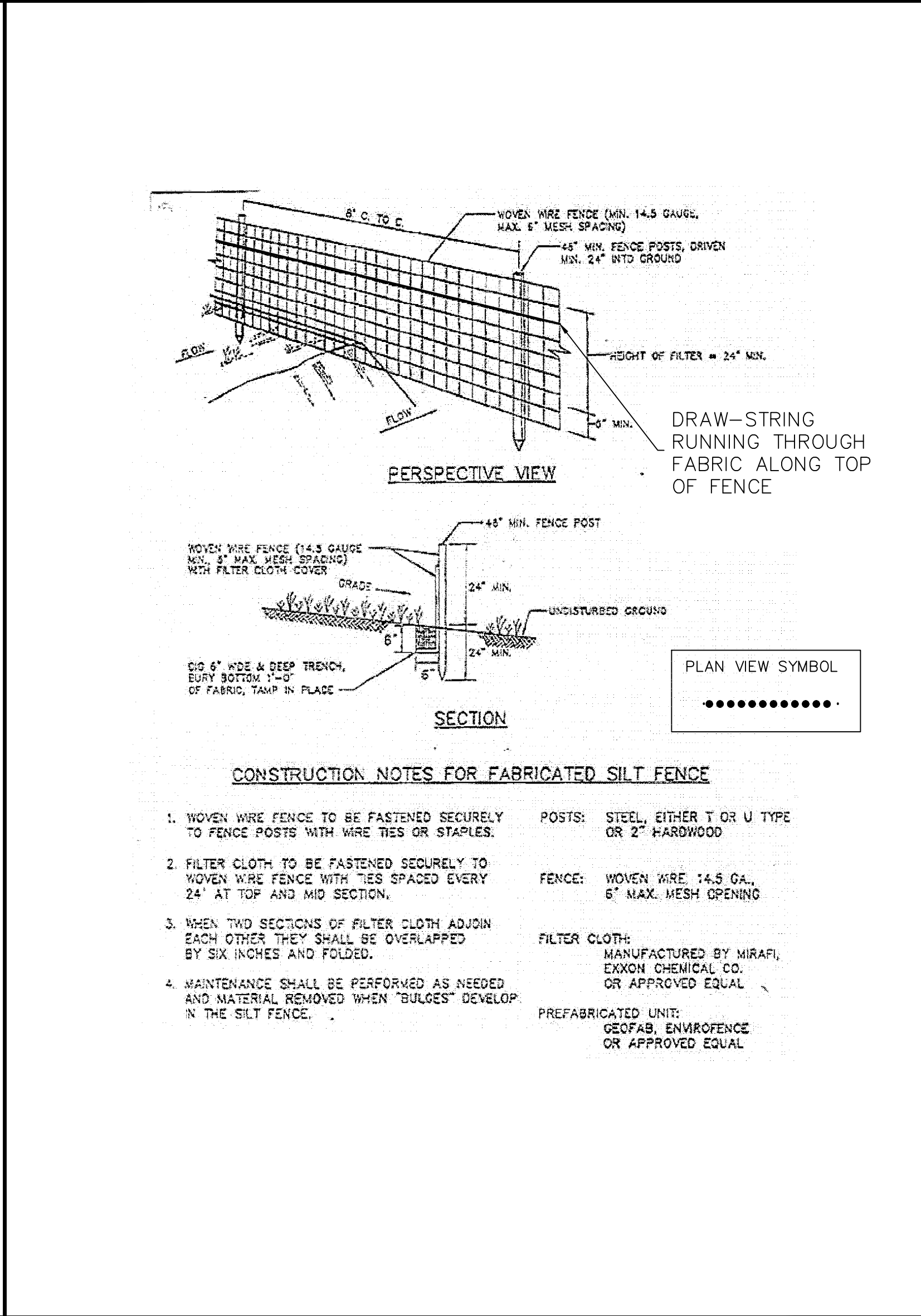
STABILIZED CONSTRUCTION ACCESS



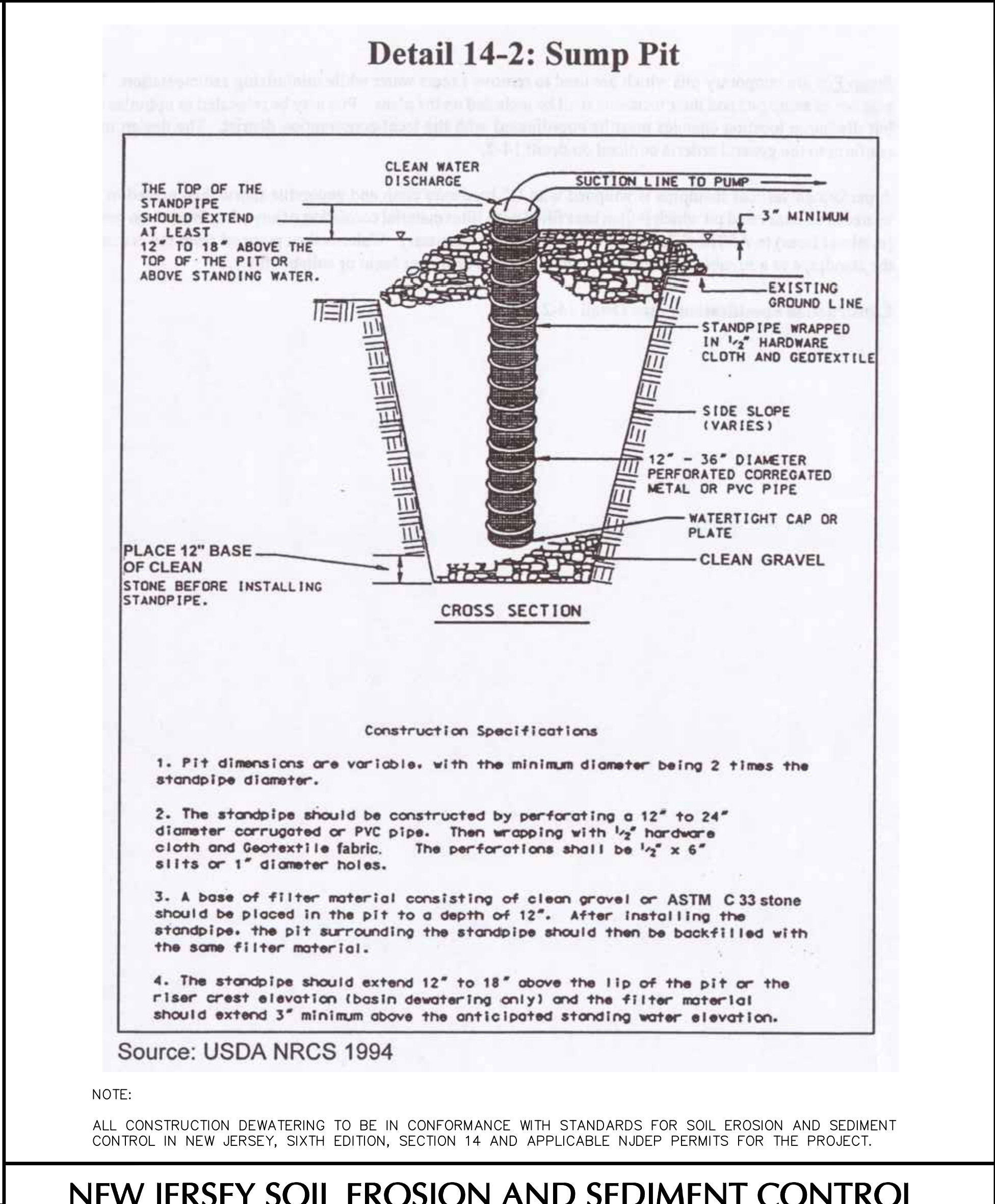
SEDIMENT FILTER BAG INSERT



TREE PROTECTION



SILT FENCE



NEW JERSEY SOIL EROSION AND SEDIMENT CONTROL
DETAIL FOR CONSTRUCTION DEWATERING

Date	Description	No.
REVISIONS		
 CHRISTIAN M. ROCHE DATE SIGNED NJ PROFESSIONAL ENGINEER NJ LICENSE No. 24GE04988100		
LANGAN Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. 989 Lenox Drive, Suite 124 Lawrenceville, NJ 08648 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION No. 24GA07986400		
Project RWJ BARNABAS HEALTH SOUTH BUILDING EXPANSION BLOCK 24.01, LOT 1.01 CITY OF NEW BRUNSWICK MIDDLESEX COUNTY NEW JERSEY		
Drawing Title SOIL EROSION AND SEDIMENT CONTROL DETAILS		
Project No. 130141101		Drawing No. CE-502
Date 05/24/2019		
Drawn By GGB		
Checked By CMR		
Sheet 9 of 11		



Date	Description	No.
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LANGAN Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. 989 Lenox Drive, Suite 124 Lawrenceville, NJ 08648 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION No. 24GA27896400		
Project		
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MIDDLESEX COUNTY	NEW JERSEY	
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05/24/2019		
Drawn By		
GGB		
Checked By		
CMR		Sheet 11 of 11