

PROPOSED INDUSTRIAL SIDETRACK & STORMWATER MANAGEMENT IMPROVEMENTS

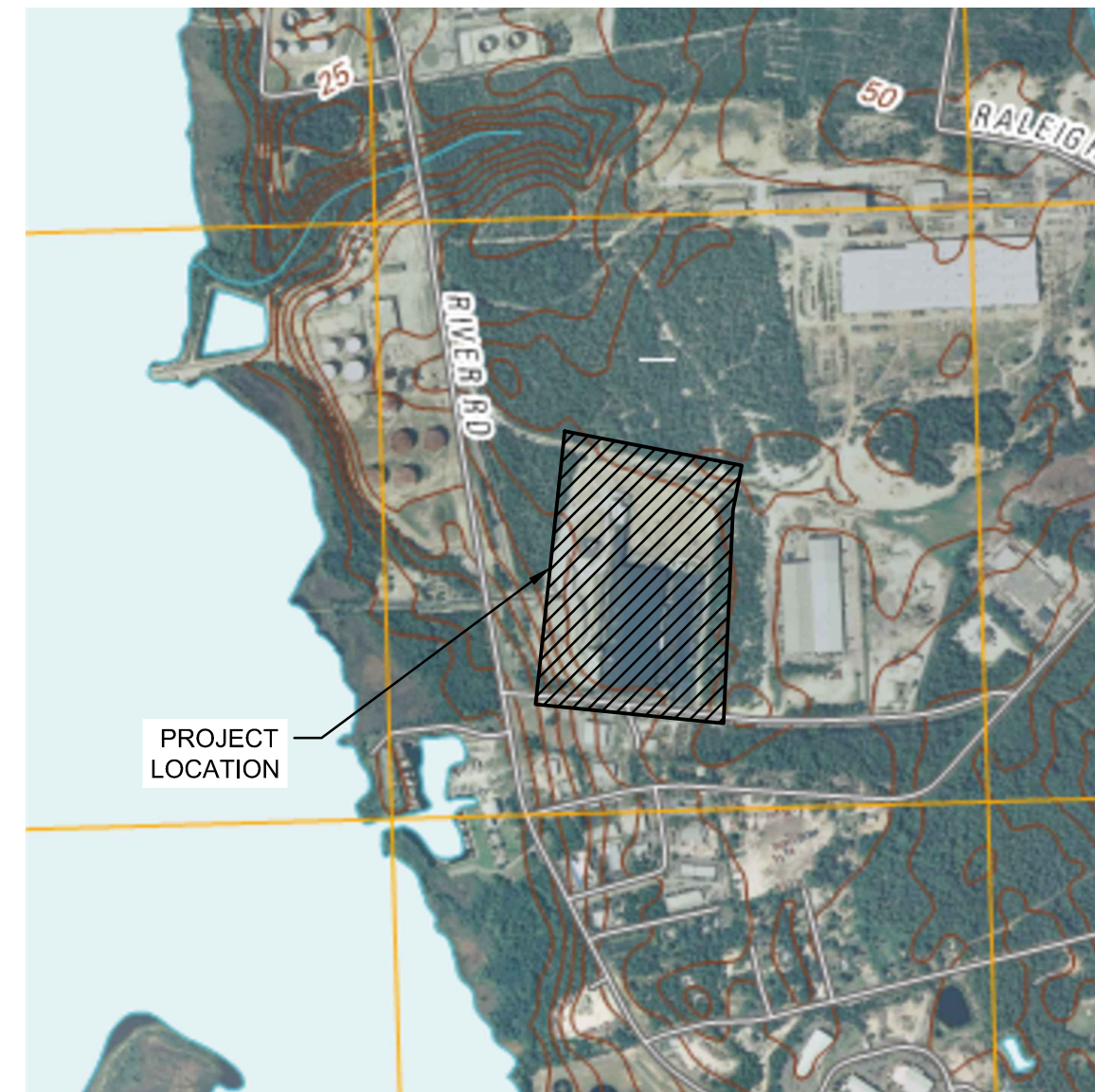
NATIONAL GYPSUM COMPANY
 NEW HANOVER COUNTY
 838 SUNNYVALE DRIVE
 WILMINGTON, NC

CIVIL ENGINEER
 URBAN ENGINEERS, INC.
 530 WALNUT STREET
 PHILADELPHIA, PA 19106
 PHONE: 215-922-8080

CONSTRUCTION SET	
SHEET NUMBER	SHEET TITLE
G-000	COVER SHEET
G-100	GENERAL NOTES & LEGENDS
C-000	EXISTING CONDITIONS PLAN
C-001	TREE INVENTORY PLAN
C-101	HORIZONTAL TRACK GEOMETRY
C-102	VERTICAL TRACK GEOMETRY
C-103 - C-106	ROADBED X-SECTIONS
C-200	EROSION & SEDIMENT CONTROL PLAN
C-201	EROSION & SEDIMENT CONTROL - NOTES 1
C-202	EROSION & SEDIMENT CONTROL - NOTES 2
C-203	EROSION & SEDIMENT CONTROL - DETAILS 1
C-204	EROSION & SEDIMENT CONTROL - DETAILS 2
C-205	DEMOLITION PLAN - OVERALL
C-206	TREE PROTECTION AND REMOVAL PLAN
C-301	RAILROAD DETAILS
C-302	RAILROAD DETAILS
C-303	TYPICAL CONSTRUCTION DETAILS
C-304	TRACK GEOMETRY DATA
C-400	SITE PLAN - OVERALL
C-401	SITE PLAN - ENLARGEMENT 1
C-402	SITE PLAN - ENLARGEMENT 2
C-410	GRADING PLAN - OVERALL
C-411	RAIL SPUR AND BASIN GRADING PLAN
C-412	ENDWALL GRADING DETAIL
C-500	UTILITY PLAN - OVERALL
C-501	UTILITY PROFILE - STORM
C-502	EMERGENCY OUTFALL UTILITY PROFILE
C-600	CONSTRUCTION DETAILS - 1
C-200-ALT	EROSION & SEDIMENT CONTROL PLAN - ADD ALTERNATE
C-205-ALT	DEMOLITION PLAN - OVERALL ADD ALTERNATE
C-206-ALT	TREE PROTECTION AND REMOVAL PLAN ADD ALTERNATE
C-400-ALT	SITE PLAN - OVERALL ADD ALTERNATE
C-402-ALT	SITE PLAN - ENLARGEMENT 2 - ADD ALTERNATE
C-410-ALT	GRADING PLAN - OVERALL ADD ALTERNATE
C-411-ALT	RAIL SPUR AND BASIN GRADING PLAN - ADD ALTERNATE



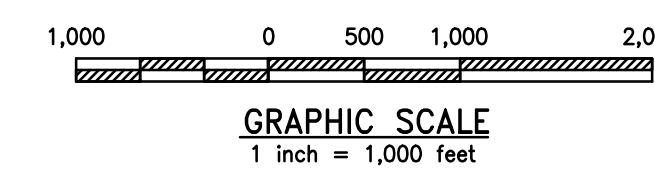
LOCATION MAP
 SCALE: 1" = 1000'



USGS MAP
 SCALE: 1" = 1000'

CITY OF WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit # _____
 Signed: _____

Approved Construction Plan
 Name _____ Date _____
 Planning _____
 Traffic _____
 Fire _____



URBAN ENGINEERS
 530 Walnut Street
 Philadelphia, PA
 19106-3685
 o. 215.922.8080



1	JAB	3/30/2020	RESPONSE TO 12/19 TRC COMMENTS
REV	BY	DATE	DESCRIPTION
LOCATION			838 SUNNYVALE DR., WILMINGTON, NC
TITLE			WILMINGTON WALLBOARD PLANT PROPOSED INDUSTRIAL SIDETRACK & STORMWATER MANAGEMENT IMPROVEMENTS COVER SHEET
DGN	JAB	DATE 03/30/2020	DRAWING NUMBER
CHK	MJT	DATE 03/30/2020	G-000

GENERAL NOTES

- EXISTING SITE INFORMATION:
 - SITE ADDRESS: 838 SUNNYVALE DRIVE
WILMINGTON, NC 28412
PARCEL ID: R06400-001-002-000
 - OWNER: NATIONAL GYPSUM COMPANY (NGC)
2001 REXFORD ROAD
CHARLOTTE, NC 28211
 - DESIGNER: URBAN ENGINEERS, INC.
530 WALNUT STREET
7TH FLOOR
PHILADELPHIA, PA 19106
 - ZONED: 'I' - INDUSTRIAL
 - WATERSHED: DRAINS TO NE CAPE FEAR
 - SITE DATA:

NUMBER OF BUILDINGS:	1
NUMBER OF FLOORS:	1
ROOF AREA:	235,015 SF
TRACT PROPERTY:	26,975 AC.
CAMA LAND USE:	URBAN
 - PROPOSED ADDITIONS:

RAIL SPUR:	26,927 SF
STUCCO BUILDING ADDITION	3,150 SF
RAIL SPUR ACCESS DRIVE:	11,200 SF
EXPANDED ASPHALT PAVING:	26,744 SF
TOTAL:	68,021 SF
- PROPOSED PROJECT WILL NOT TIE INTO EXISTING PUBLIC UTILITIES: WATER, STORMWATER, FIRE PROTECTION OR SANITARY SEWER SYSTEM
- NO NEW WATER/SEWER SERVICES ARE PROPOSED WITH THIS DEVELOPMENT
- ACCORDING TO THE FLOOD INSURANCE MAPS FOR WILMINGTON NORTH CAROLINA PREPARED BY THE NATIONAL FLOOD INSURANCE PROGRAM, THE PROJECT FALLS WITHIN THE X FLOOD ZONE AS SHOWN ON MAP NUMBER 3720311500L, REVISED DATE 8/28/2018. FLOOD INSURANCE MAPS ARE MADE AVAILABLE BY FEMA.
- DATUM:
HORIZONTAL: THE NORTH CAROLINA STATE FIELD COORDINATE SYSTEM, NAD83, BASED ON GNSS
OBSERVATIONS MADE DURING THE FIELD SURVEY.
VERTICAL: NAVD 88.
- IF DISCREPANCIES IN OR OMISSIONS FROM THE CONTRACT DOCUMENTS ARE FOUND, NOTIFY THE ENGINEER IN WRITING IMMEDIATELY. NO CONSIDERATION OR ALLOWANCES WILL BE GRANTED FOR ANY ALLEGED MISUNDERSTANDING OF MATERIAL TO BE FURNISHED OR WORK TO BE PERFORMED.
- THE CONTRACTOR SHALL NOTIFY NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY 48 HOURS PRIOR TO ANY EARTH DISTURBANCE ACTIVITIES. THE CONTRACTOR SHALL SCHEDULE AND CONDUCT ALL CONSTRUCTION TO MINIMIZE EROSION.
- APPROVED EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE PROVIDED AND MAINTAINED UNTIL ALL WORK IS COMPLETED. E&S PLANS SHALL BE AVAILABLE ON SITE UNTIL CONSTRUCTION IS COMPLETED. THE CONTRACTOR SHALL CONDUCT OPERATIONS TO COMPLY WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN. IF THE APPROVED PLAN(S) CANNOT BE FOLLOWED, THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL OF ALTERNATIVE EROSION AND SEDIMENTATION CONTROLS BY THE APPROPRIATE REGULATORY AGENCY. AT NO TIME SHALL WATER CONTAINING SEDIMENTS OR POLLUTANTS BE DISCHARGED INTO DRAINAGE DITCHES, STORMWATER PIPES OR WATERCOURSES.
- CLEAR AND GRUB ALL VEGETATION AND OTHER MISCELLANEOUS ITEMS WITHIN THE LIMITS OF WORK PRIOR TO ANY EARTHMOVING ACTIVITIES.
- ALL STRUCTURES ARE DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER CONSTRUCTION WORK IS FULLY COMPLETE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE CONSTRUCTION PROCEDURES AND SEQUENCE AND TO ENSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENTS PARTS DURING ERECTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIE DOWNS WHICH MAY BE NECESSARY. SUCH MATERIAL SHALL REMAIN THE CONTRACTORS PROPERTY AND BE REMOVED FROM THE SITE AFTER COMPLETION OF PROJECT.

CONSTRUCTION NOTES

- ALL WORK SHALL BE PERFORMED IN CONFORMANCE WITH APPLICABLE CODES.
- THE CONTRACTOR SHALL BE GOVERNED BY THE REQUIREMENTS OF THE FOLLOWING GENESEE & WYOMING RAILROAD REGULATIONS WHEN PERFORMING WORK ON OR ADJACENT TO THE WILMINGTON TERMINAL RAILROAD RIGHT OF WAY OR TRACKS:
 - GENESEE & WYOMING, INC. ROADWAY WORKER PROTECTION & MOFW RULES (CURRENT VERSION).
 - GENESEE & WYOMING, INC. CONTRACTOR SAFETY RULES (CURRENT VERSION).
 - GENESEE & WYOMING, INC. ENGINEERING SAFETY RULES (CURRENT VERSION).
 - CONTACT TRAFFIC ENGINEERING AT 910-341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT-OF-WAY.
- RAILROAD TRAFFIC SHALL BE MAINTAINED AT ALL TIMES AND THE CONTRACTOR SHALL CONDUCT ALL OF HIS OPERATIONS ON OR ADJACENT TO THE WILMINGTON TERMINAL RAILROAD RIGHT-OF-WAY FULLY WITHIN THE RULES, REGULATIONS, AND REQUIREMENTS OF THE WILMINGTON TERMINAL RAILROAD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUAINTING HIMSELF WITH ANY SUCH REQUIREMENTS AS THE RAILROAD MAY DEMAND.
- ALL WORK SHALL BE EXECUTED IN COMPLIANCE WITH THE HIGHEST PROFESSIONAL STANDARDS OF WORKMANSHIP OF THE VARIOUS TRADES PERFORMING WORK UNDER THIS CONTRACT.
- CONTRACTOR SHALL FIELD VERIFY THE AREA AND CONDITIONS OF UTILITIES, SUPPORTS, ETC., AND SHALL IMMEDIATELY INFORM THE ENGINEER UPON ANY DISCOVERY OF ITEMS THAT ARE CONSIDERED UNSAFE OR IN NEED OF ATTENTION, PRIOR TO THE COMMENCEMENT OF WORK.
- EXTREME CARE SHALL BE TAKEN NOT TO DAMAGE PORTIONS OF THE EXISTING FACILITY WHILE PERFORMING THE REQUIRED WORK.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY IN THE FIELD ALL DIMENSIONS OF EXISTING STRUCTURES AFFECTING NEW CONSTRUCTION.
- ANY PORTION OF EXISTING WORK WHICH IS REMOVED, DISTURBED, OR DAMAGED IN THE COURSE OF INSTALLATION OF NEW WORK SHALL BE RESTORED IN COMPLIANCE WITH ALL APPLICABLE CODES AND STANDARDS AT NO EXPENSE TO NATIONAL GYPSUM COMPANY
- THE CONTRACTOR IS SUBJECT TO THE 2014 NORTH CAROLINA GENERAL STATUTES CHAPTER 87 - CONTRACTORS, ARTICLE 8A - "UNDERGROUND UTILITY SAFETY AND DAMAGE PREVENTION ACT", AND IS DIRECTED TO COMPLY WITH IT.
- THE CONTRACTOR SHALL INITIATE A UTILITY LOCATION REQUEST BY CALLING NC811 BETWEEN THE HOURS OF 7 AM AND 7 PM MONDAY THROUGH FRIDAY BY DIALING 811 OR 1-800-632-4949 AT LEAST FOUR (4) WORKING DAYS IN ADVANCE OF ANY EXCAVATION OR EARTH DISTURBANCE ACTIVITY.
- THE CONTRACTOR, FOR THE PURPOSE OF SAFETY, SHALL NOTIFY THE UTILITY COMPANIES INVOLVED IF ANY OF THEIR UTILITIES ARE EXPOSED AND/OR UNDERMINED DURING THE COURSE OF CONSTRUCTION.
- THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS IN EXCAVATIONS AND SHALL HAND EXCAVATE AS NEEDED TO PROTECT UNDERGROUND STRUCTURES AND UTILITIES.

CONSTRUCTION NOTES CONTINUED

- THE CONTRACTOR SHALL PLATE OVER TRENCHES AS NECESSARY FOR MAINTAINING PEDESTRIAN AND VEHICULAR TRAFFIC DURING UNDERGROUND UTILITY WORK AND SITE REMOVALS.
- UNLESS OTHERWISE NOTED ON THE PLANS, ADJUST ALL UTILITY CASTINGS (VALVE BOXES, FRAMES AND COVERS) TO BE FLUSH WITH FINISHED GRADE.
- UTILITIES SHALL BE MAINTAINED IN ACTIVE OPERATION AT ALL TIMES. PROVIDE BYPASS PIPING AND PUMPING WHERE REQUIRED. ALL NEW UTILITY SYSTEMS SHALL BE OPERATIONAL BEFORE ANY EXISTING SYSTEMS ARE ABANDONED OR RELIEVED IF EXISTING UTILITIES ARE TAKEN OUT OF SERVICE FOR CONNECTIONS. THE TIMING SHALL BE APPROVED BY THE ENGINEER.
- REMOVE ALL UNSUITABLE EXCAVATED MATERIALS, AND LEGALLY DISPOSE OF OFF-SITE. UPON COMPLETION OF WORK, REMOVE ALL DEBRIS, EQUIPMENT AND UNUSED MATERIALS FROM NATIONAL GYPSUM COMPANY PROPERTY.
- ALL CATCH BASINS, AND OTHER DRAINAGE STRUCTURES IN THE PROJECT AREA SHALL BE MAINTAINED IN AN OPERABLE CONDITION INCLUDING FLOW WITHOUT BACKUP AT ALL TIMES.
- ALL AREAS DISTURBED/DAMAGED BY THE CONTRACTOR WITHOUT AUTHORIZATION BY THE ENGINEER SHALL BE RESTORED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.

CITY OF WILMINGTON REQUIRED NOTES

- ALL SIGNS AND PAVEMENT MARKINGS IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARD.
- ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCH STANDARDS.
- CONTACT TRAFFIC ENGINEERING AT 910-341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT-OF-WAY.

TREE PROTECTION NOTES

- PRIOR TO ANY CLEARING, GRADING, OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVE OF TREES. AND NO CONSTRUCTION WORKS, TOOLS, MATERIALS OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.

LANDSCAPING NOTES

- NO TREE MITIGATION IS PROPOSED WITH THIS DEVELOPMENT. EXISTING TREES TO BE REMOVED ARE IN DIRECT CONFLICT WITH THE MAXIMUM RAIL GRADE & CURVE REQUIREMENTS AND STORMWATER MANAGEMENT FEATURES AND ARE THEREFORE EXEMPT FROM MITIGATION AS DESCRIBED IN SECTION 18-461(a-c) OF ARTICLE 8 OF THE WILMINGTON, NC CODE OF ORDINANCES.
- NO ADDITIONAL TREES AS A RESULT IN EXPANSION UNDER SECTION 18-510, TABLE III ARE PROPOSED. PROPOSED ASPHALT EXPANSION IS TO REPLACE TRAILER PARKING LOSE FROM THE RAIL SPUR ADDITION AND NOT FOR ADDITIONAL VEHICULAR USE.
- ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30'-10'.

UTILITY NOTES

- CAUTION: HIGH VOLTAGE LINES MAY EXIST WITHIN THE PROJECT LIMITS. ALL WORK IS TO BE PERFORMED IN CONFORMITY WITH ALL STATE, FEDERAL, UTILITY AND CONTRACT REQUIREMENTS. MEANS, METHODS, CHOICE OF EQUIPMENT, SEQUENCING OF AND SAFETY PRACTICES USED OR NOT USED, IN, ON OR AROUND HIGH VOLTAGE LINES OR OTHER UTILITY STRUCTURES, AS THESE ITEMS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR PHYSICALLY PERFORMING OR CONTROLLING, THE PERFORMANCE OF THE WORK. EXCEPT WHERE ELECTRICAL DISTRIBUTION AND TRANSMISSION LINES HAVE BEEN DE-ENERGIZED AND VISIBLY DE-ENERGIZED GROUNDED AT THE POINT OF WORK, ASSUME THAT ALL SUCH LINES ARE ENERGIZED AND CONFORM OPERATIONS TO INTER ALIA, TITLE 29 OF THE CODE OF FEDERAL REGULATIONS, SECTION 1926.550(a)(19).
- EXAMINE ALL DRAWINGS RELATED TO PROPOSED WORK OF ALL TRADES AND BECOME THOROUGHLY FAMILIAR AND FULLY INFORMED AS TO THE EXTENT AND CHARACTER OF THE WORK REQUIRED AND ITS RELATIONSHIP TO ALL OTHER WORK ON THE PROJECT. IF DISCREPANCIES IN OR OMISSIONS FROM THE CONTRACT DOCUMENTS ARE FOUND, NOTIFY THE ENGINEER IN WRITING IMMEDIATELY. NO CONSIDERATION OR ALLOWANCES WILL BE GRANTED FOR ANY ALLEGED MISUNDERSTANDING OF MATERIAL TO BE FURNISHED OR WORK TO BE PERFORMED.
- THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING UTILITIES AND/OR TEMPORARILY RELOCATE AND PROPERLY SUPPORT EXISTING UTILITIES AS NECESSARY.
- THE CONTRACTOR SHALL RESTORE INTERRUPTED OR DAMAGED UTILITY SERVICES 24 HOURS PER DAY UNTIL UTILITY SERVICES HAVE BEEN COMPLETELY RESTORED OR TEMPORARY SERVICES HAVE BEEN DETERMINED SUFFICIENT BY THE ENGINEER.
- THE CONTRACTOR SHALL OBTAIN FROM THE APPROPRIATE UTILITY COMPANY OR CITY DEPARTMENT, VERIFICATION OF THE CURRENT STATUS OF UTILITIES AND STRUCTURES SHOWN ON THE CONTRACT DOCUMENTS PRIOR TO WORKING ON OR NEAR SUCH STRUCTURES AND UTILITIES.

SOILS DATA

- THE SOIL INFORMATION FOR THIS PROJECT WAS OBTAINED FROM THE U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY.
- SOIL SURVEY STAFF, NATURAL RESOURCES CONSERVATION SERVICE, UNITED STATES DEPARTMENT OF AGRICULTURE. WEB SOIL SURVEY. AVAILABLE ONLINE AT <http://websoilsurvey.nrcs.usda.gov/accessed/06/11/2019>.
- THE SOIL SURVEY INDICATES THAT THE SOILS ENCOMPASSING THE PROJECT AREA ARE SAND. THE SOILS AND FOUNDATION MATERIALS ARE HIGHLY VARIABLE.

WATER AND SEWER CAPACITY

WATER: 3,000 GPD (CURRENT USE)
WATER: 0 GPD (PROPOSED ADDITIONAL USE)

SEWER: 3,000 GPD (CURRENT USE)
SEWER: 0 GPD (PROPOSED ADDITIONAL USE)

EXISTING WATER AND SEWER CONNECTIONS

FIRE WATER LATERAL CONNECTS TO AN EXISTING 6" WATER LINE WITHIN SUNNYVALE R.O.W. OWNED BY CAPE FEAR PUBLIC UTILITY AUTHORITY.

12" RECP LATERAL CONNECTS TO EXISTING SANITARY SEWER LINE WITHIN SUNNYVALE R.O.W. OWNED BY CAPE FEAR PUBLIC UTILITY AUTHORITY.

STORMWATER MANAGEMENT NOTES

- THE CONTRACTOR SHALL PERFORM ANY REMEDIATION OR REPAIRS TO EXISTING INFRASTRUCTURE THAT IS DAMAGED BY CONSTRUCTION ACTIVITIES, AT NO ADDITIONAL COST TO THE CITY.
- DISTURBANCE WITHIN THE PROPERTY'S IS 289,238 SF, THUS THE PROJECT WILL REQUIRE A NPDES PERMIT.
- PROJECT DRAINS TO THE NE CAPE FEAR.

UTILITIES CONTACT

COMPANY: CAPE FEAR PUBLIC UTILITY AUTHORITY
ADDRESS: 235 GOVERNMENT CENTER DRIVE
WILMINGTON, NC 28403
CONTACT: FIELD - JIM TAYSON
910-470-3243
FIELD - KATHY WILLIS
910-367-8698
DAMAGE - SHANE FORD
910-322-6571

COMPANY: DUKE ENERGY
ADDRESS: 1451 MILITARY CUTOFF ROAD
WILMINGTON, NC 28403
CONTACT: FIELD - DISPATCH
800-778-9140
DAMAGE - DUKE ENERGY REPRESENTATIVE
800-452-2777

COMPANY: SOUTH WILMINGTON PIPELINE/KI
CONTACT: FIELD - ARDEN HORELL
910-791-3291
DAMAGE - ARDEN HORRELL
910-200-9002

COMPANY: AT&T(DISTRIBUTION)
CONTACT: FIELD 1 - DISPATCH
800-778-9140
FIELD 2 - DINO FARRUGGIO
561-997-0240
DAMAGE ATT REPRESENTATIVE
877-737-2478

COMPANY: TIME WARNER CABLE-CHARTER
ADDRESS: 2321 SCIENTIFIC PARK DR
WILMINGTON, NC 28405
CONTACT: FIELD - DISPATCH
800-778-9140
DAMAGE - CAROLINAS REGIONAL OPERATIONS
855-272-2862

COMPANY: USIC LOCATING SERVICES, INC.
ADDRESS: WTR/SWR/STR DRAIN ONLY LOCATION

COMPANY: PIEDMONT NATURAL GAS COMPANY
ADDRESS: 1321 SOUTH 10TH ST, WILMINGTON, NC 28401
CONTACT: FIELD - LARRY JOHNSTON
910-465-5397
DAMAGE - CUSTOMER SERVICE CENTER
800-752-7504

EXISTING LEGEND

STANDARD ABBREVIATIONS	STANDARD SYMBOLS
AC AIR CONDITIONER	⊕ OVERHEAD TRAFFIC SIGNAL LIGHT
BH BORE HOLE	⚡ POWER POLE
BSL BUILDING SETBACK LINE	— GUY WIRE
CI CURB INLET	— POWER LINE
CMP CORRUGATED METAL PIPE	⊕ LP LIGHT POLE
CMF CONCRETE MONUMENT FND	⊠ ELECTRIC TRANSFORMER
CO SANITARY CLEANOUT	⊠ WATER VAULT
CPED COMMUNICATION PEDESTAL	⊠ GAS VALVE
CTP CRIMPED TOP PIPE	⊠ GAS METER
DI DROP INLET	⊠ WATER VALVE
DIP DUCTILE IRON PIPE	⊠ WATER METER
DWCB DOUBLE WING CATCH BASIN	⊠ FIRE HYDRANT
FNC FENCE	— UNDERGROUND ELECTRIC LINE
FND FOUND	— UNDERGROUND GAS LINE
GM GAS METER	— UNDERGROUND COMMUNICATION LINE
INV INVERT	— UNDERGROUND WATER LINE
JB JUNCTION BOX	① PHOTO POSITION INDICATOR
MH MANHOLE	⊙ REGULAR PARKING SPACE COUNT
OCS OUTLET CONTROL STRUCTURE	♿ HANDICAP PARKING SPACE
OTP OPEN TOP PIPE	♿ TREE POSITION INDICATOR
PM POWER METER	⊙ EXISTING TREE LOCATION
PKS PK NAIL SET	⊙ BRUSH/SHRUB
POB POINT OF BEGINNING	
POC POINT OF COMMENCEMENT	
RCP REINFORCED CONCRETE PIPE	
RBR IRON REINFORCING BAR	
RBS 5/8"RBR SET CAPPED LSF 621	
RRS RAILROAD SWITCH	
SS SANITARY SEWER	
SWCB SINGLE WING CATCH BASIN	
TRANS ELECTRIC TRANSFORMER	

EROSION & SEDIMENT CONTROL LEGEND

	LIMIT OF DISTURBANCE
	ENVIRONMENTAL FEATURE
	12" CURLEX SEDIMENT LOG
	SAWCUT LINE
	REMOVE & SALVAGE FENCE
	PROTECT FENCE
	SOIL DELINEATION
	ROCK CONSTRUCTION ENTRANCE
	REMOVE & DISPOSE ASPHALT
	TEMPORARY/PERMANENT SEEDING AREA
	RETENTION BASIN AREA
	PROTECT ASPHALT DRIVE
	STOCKPILE STORAGE AREA
	INLET PROTECTION
	UTILITY PROTECTION

UTILITIES LEGEND

	PROPOSED STORMWATER PIPE
	SECONDARY OUTLET CONTROL STRUCTURE
	HEADWALL/ENDWALL
	MANHOLE

DEMOLITION LEGEND

	TREE PROTECTION FENCE
	REMOVE TREE
	REMOVE FENCE
	LIMIT OF DISTURBANCE
	ASPHALT REMOVAL

GRADING LEGEND

	40 MAJOR CONTOUR
	41 MINOR CONTOUR
	37.86 SPOT ELEVATION
	2% SLOPES

SITE LEGEND

	PROPOSED ASPHALT PAVING
	6" HIGH CHAIN LINK FENCE
	RETENTION BASIN AREA
	ADA ACCESSIBLE ROUTE
	PROPOSED LAWN AREA
	RAIL SPUR
	BOLLARDS
	STRIPING
	BIKE RACK

CURRENT IMPERVIOUS AREA CALCULATIONS

CURRENTLY UNDER ROOF: 235,015 SF
PAVED PARKING/ROADWAYS: 269,200 SF
TOTAL: 504,215 SF
42.96% OF TOTAL AREA

PROPOSED IMPERVIOUS AREA CALCULATIONS

CURRENTLY UNDER ROOF: 235,015 SF
STUCCO BUILDING ADDITION: 3,150 SF
PAVED PARKING/ROADWAYS: 258,667 SF
RAIL SPUR: 26,927 SF
RAIL SPUR ACCESS DRIVE: 11,200 SF
EXPANDED ASPHALT PAVING: 26,744 SF
TOTAL: 564,550 SF
47.88% OF TOTAL AREA

OFF STREET PARKING

- PER WILMINGTON ZONING CODE SECTION 18.528 (E)

1:15 PARKING SPACES PER EMPLOYEE ON THE SHIFT OF THE AVERAGE GREATEST EMPLOYMENT

MINIMUM REQUIRED = 2 BASED ON LARGEST SHIFT PRODUCTION

1ST SHIFT (DAYTIME) - 30 EMPLOYEES
2ND SHIFT - 15 EMPLOYEES
3RD SHIFT - 15 EMPLOYEES

SITE PARKING:

78 VEHICULAR PARKING SPACES (INCLUDES 4 ADA SPACES)
33 TRACTOR TRAILER PARKING SPACES



530 Walnut Street
Philadelphia, PA
19106-3685
o. 215.922.8080



NO.	DATE	DESCRIPTION
1	JAB 3/30/2020	RESPONSE TO 12/19 TRC COMMENTS
LOCATION: 838 SUNNYVALE DR., WILMINGTON, NC		
TITLE: WILMINGTON WALLBOARD PLANT PROPOSED INDUSTRIAL SIDETRACK & STORMWATER MANAGEMENT IMPROVEMENTS GENERAL NOTES & LEGENDS		
DN		
DN	JAB	DATE: 03/30/2020
DN	JAB	DATE: 03/30/2020
DRAWING NUMBER		G-100

SEABOARD COASTLINE RAILROAD
 PARCEL ID R06400-022-006-000
 ZONING - INDUSTRIAL
 CURRENT LAND USE - INDUSTRIAL

VOPAK TERMINAL WILMINGTON, INC.
 PARCEL ID R06400-001-003-000
 ZONING - INDUSTRIAL
 CURRENT LAND USE - VACANT

TRACT 1
 26.975 ACRES
 1,175,037.5 SF

CAMERON COMPANY, LTD
 PARCEL ID R06500-007-001-000
 ZONING - INDUSTRIAL
 CURRENT LAND USE - VACANT

EXISTING BUILDING
 238,165 SQ. FT.
 HEIGHT OF BUILDING = 66.2'

SEABOARD COASTLINE RAILROAD
 ZONING - INDUSTRIAL
 CURRENT LAND USE - VACANT

SKYWAY INVESTMENTS, LLC
 PARCEL ID R06500-006-014-000
 ZONING - INDUSTRIAL
 CURRENT LAND USE - INDUSTRIAL

BURNETTE ENTERPRISES OF WILM INC ETAL
 PARCEL ID R06500-006-013-000
 ZONING - INDUSTRIAL
 CURRENT LAND USE - INDUSTRIAL

EXISTING LEGEND

STANDARD ABBREVIATIONS	STANDARD SYMBOLS
AC AIR CONDITIONER	⊕ OVERHEAD TRAFFIC SIGNAL LIGHT
BH BORE HOLE	⊖ POWER POLE
BSL BUILDING SETBACK LINE	— GUY WIRE
CI CURB INLET	— POWER LINE
CMF CORRUGATED METAL PIPE	⊗ LIGHT POLE
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CTP CRIMPED TOP PIPE	⊗ WATER VALVE
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GM GAS METER	— UNDERGROUND WATER LINE
INV INVERT	⊗ PHOTO POSITION INDICATOR
JB JUNCTION BOX	⊗ REGULAR PARKING SPACE COUNT
MH MANHOLE	⊗ HANDICAP PARKING SPACE
OCS OUTLET CONTROL STRUCTURE	⊗ TREE POSITION INDICATOR
OTP OPEN TOP PIPE	⊗ SIGN
PM POWER METER	⊗ EXISTING TREE LOCATION
PKS PK NAIL SET	⊗ BRUSH/SHRUB
POB POINT OF BEGINNING	
POC POINT OF COMMENCEMENT	
RCP REINFORCED CONCRETE PIPE	
RBR IRON REINFORCING BAR	
RBS 5/8" RBR SET CAPPED LSF 621	
RRS RAILROAD SWITCH	
SS SANITARY SEWER	
SWCB SINGLE WING CATCH BASIN	
TRANS ELECTRIC TRANSFORMER	
— EXISTING RAIL	
— EXISTING TREELINE	
— EXISTING FENCE	

WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit # _____
 Signed: _____

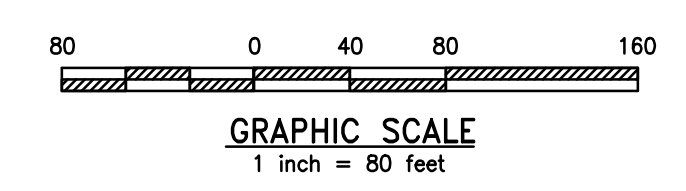
Approved Construction Plan

Name: _____ Date: _____

Planning: _____

Traffic: _____

Fire: _____

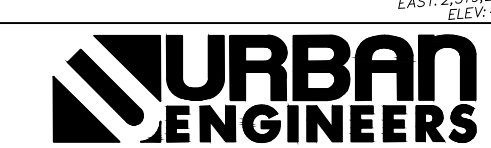


REV	BY	DATE	DESCRIPTION
1	JAB	3/30/2020	RESPONSE TO 12/19 TRC COMMENTS

LOCATION: 838 SUNNYVALE DR., WILMINGTON, NC

TITLE: WILMINGTON WALLBOARD PLANT
 PROPOSED INDUSTRIAL SIDETRACK &
 STORMWATER MANAGEMENT IMPROVEMENTS
 EXISTING CONDITIONS PLAN

DN	JAB	DATE	03/30/2020	DRAWING NUMBER	C-000
CHK	MJT	DATE	03/30/2020		



530 Walnut Street
 Philadelphia, PA
 19106-3685
 o. 215.922.8080



SEABOARD COASTLINE RAILROAD
 PARCEL ID R06400-022-006-000
 ZONING - INDUSTRIAL
 CURRENT LAND USE - INDUSTRIAL

VOPAK TERMINAL WILMINGTON, INC.
 PARCEL ID R06400-001-003-000
 ZONING - INDUSTRIAL
 CURRENT LAND USE - VACANT

TRACT 1
 26.975 ACRES
 1,175,037.5 SF

EXISTING BUILDING
 238,165 SQ. FT.
 HEIGHT OF BUILDING = 66.2'

CAMERON COMPANY, LTD
 PARCEL ID R06500-007-001-000
 ZONING - INDUSTRIAL
 CURRENT LAND USE - VACANT

SKYWAY INVESTMENTS, LLC
 PARCEL ID R06500-006-014-000
 ZONING - INDUSTRIAL
 CURRENT LAND USE - INDUSTRIAL

BURNETTE ENTERPRISES OF WILM INC ET AL,
 PARCEL ID R06500-006-013-000
 ZONING - INDUSTRIAL
 CURRENT LAND USE - INDUSTRIAL

EXISTING LEGEND

STANDARD ABBREVIATIONS	STANDARD SYMBOLS
AC AIR CONDITIONER	⊕ OVERHEAD TRAFFIC SIGNAL LIGHT
BH BORE HOLE	⊖ POWER POLE
BSL BUILDING SETBACK LINE	— GUY WIRE
CI CURB INLET	⊖ POWER LINE
CMP CORRUGATED METAL PIPE	⊖ LP LIGHT POLE
CMF CONCRETE MONUMENT FND	⊖ ELECTRIC TRANSFORMER
CO SANITARY CLEAOUT	⊖ WATER VAULT
CPED COMMUNICATION PEDESTAL	⊖ GAS VALVE
CTP CRIMPED TOP PIPE	⊖ GAS METER
DI DROP INLET	⊖ WATER VALVE
DIP DUCTILE IRON PIPE	⊖ WATER METER
DWCB DOUBLE WING CATCH BASIN	⊖ FIRE HYDRANT
FNC FENCE	— UNDERGROUND ELECTRIC LINE
FND FOUND	— UNDERGROUND GAS LINE
GM GAS METER	— UNDERGROUND COMMUNICATION LINE
INV INVERT	— UNDERGROUND WATER LINE
JB JUNCTION BOX	⊖ PHOTO POSITION INDICATOR
MH MANHOLE	⊖ REGULAR PARKING SPACE COUNT
OCS OUTLET CONTROL STRUCTURE	⊖ HANDICAP PARKING SPACE
OTP OPEN TOP PIPE	⊖ TREE POSITION INDICATOR
PM POWER METER	⊖ SIGN
PKS PK NAIL SET	⊖ EXISTING TREE LOCATION
POB POINT OF BEGINNING	⊖ BRUSH/SHRUB
POC POINT OF COMMENCEMENT	
RCP REINFORCED CONCRETE PIPE	
RBR IRON REINFORCING BAR	
RBS 5/8"RBR SET CAPPED LSF 621	
RSS RAILROAD SWITCH	
SS SANITARY SEWER	
SWCB SINGLE WING CATCH BASIN	
TRANS ELECTRIC TRANSFORMER	
— EXISTING RAIL	
— EXISTING TREELINE	
— EXISTING FENCE	

TREE INVENTORY NOTES:

- TREE SURVEY/INVENTORY CONDUCTED FOR PROJECT DISTURBANCE AREA ONLY AND ONLY INCLUDES REGULATED AND SIGNIFICANT TREES AS DEFINED IN SECTION 18-456 (a) AND (b).

PROPERTY ADDRESS & PARCEL ID:

838 SUNNYVALE DRIVE
 WILMINGTON, NC 28412

PARCEL ID: R06400-001-002-000

PROPERTY OWNER:

NATIONAL GYPSUM COMPANY
 2001 REXFORD ROAD
 CHARLOTTE, NC 28211

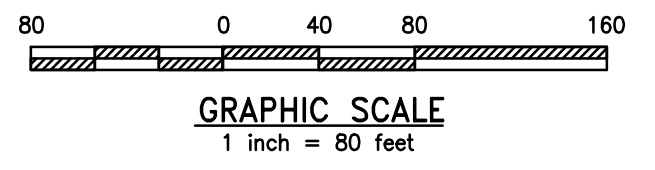
SITE DATA:

NUMBER OF BUILDINGS: 1
 NUMBER OF FLOORS: 1
 ROOF AREA: 238,165 SF
 TRACT PROPERTY: 26.975 AC.
 ZONED: INDUSTRIAL
 CAMA LAND USE: URBAN

CITY OF WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: Permit #
 Signed:

Approved Construction Plan

Name	Date
Planning	
Traffic	
Fire	



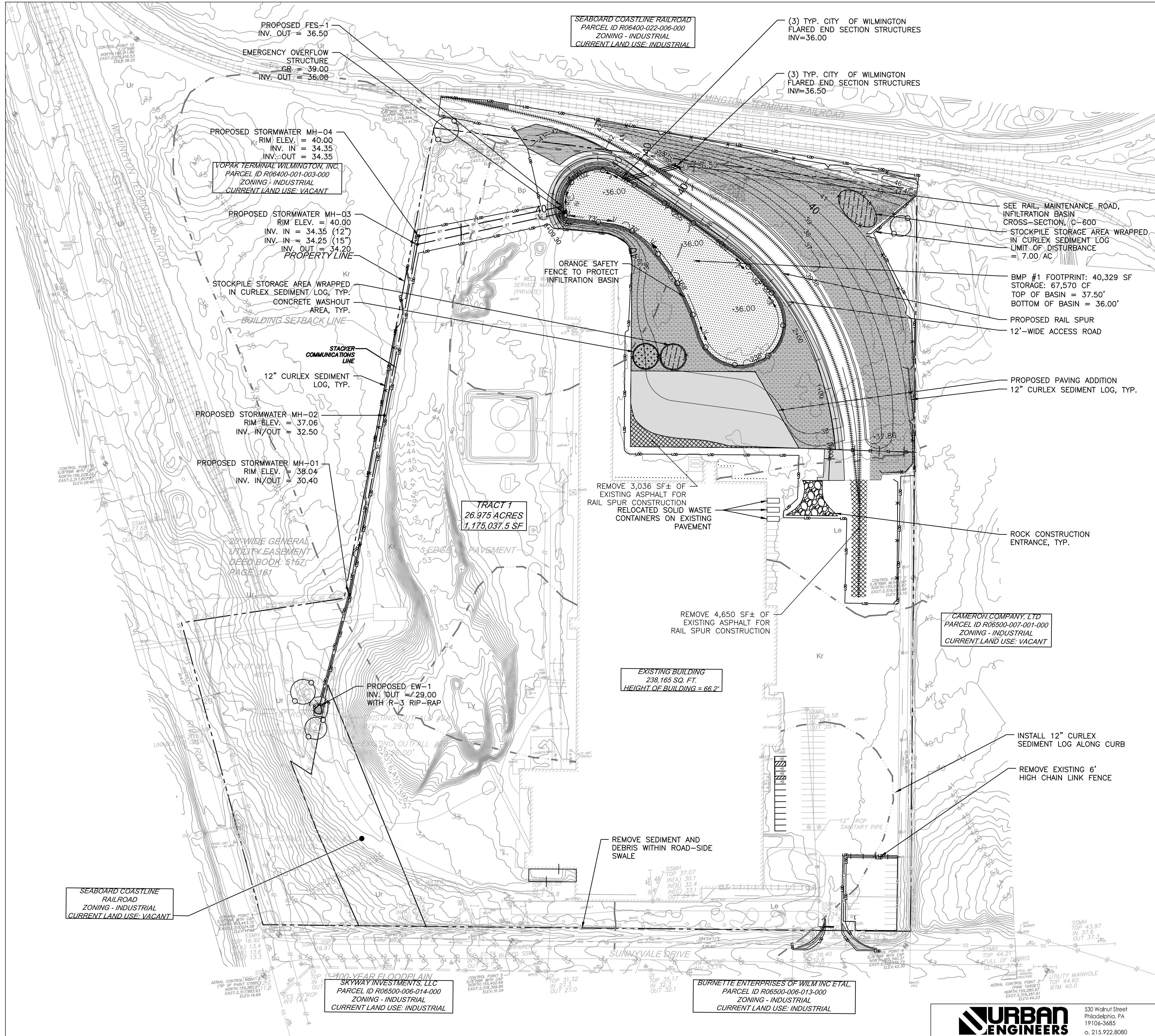
REV	BY	DATE	DESCRIPTION
1	JAB	3/30/2020	RESPONSE TO 12/19 TRC COMMENTS

LOCATION 838 SUNNYVALE DR., WILMINGTON, NC



TITLE WILMINGTON WALLBOARD PLANT
 PROPOSED INDUSTRIAL SIDETRACK &
 STORMWATER MANAGEMENT IMPROVEMENTS
 TREE INVENTORY PLAN

PN	DATE	DRAWING NUMBER
PN JAB	03/30/2020	C-001
CHK MJT	03/30/2020	



PROPERTY ADDRESS & PARCEL ID:

838 SUNNYVALE DRIVE
WILMINGTON, NC 28412

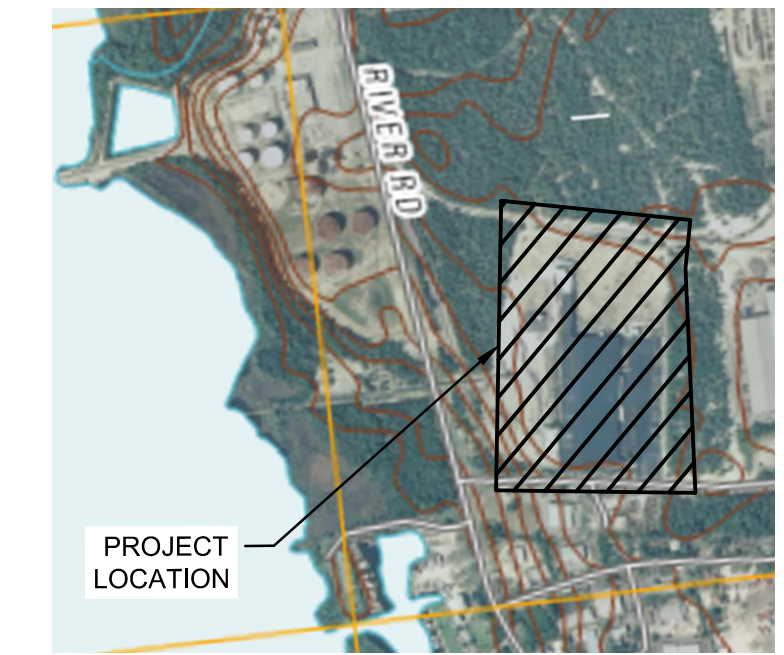
PARCEL ID: R06400-001-002-000

PROPERTY OWNER:

NATIONAL GYPSUM COMPANY
2001 REXFORD ROAD
CHARLOTTE, NC 28211

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ROOF AREA: 238,165 SF
TRACT PROPERTY: 26.975 AC.
ZONED: INDUSTRIAL URBAN
CAMA LAND USE: URBAN



USGS MAP
SCALE: 1" = 1000'

- EROSION & SEDIMENT CONTROL LEGEND**
- LIMIT OF DISTURBANCE
 - - - ENVIRONMENTAL FEATURE
 - 12" CURLEX SEDIMENT LOG
 - SAWCUT LINE
 - - - REMOVE & SALVAGE FENCE
 - - - PROTECT FENCE
 - Ur Kr Ly Le SOIL DELINEATION
 - ROCK CONSTRUCTION ENTRANCE
 - REMOVE & DISPOSE ASPHALT
 - TEMPORARY/PERMANENT SEEDING AREA
 - RETENTION BASIN AREA
 - PROTECT ASPHALT DRIVE
 - STOCKPILE STORAGE AREA
 - INLET PROTECTION
 - UTILITY PROTECTION
- DEMOLITION LEGEND**
- TREE PROTECTION FENCE
 - × REMOVE TREE
 - REMOVE FENCE
 - LIMIT OF DISTURBANCE
 - ASPHALT REMOVAL

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit # _____
Signed: _____

Approved Construction Plan

Name: _____ Date: _____

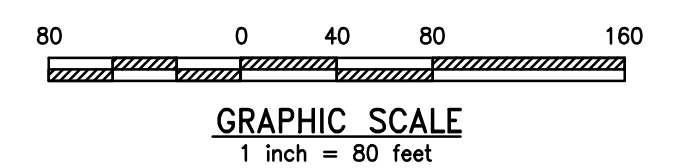
Planning: _____

Traffic: _____

Fire: _____

E&S NOTES:

- FOR GENERAL E&S NOTES, SEE SHEET C-201 - EROSION & SEDIMENT CONTROL - NOTES 1.
- FOR CONSTRUCTION SEQUENCING SEE SHEET C-202 - EROSION & SEDIMENT CONTROL - NOTES 2.
- FOR E&S DETAILS, SEE SHEETS C-203 THROUGH C-204.



REV	BY	DATE	DESCRIPTION
1	JAB	3/30/2020	RESPONSE TO 12/19 TRC COMMENTS

LOCATION: 838 SUNNYVALE DR., WILMINGTON, NC



TITLE: WILMINGTON WALLBOARD PLANT PROPOSED INDUSTRIAL SIDETRACK & STORMWATER MANAGEMENT IMPROVEMENTS EROSION & SEDIMENT CONTROL PLAN
DRN: JAB DATE: 03/30/2020 DRAWING NUMBER: C-200
CHK: MJT DATE: 03/30/2020

EXISTING BUILDING
238,165 SQ. FT.
HEIGHT OF BUILDING = 66.2'

CAMERON COMPANY, LTD
PARCEL ID R06500-007-001-000
ZONING - INDUSTRIAL
CURRENT LAND USE: VACANT

TRACT 1
26.975 ACRES
1,175,037.5 SF

VOPAK TERMINAL WILMINGTON, INC.
PARCEL ID R06400-001-003-000
ZONING - INDUSTRIAL
CURRENT LAND USE: VACANT

SEABOARD COASTLINE RAILROAD
PARCEL ID R06400-022-006-000
ZONING - INDUSTRIAL
CURRENT LAND USE: INDUSTRIAL

(3) TYP. CITY OF WILMINGTON
FLARED END SECTION STRUCTURES
INV=36.00

(3) TYP. CITY OF WILMINGTON
FLARED END SECTION STRUCTURES
INV=36.50

PROPOSED FES-1
INV. OUT = 36.50

EMERGENCY OVERFLOW
STRUCTURE
CR = 39.00
INV. OUT = 36.00

PROPOSED STORMWATER MH-04
RIM ELEV. = 40.00
INV. IN = 34.35
INV. OUT = 34.35

PROPOSED STORMWATER MH-03
RIM ELEV. = 40.00
INV. IN = 34.35 (12")
INV. IN = 34.25 (15")
INV. OUT = 34.20

PROPOSED STORMWATER MH-02
RIM ELEV. = 37.06
INV. IN/OUT = 32.50

PROPOSED STORMWATER MH-01
RIM ELEV. = 38.04
INV. IN/OUT = 30.40

PROPOSED EW-1
INV. OUT = 29.00
WITH R-3 RIP-RAP

SEE RAIL, MAINTENANCE ROAD,
INFILTRATION BASIN
CROSS-SECTION, C-600

STOCKPILE STORAGE AREA WRAPPED
IN CURLEX SEDIMENT LOG
LIMIT OF DISTURBANCE
= 7.00 AC

BMP #1 FOOTPRINT: 40,329 SF
STORAGE: 67,570 CF
TOP OF BASIN = 37.50'
BOTTOM OF BASIN = 36.00'

PROPOSED RAIL SPUR
12'-WIDE ACCESS ROAD

PROPOSED PAVING ADDITION
12" CURLEX SEDIMENT LOG, TYP.

REMOVE 3,036 SF± OF
EXISTING ASPHALT FOR
RAIL SPUR CONSTRUCTION
RELOCATED SOLID WASTE
CONTAINERS ON EXISTING
PAVEMENT

REMOVE 4,650 SF± OF
EXISTING ASPHALT FOR
RAIL SPUR CONSTRUCTION

ROCK CONSTRUCTION
ENTRANCE, TYP.

INSTALL 12" CURLEX
SEDIMENT LOG ALONG CURB

REMOVE EXISTING 6'
HIGH CHAIN LINK FENCE

REMOVE SEDIMENT AND
DEBRIS WITHIN ROAD-SIDE
SWALE

SEABOARD COASTLINE
RAILROAD
ZONING - INDUSTRIAL
CURRENT LAND USE: VACANT

SKYWAY INVESTMENTS, LLC
PARCEL ID R06500-006-014-000
ZONING - INDUSTRIAL
CURRENT LAND USE: INDUSTRIAL

BURNETTE ENTERPRISES OF WILM INC ET AL
PARCEL ID R06500-006-013-000
ZONING - INDUSTRIAL
CURRENT LAND USE: INDUSTRIAL

330 Walnut Street
Philadelphia, PA
19106-3685
o. 215.922.8080

EROSION AND SEDIMENT CONTROL GENERAL NOTES

- LAND DISTURBING ACTIVITIES MUST BE MANAGED TO AVOID SEDIMENT RUN-OFF AND POLLUTION FROM CONSTRUCTION SITES
- WHERE PERMITTED LOCALLY BY NEW HANOVER COUNTY, AN EROSION AND SEDIMENT (E&S) PLAN WILL CONTAIN DETAILS AND GUIDANCE. E&S PLANS ARE PERFORMANCE BASED AND OFTEN REQUIRE ADJUSTMENTS OR REPAIRS.
- AS PERMITTED BY NC DEQ, DIVISIONS OF WATER QUALITY AND LAND RESOURCES, A STORMWATER PERMIT WILL REQUIRE SELF-MONITORING REPORTS (WEEKLY, >1" RAIN EVENT) OR SELF-INSPECTION REPORTS AFTER EACH CONSTRUCTION PHASE, BASED ON ELEMENTS OF THE E&S PLAN.
- INLET PROTECTION SHOULD BE PROVIDED FOR ALL INLETS OWNED BY THE ENGINEERING DEPARTMENT OF WILMINGTON, NC THAT ARE LOCATED WITHIN ONE BLOCK OF THE PROJECT SITE. ALL INLETS NOT WITHIN THE PARCEL SHOULD BE CONSIDERED OWNED BY ENGINEERING DEPARTMENT OF WILMINGTON, NC.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY CLEANING OR REPAIRS NEEDED ON CITY-OWNED INFRASTRUCTURE DUE TO FAILURE OF ANY EROSION AND SEDIMENT CONTROL PRACTICES.
- INSPECTION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES SHALL OCCUR ON A WEEKLY BASIS, BEFORE ANY ANTICIPATED PRECIPITATION EVENTS, AND AFTER ALL PRECIPITATION EVENTS BY THE CONTRACTOR.
- THE MAXIMUM HEIGHT FOR STOCKPILES AREAS SHALL BE 35 FEET. THE MAXIMUM SIDE SLOPE FOR STOCKPILE AREAS SHALL NOT EXCEED 2:1.
- THE ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED ON-SITE. A STOCKPILE SHALL BE MAINTAINED ON-SITE FOR THIS PURPOSE. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEEPED INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
- SILT FENCE/CURLEX SEDIMENT LOG SHOULD BE INSTALLED AT LEVEL GRADE. BOTH ENDS OF EACH FENCE SECTION SHOULD BE EXTENDED AT LEAST 8 FEET UPSLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. SUPPORT STAKES SHALL BE SPACED 6 FEET APART UNLESS A WIRE BACKING IS USED WITH 8 FOOT STAKE SPACING, OR BY APPROVED CONSTRUCTION DETAIL. SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE FILTER FENCE.
- ANY FENCE OR SEDIMENT LOG SECTION WHICH HAS BEEN UNDERMINED OR TOPPED MUST BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET. SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.
- EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3H:1V OR STEEPER WITHIN 50 FEET OF A SURFACE WATER AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE CONTRACT DOCUMENTS AND/OR DETAIL SHEETS.
- IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE CONTRACTOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE ENGINEERING DEPARTMENT OF WILMINGTON, NC AND NC DEQ.
- UNTIL THE SITE IS STABILIZED, ALL E&S BMPS SHALL BE MAINTAINED PROPERLY BY THE CONTRACTOR. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL E&S BMPS PRIOR TO ANY ANTICIPATED STORM EVENT, AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING, MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED, WILL BE REQUIRED.
- ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING, AS WELL AS CUTS AND FILLS, SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE ENGINEERING DEPARTMENT OF WILMINGTON, NC SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES BY THE CONTRACTOR. THE ENGINEERING DEPARTMENT OF WILMINGTON, NC MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
- AT LEAST SEVEN (7) DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE NORTH CAROLINA ONE CALL CENTER SHALL BE NOTIFIED AT 1-800-632-4949 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
- ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE CONTRACT DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING BY THE ENGINEERING DEPARTMENT OF WILMINGTON, NC AND THE NC DEQ PRIOR TO IMPLEMENTATION.
- AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL, DEFINED BY THE CONTRACT SPECIFICATIONS.
- CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING, AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OF THE PROJECT UNTIL THE E&S BMPS SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
- AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE CONTRACT DOCUMENTS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
- A LOG SHOWING DATES THAT E&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE BY THE CONTRACTOR AND BE MADE AVAILABLE TO THE ENGINEERING DEPARTMENT OF WILMINGTON, NC AT THE TIME OF INSPECTION.
- ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF AS DEFINED BY THE NPDES PERMIT, BY THE CONTRACTOR.

- REFER TO CONTRACT SPECIFICATIONS AND CONTRACTOR DOCUMENT DETAILS FOR TOPSOIL AREA SCARIFICATION, SEEDING, MULCHING, AND TOPSOIL DEPTH REQUIREMENTS.
- ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE, OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES, AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
- ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED NINE INCHES IN THICKNESS.
- FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS, DEFINED BY THE CONTRACT SPECIFICATIONS, THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
- ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
- IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE CONTRACTOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN ONE YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN ONE YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
- PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
- E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE ENGINEERING DEPARTMENT OF WILMINGTON, NC AND NC DEQ.
- AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY E&S BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE E&S BMPS SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
- SEDIMENT BASINS AND/OR TRAPS SHALL BE KEPT FREE OF ALL CONSTRUCTION WASTE, WASH WATER, AND OTHER DEBRIS HAVING POTENTIAL TO CLOG THE BASIN/TRAP OUTLET STRUCTURES AND/OR POLLUTE THE SURFACE WATERS. (WHEN APPLICABLE)
- DURING CONSTRUCTION, THE SELECTED CONTRACTOR IS EXPECTED TO FOLLOW THE PCSMP APPROVED BY THE ENGINEERING DEPARTMENT OF WILMINGTON, NC. NO CHANGE OR DEVIATION FROM THE APPROVED PCSMP IS PERMITTED WITHOUT PRIOR APPROVAL FROM THE ENGINEERING DEPARTMENT OF WILMINGTON, NC.
- ALL WORK ASSOCIATED WITH THE ENGINEERING DEPARTMENT OF WILMINGTON, NC WATER CONVEYANCE AND SEWER INFRASTRUCTURE SHALL BE DONE IN ACCORDANCE WITH THE WILMINGTON, NORTH CAROLINA "TECHNICAL STANDARDS AND SPECIFICATIONS MANUAL", 2007 EDITION, AND WILMINGTON, NORTH CAROLINA STANDARD DETAILS.
- CONTACT THE ENGINEERING DEPARTMENT OF WILMINGTON, NC (212 OPERATIONS CENTER DRIVE, PHONE: 910-341-7807) FOR ADDITIONAL APPROVALS AND PERMITS REQUIRED FOR ALL WATER SERVICES, METERS, AND CONNECTIONS TO THE EXISTING AND/OR PROPOSED THE ENGINEERING DEPARTMENT OF WILMINGTON, NC FACILITIES.
- ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE NC DEQ'S SOLID WASTE MANAGEMENT REGULATIONS AT 15A NCAC 13. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMED, OR DISCHARGED AT THE SITE.
- THE ENGINEERING DEPARTMENT OF WILMINGTON, NC INFRASTRUCTURE SHALL BE RESTORED TO THE ENGINEERING DEPARTMENT OF WILMINGTON, NC STANDARDS AT PRIVATE COST.

SOIL INFORMATION FOR NEW HANOVER COUNTY

- THE SOIL INFORMATION FOR THIS PROJECT WAS OBTAINED FROM THE U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY ON JUNE 19, 2019.
- THE SOIL SURVEY INDICATES THAT THE SOILS ENCOMPASSING THE PROJECT AREA ARE BAYMEADE FINE SAND (BE), BORROW PITS (BP), KUREB SAND (KR), LEON SAND (LE), LYNN HAVEN FINE SAND (LY), AND URBAN LAND (UR).

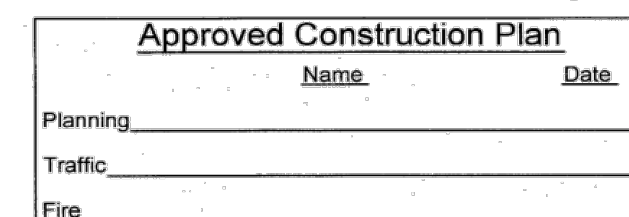
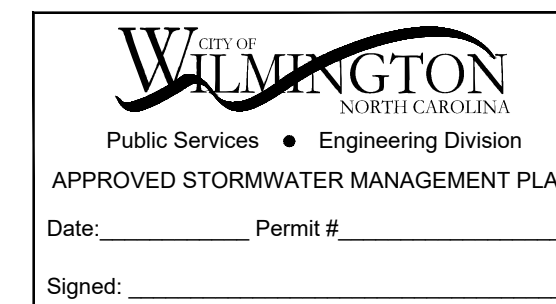
COMPLIANCE WITH STATE AND LOCAL REQUIREMENTS

- THE EROSION AND SEDIMENT POLLUTION CONTROL REPORT, APPLICATION DOCUMENTS, NARRATIVE(S), CONTRACT PLANS AND SPECIFICATIONS ARE ALL INCLUDED HERewith BY REFERENCE AS AN INTEGRAL PART OF THIS CONTRACT. ANY QUESTIONS, COMMENTS, APPROVAL CONDITIONS OR PERMIT REQUIREMENTS CONTAINED WITHIN A REGULATORY REVIEW LETTER (OR THE ENGINEER'S RESPONSE TO A REGULATORY REVIEW LETTER) FOR THIS PROJECT ARE HEREBY INCLUDED AS AN INTEGRAL PART OF THIS CONTRACT, AND THE CONTRACTOR SHALL FULLY COMPLY WITH ANY APPROVAL CONDITIONS OR PERMIT REQUIREMENTS AS IF THEY WERE INCLUDED HERewith IN THEIR FULL TEXT. COPIES OF ALL STATE AND LOCAL REGULATORY AGENCY REVIEWS, COMMENTS, APPROVAL CONDITIONS OR PERMIT REQUIREMENTS MAY BE OBTAINED THROUGH THE ENGINEER OR THE ENGINEERING DEPARTMENT OF WILMINGTON, NC OFFICE.

- A COPY OF THE APPROVED EROSION AND SEDIMENT POLLUTION CONTROL PLANS MUST BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES IN ACCORDANCE WITH STATE LAW.

UTILITY LINE TRENCH EXCAVATION NOTES

- LIMIT CLEARING AND GRUBBING ACTIVITIES TO A DISTANCE EQUAL TO TWICE THE LENGTH PIPE THAT CAN BE INSTALLED IN ONE DAY. (WHERE APPLICABLE)
- LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.
- SHOULD UNFORESEEN EROSION CONDITIONS DEVELOP DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ACTION TO REMEDY SUCH CONDITIONS AND TO PREVENT DAMAGE TO ADJACENT AREAS AS A RESULT OF INCREASED RUNOFF AND/OR SEDIMENT DISPLACEMENT. STOCKPILES OF WOOD CHIPS, HAY BALES, CRUSHED STONE AND SEDIMENT FILTER LOGS SHALL BE HELD IN READINESS TO DEAL IMMEDIATELY WITH EMERGENCY PROBLEMS OR EROSION.



1	JAB	3/30/2020	RESPONSE TO 12/19 TRC COMMENTS
REV	BY	DATE	DESCRIPTION
LOCATION 838 SUNNYVALE DR., WILMINGTON, NC			
TITLE WILMINGTON WALLBOARD PLANT PROPOSED INDUSTRIAL SIDETRACK & STORMWATER MANAGEMENT IMPROVEMENTS EROSION & SEDIMENT CONTROL - NOTES 1			
DN	JAB	DATE 03/30/2020	DRAWING NUMBER
CHK	MJT	DATE 03/30/2020	C-201



MAINTENANCE PROGRAM FOR SEDIMENT AND EROSION CONTROLS

- 1. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF...
2. ALL POINTS OF EGRESS WILL HAVE CONSTRUCTION ENTRANCES THAT WILL BE PERIODICALLY TOP-DRESSED WITH AN ADDITIONAL 2 INCHES OF #4 STONE...
3. SEDIMENT WILL BE REMOVED FROM HARDWARE CLOTH AND GRAVEL INLET PROTECTION, BLOCK AND GRAVEL INLET PROTECTION, ROCK DROUGHTNUT INLET PROTECTION AND ROCK PIPE INLET PROTECTION...

APPROVED E&S PLAN ARE IMPLEMENTED. SHOULD THE CONTRACTOR WISH TO IMPLEMENT CHANGES, THE CONTRACTOR MUST PREPARE REVISED E&S PLANS FOR REVIEW AND APPROVAL BY THE OWNER/ENGINEER AND THEN SUBMIT TO APPROPRIATE AGENCIES FOR REGULATORY APPROVAL.

- 6. THE CONTRACTOR IS ADVISED THAT THE OWNER HAS DETERMINED THAT ALL EXCAVATED MATERIALS ARE TO REMAIN ON-SITE.
7. THE CONTRACTOR SHALL SWEEP (USING A VACUUM TRUCK) LOCAL ROADWAY PAVEMENT DAILY AND RETURN SEDIMENT TO WORK AREAS.
8. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT INSPECTIONS COORDINATOR OF THE ENGINEERING DEPARTMENT OF WILMINGTON, NC...

SEQUENCE OF CONSTRUCTION

BEFORE IMPLEMENTING, ANY REVISIONS TO THE APPROVED POST CONSTRUCTION STORMWATER MANAGEMENT PLAN OR REVISIONS TO OTHER PLANS THAT MAY AFFECT THE EFFECTIVENESS OF THE APPROVED POST CONSTRUCTION STORMWATER MANAGEMENT PLAN...

AFTER THE COMPLETION OF THE INITIAL INSPECTION COORDINATION WITH THE ENGINEERING DEPARTMENT OF WILMINGTON, NC (AS INDICATED ABOVE) THE FOLLOWING CONSTRUCTION SEQUENCE CAN OCCUR IN THE FOLLOWING ORDER:

- 1. INSTALL SITE EROSION AND SEDIMENT (E&S) CONTROL BMPs IN ACCORDANCE WITH THE E&S STANDARD SEQUENCE OF CONSTRUCTION NOTE.
2. CLEAR AND GRUB SITE.
3. INSTALL ORANGE SAFEY FENCE AROUND PROPOSED INFILTRATION BASIN. BASIN FOOTPRINT TO BE PROTECTED DURING NON-BASIN CONSTRUCTION ACTIVITIES TO AVOID SOIL COMPACTION.
4. EXCAVATE TO RAIL SUB-BASE ELEVATIONS. INSTALL IMPERMEABLE GEOTEXILE LAYER.
5. PERFORM RAIL INSTALLATION CONSTRUCTION SEQUENCING.

NOTE: ALL EXISTING DRAINAGE FACILITIES DIRECTLY UPSTREAM AND DOWNSTREAM OF THE PROJECT SITE WILL BE PROTECTED AND MAINTAINED. WHERE APPLICABLE, EXISTING SITE DRAINAGE WILL BE MAINTAINED AT ALL TIMES DURING AND AFTER CONSTRUCTION...

CURLEX SEDIMENT LOG:

- 1. THE STRUCTURE'S THICKNESS WILL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL WILL BE MAINTAINED ON THE SITE FOR THIS PURPOSE.
2. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PUBLIC ROADWAYS WILL BE REMOVED BY USE OF A VACUUM TYPE ROAD SWEEPER AND RETURNED TO THE CONSTRUCTION SITE.

STANDARD SEQUENCE OF CONSTRUCTION NOTES

FOLLOWING IS A SCHEDULE OF EARTHMOVING/CONSTRUCTION ACTIVITIES AND INSTALLATION OF CONTROL MEASURES AND FACILITIES. ALL EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED AT THE LOCATIONS SHOWN ON THE PLANS. THEY SHALL BE CONSTRUCTED ACCORDING TO THE DETAILS AND MAINTAINED AS INSTRUCTED ON THE DETAILS AND WITHIN THIS EROSION & SEDIMENTATION CONTROL PLAN.

ALL EXISTING DRAINAGE FACILITIES DIRECTLY UPSTREAM AND DOWNSTREAM OF THE PROJECT SITE WILL BE PROTECTED AND MAINTAINED. ALL EXISTING DRAINAGE FACILITIES WITHIN THE PROJECT LIMITS WILL BE PROTECTED DURING CONSTRUCTION AS OUTLINED IN THE E&S CONTROL PLANS. EXISTING SITE DRAINAGE WILL BE MAINTAINED AT ALL TIMES DURING AND AFTER CONSTRUCTION.

- 1. PROVIDE WRITTEN NOTIFICATION (10 DAYS PRIOR TO ANTICIPATED START DATE) TO THE NC DEQ AND THE ENGINEERING DEPARTMENT OF WILMINGTON, NC THAT WORK IS SCHEDULED TO BEGIN. AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OWNER SHALL INVITE ALL CONTRACTORS INVOLVED IN THE PROPOSED ACTIVITIES...
2. AT LEAST SEVEN (7) DAYS PRIOR TO ANY EARTH DISTURBANCE, THE INSPECTIONS COORDINATOR OF THE ENGINEERING DEPARTMENT OF WILMINGTON, NC...
3. AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE NORTH CAROLINA ONE CALL SYSTEM INC. AT 1-800-632-4949 FOR BURIED UTILITIES LOCATION.

Temporary Seeding Recommendations

Table 6.10a: Late Winter & Early Spring. Seeding mixture table with Species, Rate (lb/acre), and lb/1000 ft columns. Lists Rye (grain), Annual lespedeza (Kobe in Piedmont and Coastal Plain, Korean in Mountains).

Table 6.10b: Summer. Seeding mixture table with Species, Rate (lb/acre), and lb/1000 ft columns. Lists German Millet. Includes instructions for application and maintenance.

Table 6.10c: Fall. Seeding mixture table with Species, Rate (lb/acre), and lb/1000 ft columns. Lists Rye (grain). Includes instructions for application and maintenance.

Table 6.11a: Fall & Early Spring. Seeding mixture table with Species, Rate (lb/acre), and lb/1000 ft columns. Lists Tall fescue, Pensacola Bahiagrass, Sericea lespedeza, Kobe lespedeza.

Table 6.11b: Late Spring & Early Summer. Seeding mixture table with Species, Rate (lb/acre), and lb/1000 ft columns. Lists Pensacola Bahiagrass, Sericea lespedeza, Common Bermudagrass, German millet.

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING. SECTION A: SELF-INSPECTION. SECTION B: RECORDKEEPING. Includes detailed instructions for inspection procedures, recordkeeping requirements, and reporting timelines.

PART II, SECTION G, ITEM (4) DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSURE. Sediment basins and traps that receive runoff from drainage areas of one acre or more shall include structures that withdraw water from the surface when these devices need to be drawn down for maintenance or closed out unless this is infeasible.

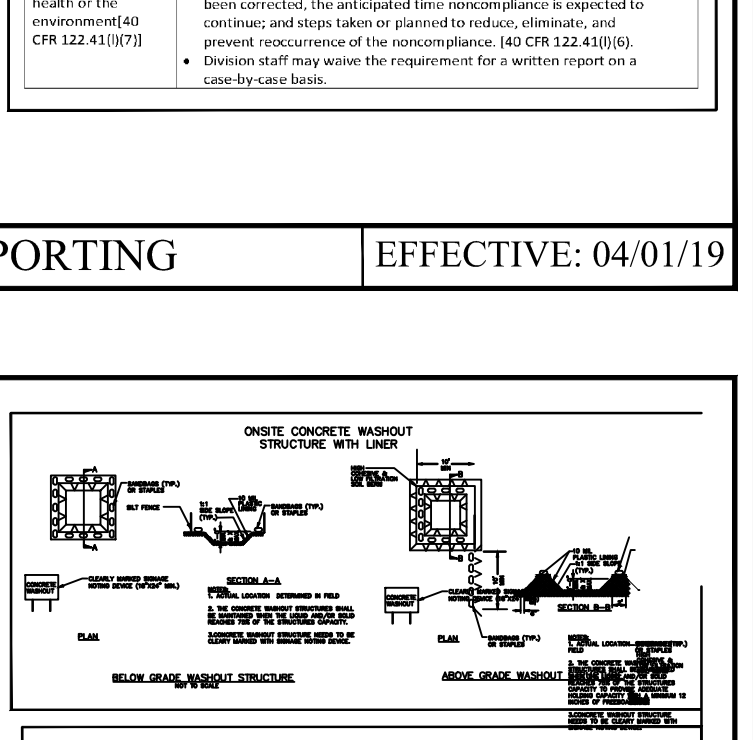
NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING EFFECTIVE: 04/01/19

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT. SECTION E: GROUND STABILIZATION. SECTION F: EQUIPMENT AND VEHICLE MAINTENANCE. SECTION G: LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE. SECTION H: PORTABLE TOILETS. SECTION I: HAZARDOUS AND TOXIC WASTE. SECTION J: HERBICIDES, PESTICIDES AND RODENTICIDES. SECTION K: EARTHEN STOCKPILE MANAGEMENT.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING EFFECTIVE: 04/01/19

APPROVED STORMWATER MANAGEMENT PLAN. Includes City of Wilmington logo, Public Services and Engineering Division contact info, and a signature block with Name, Date, and Permit # fields.

SECTION C: REPORTING. 1. OCCURRENCE THAT MUST BE REPORTED. 2. REPORTING TIMEFRAMES AND OTHER REQUIREMENTS. Includes detailed requirements for reporting sediment discharges, spills, and other environmental incidents.

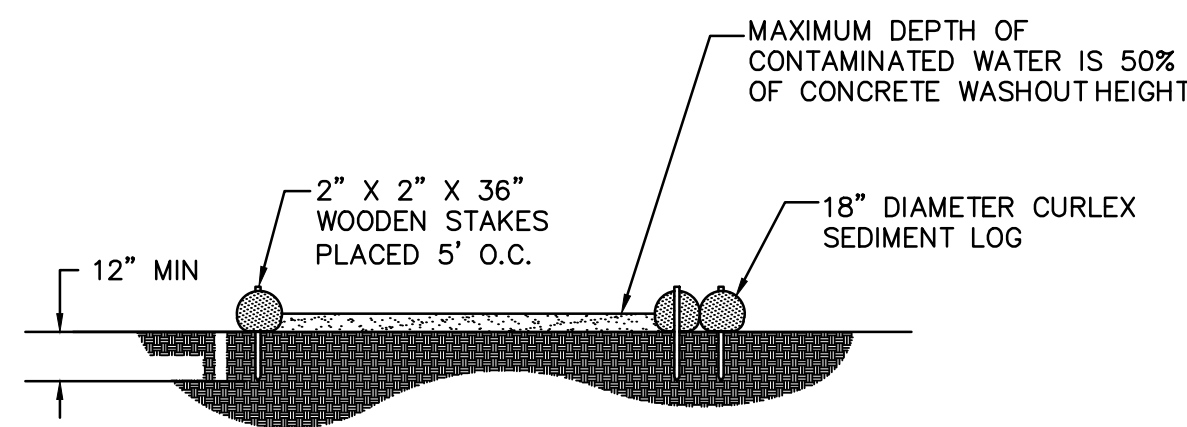


- CONCRETE WASHOUTS: 1. Do not discharge concrete or cement slurry from the site. 2. Dispose of, or recycle, steel, hardened concrete residue in accordance with local and state solid waste regulations and an approved facility. 3. Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.

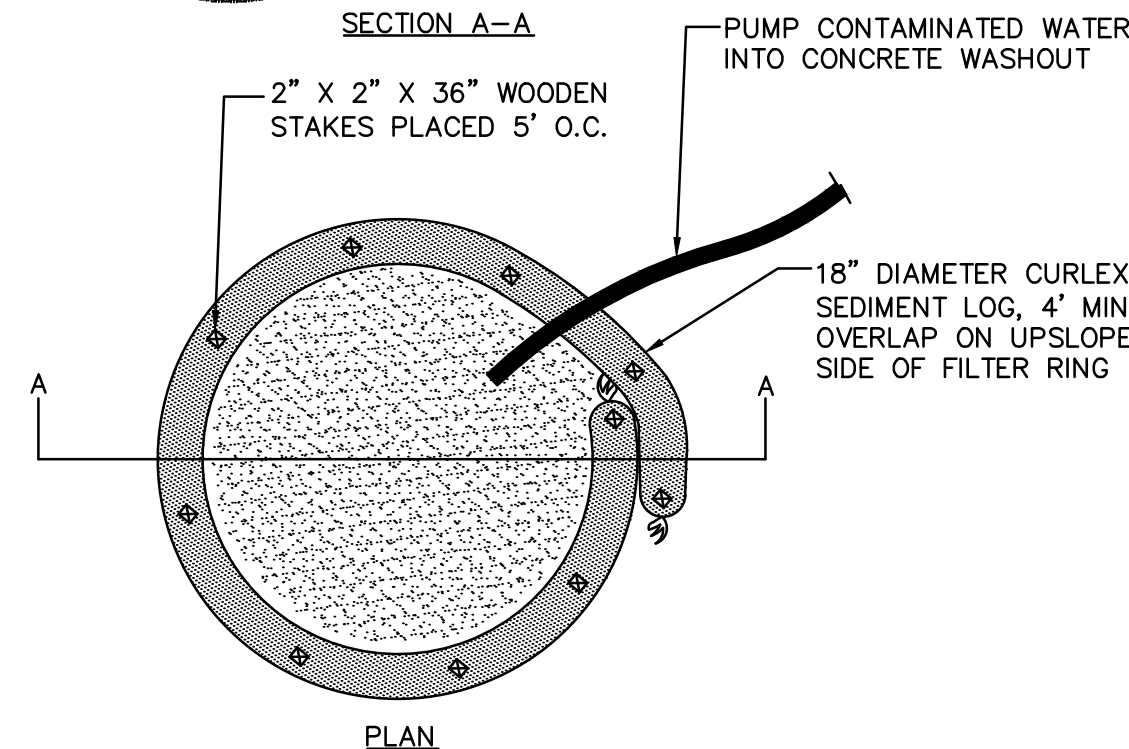
- HAZARDOUS AND TOXIC WASTE: 1. Create designated hazardous waste collection area on-site. 2. Place hazardous waste containers under cover or in secondary containment. 3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

National Gypsum Company logo and contact information: 530 Walnut Street, Philadelphia, PA 19106-3485, 215.922.8080. Includes a drawing number field showing 'C-202'.

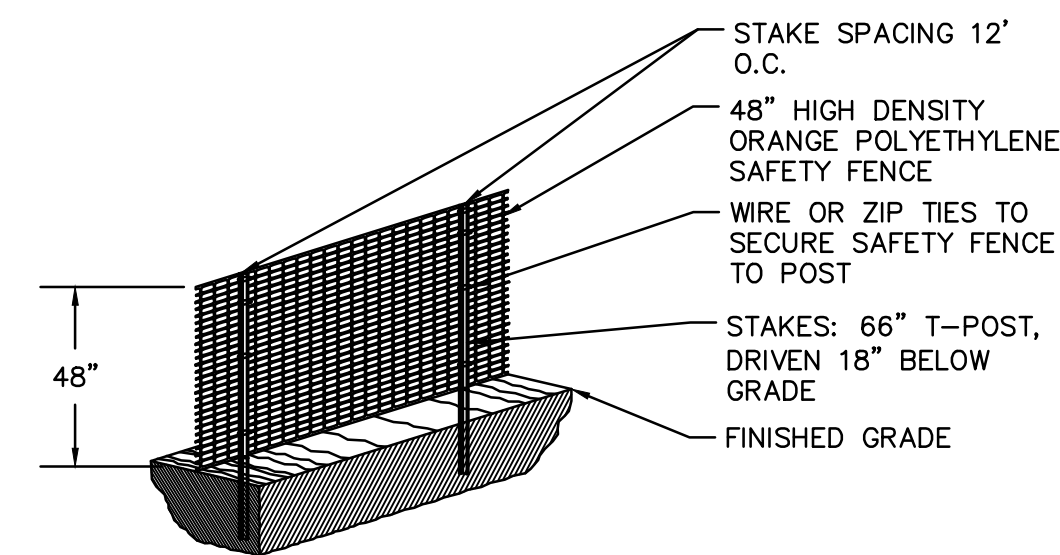
- INSTALLATION NOTES:**
1. PLACE GEOTEXTILE, CLASS 2, TYPE A BENEATH THE AREA OF THE WASHOUT.
 2. STAKE CURLEX SEDIMENT LOGS IN A MANNER RECOMMENDED BY THE MANUFACTURER AROUND THE PERIMETER OF THE GEOTEXTILE SO AS TO FORM A RING WITH THE ENDS OF THE LOG LOCATED AT THE UPSLOPE CORNER.
 3. ENSURE LOG MAINTAINS CONTINUOUS CONTACT WITH GEOTEXTILE AT ALL LOCATIONS.
 4. LOGS MAY BE STAKED SO AS TO FORM A TRIANGULAR CROSS SECTION.



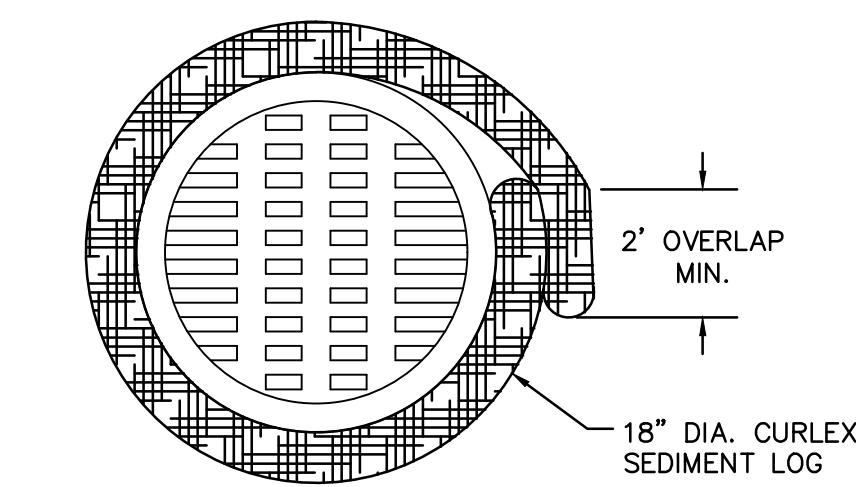
- NOTES:**
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE.
 2. 18" DIAMETER CURLEX SEDIMENT LOG MAY BE STAKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.
 3. WASHOUT FACILITIES SHOULD NOT BE PLACED WITHIN 50 FEET OF STORM DRAINS, OPEN DITCHES OR SURFACE WATERS.
 4. WHERE POSSIBLE, WASHOUT FACILITIES SHOULD BE LOCATED ON A SLOPE NOT EXCEEDING A 2% GRADE.
 5. NO DIRECT DISCHARGE TO RIVER OR CITY SEWERS ALLOWED.



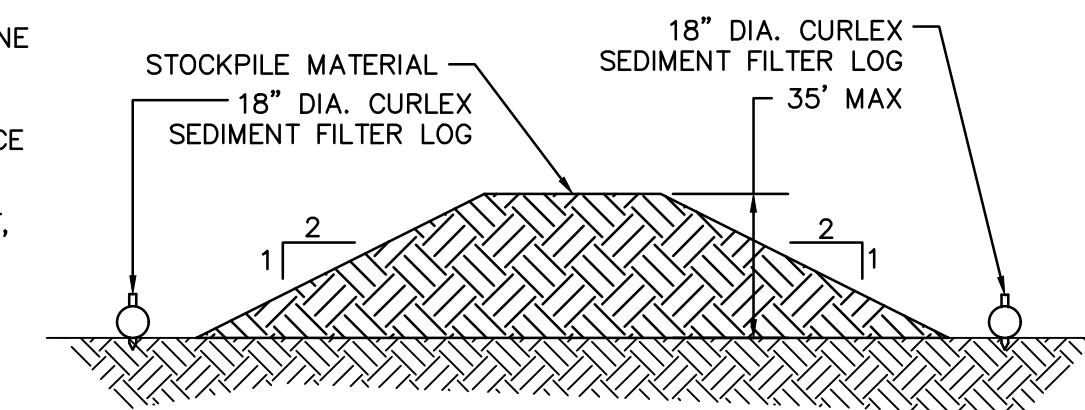
CONCRETE WASHOUT FACILITY DETAIL
NOT TO SCALE



ORANGE CONSTRUCTION FENCE
NOT TO SCALE



TYPICAL COMPOST SOCK WASHOUT INSTALLATION
NOT TO SCALE

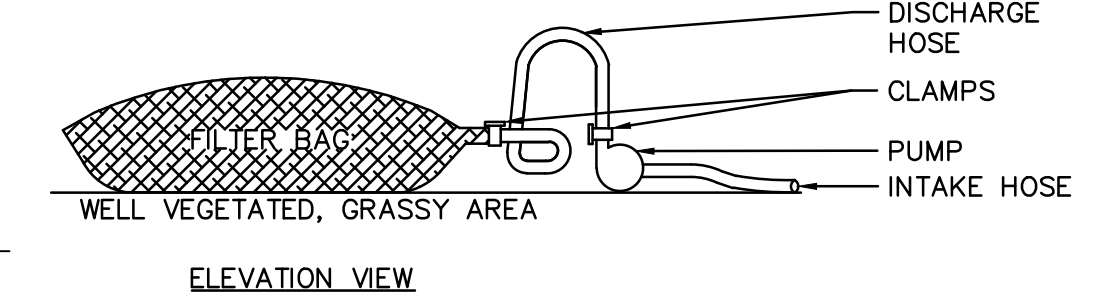
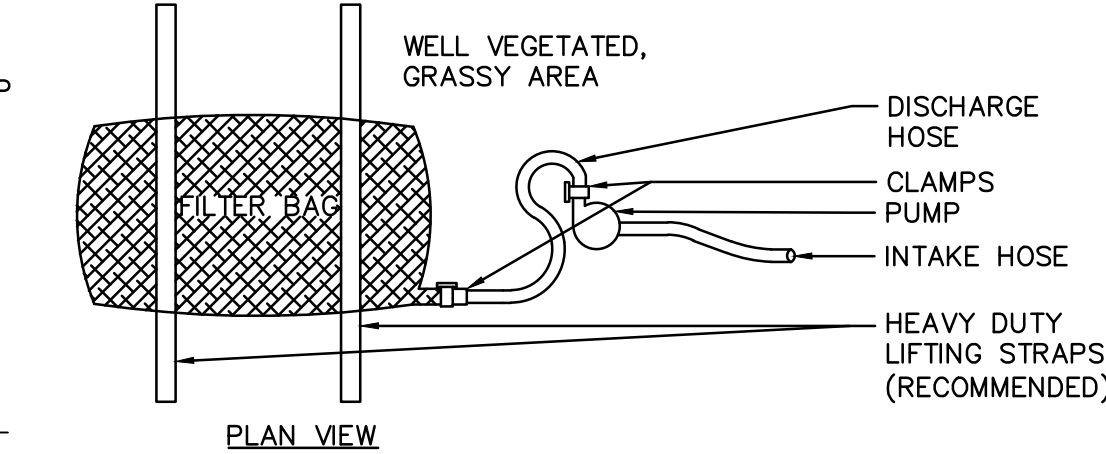


SOIL STOCKPILE AREA
NOT TO SCALE

- NOTES:**
- 1.) LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

- 2.) A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.
- 3.) BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.
- 4.) NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.
- 5.) THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.
- 6.) THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.
- 7.) FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.



PUMPED WATER FILTER BAG
NOT TO SCALE

REV	BY	DATE	DESCRIPTION
1	JAB	3/30/2020	RESPONSE TO 12/19 TRC COMMENTS

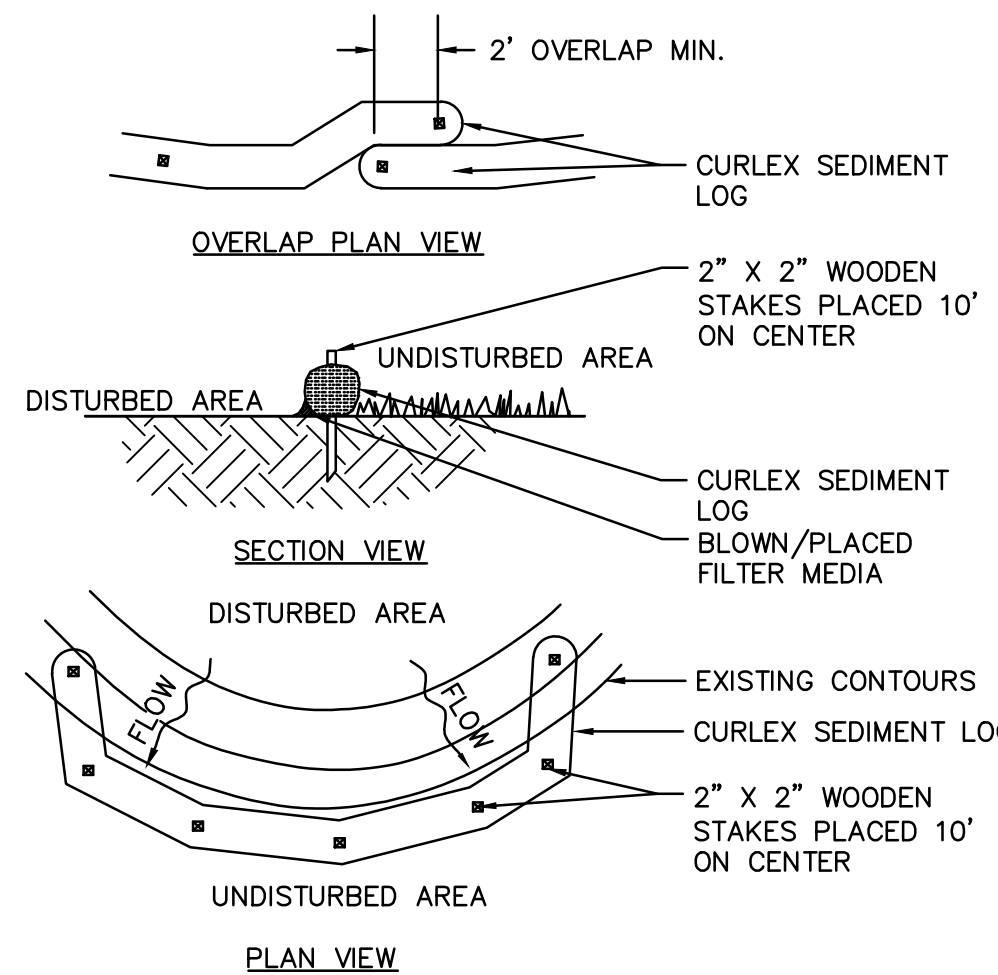
LOCATION: 838 SUNNYVALE DR., WILMINGTON, NC

TITLE: WILMINGTON WALLBOARD PLANT PROPOSED INDUSTRIAL SIDETRACK & STORMWATER MANAGEMENT IMPROVEMENTS EROSION & SEDIMENT CONTROL - DETAILS 1

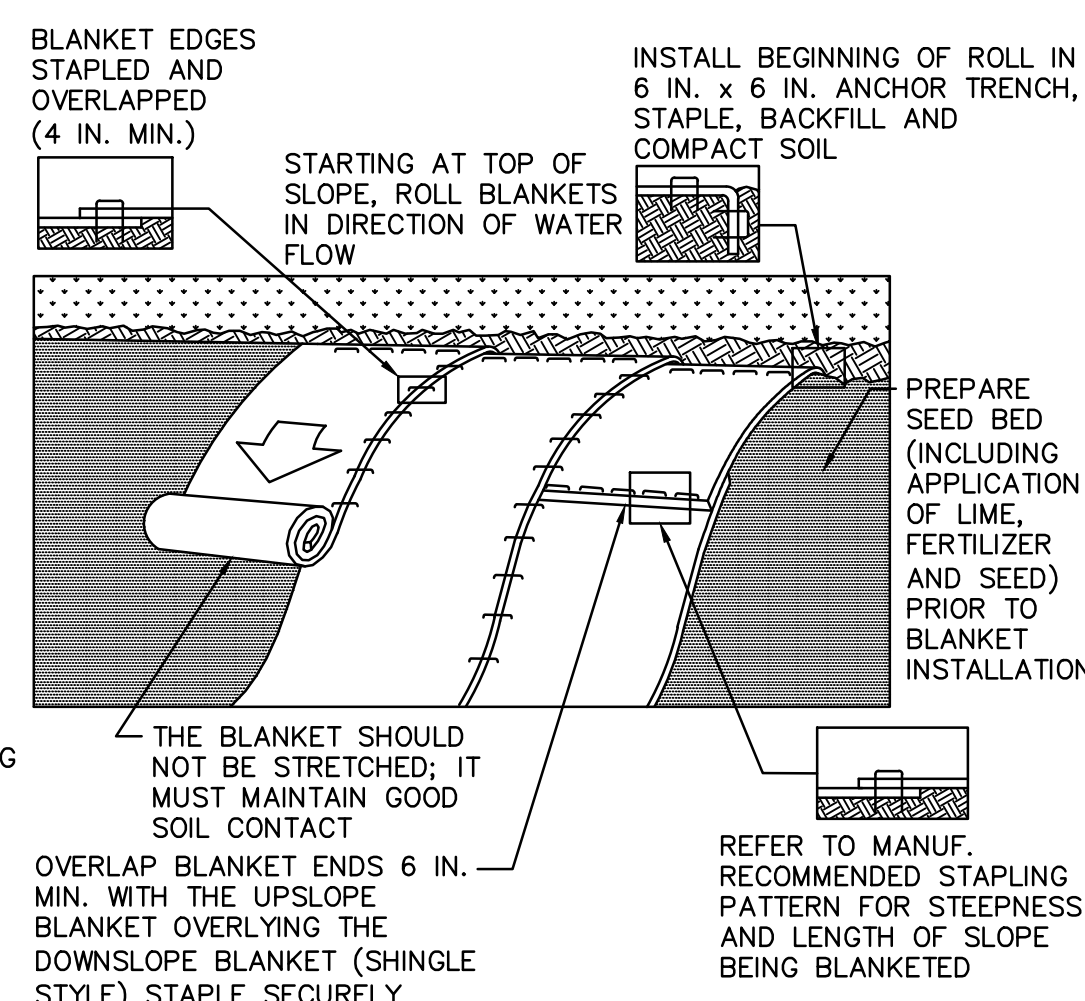
DATE	DATE	DRAWING NUMBER
JAB	03/30/2020	C-203
MJT	03/30/2020	

- NOTES:**
- 1.) SEDIMENT LOG SHALL MEET STANDARDS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF NC DEQ EROSION AND SEDIMENT CONTROL PLANNING DESIGN AND MANUAL.
 - 2.) SEDIMENT LOG SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.
 - 3.) TRAFFIC SHALL NOT BE PERMITTED TO CROSS SEDIMENT LOG.
 - 4.) ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
 - 5.) COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
 - 6.) BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
 - 7.) UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED IN THE LATTER CASE. THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.
 - 8.) OBJECTS OF CONSIDERABLE MASS (I.E. CONCRETE BLOCKS, SAND BAGS, ETC.) MUST BE USED IMMEDIATELY DOWNSLOPE OF COMPOST SOCKS PLACED ON PAVED SURFACES (AT THE SAME INTERVALS AS RECOMMENDED BY THE SOCK MANUFACTURER FOR STAKES) IN ORDER TO HOLD THEM IN PLACE.

- NOTES:**
- 1.) SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.
 - 2.) PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.
 - 3.) SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.
 - 4.) BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.
 - 5.) THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
 - 6.) BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.



CURLEX SEDIMENT LOG
NOT TO SCALE

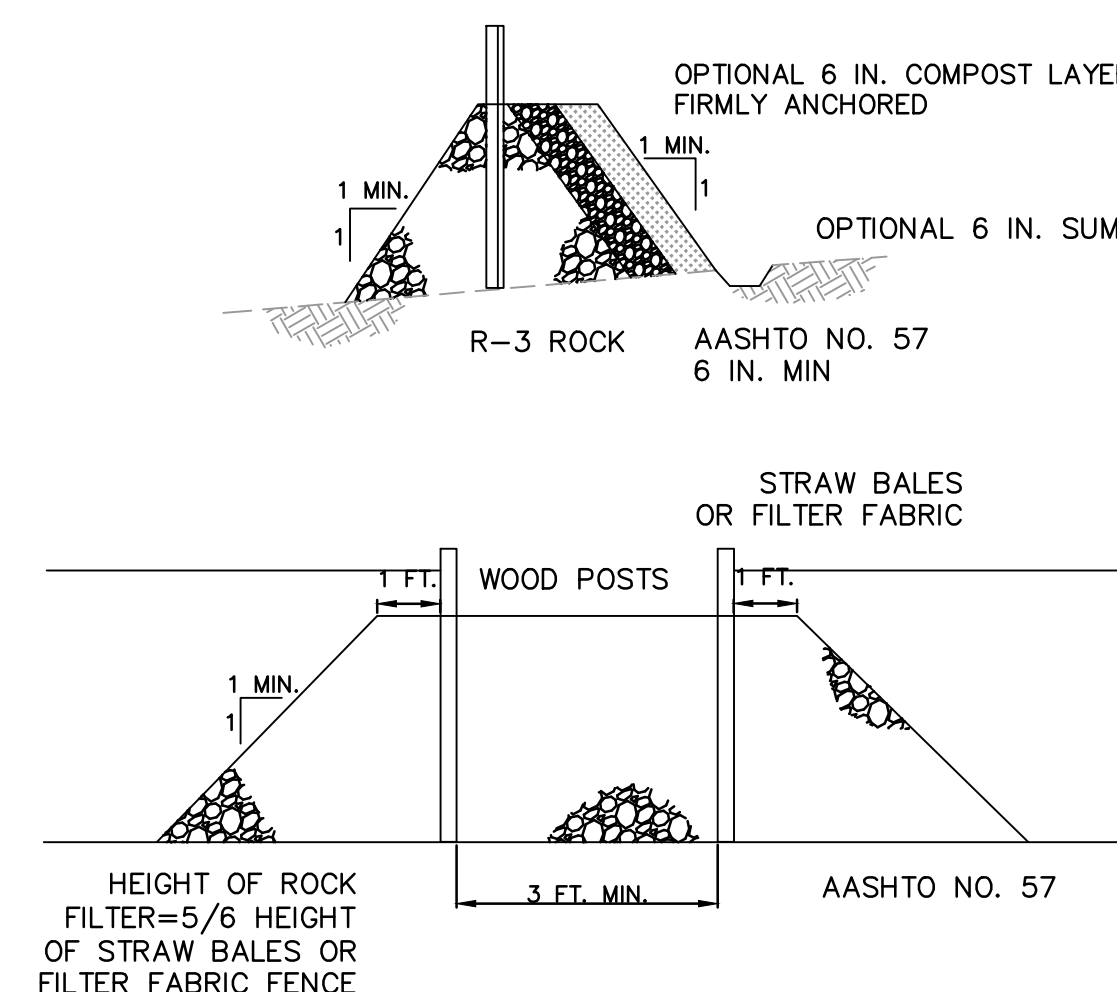


EROSION CONTROL MATTING
NOT TO SCALE

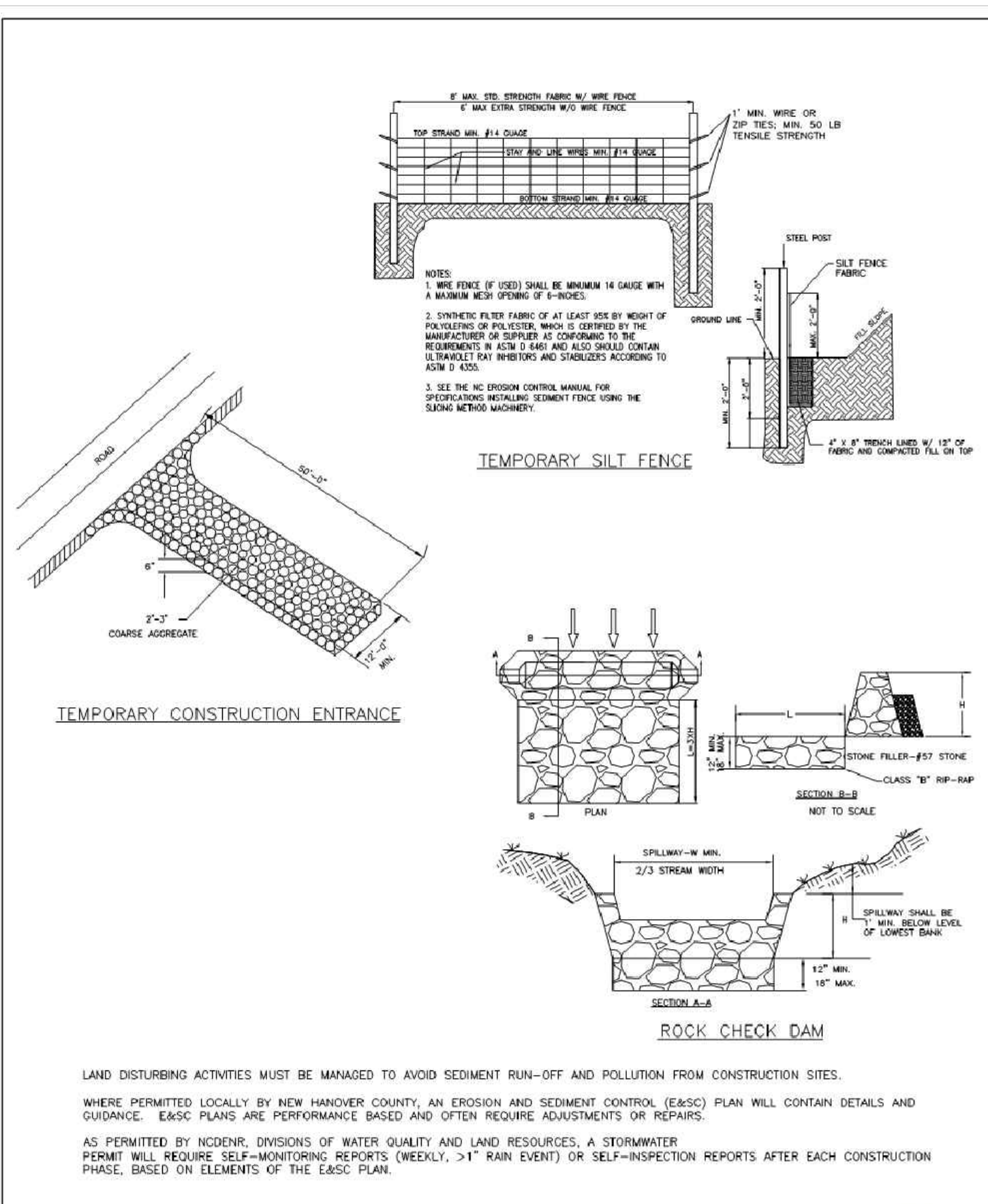
NOTES:

- 1.) A ROCK FILTER OUTLET SHALL BE INSTALLED WHERE FAILURE OF A SILT FENCE OR STRAW BALE BARRIER HAS OCCURRED DUE TO CONCENTRATED FLOW. ANCHORED COMPOST LAYER SHALL BE USED ON UPSLOPE FACE IN HQ AND EV WATERSHEDS.

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.



ROCK FILTER OUTLET
NOT TO SCALE



TEMPORARY SILT FENCE

TEMPORARY CONSTRUCTION ENTRANCE

ROCK CHECK DAM

LAND DISTURBING ACTIVITIES MUST BE MANAGED TO AVOID SEDIMENT RUN-OFF AND POLLUTION FROM CONSTRUCTION SITES. WHERE PERMITTED LOCALLY BY NEW HANOVER COUNTY, AN EROSION AND SEDIMENT CONTROL (EASC) PLAN WILL CONTAIN DETAILS AND GUIDANCE. EASC PLANS ARE PERFORMANCE BASED AND OFTEN REQUIRE ADJUSTMENTS OR REPAIRS. AS PERMITTED BY NCDENR, DIVISIONS OF WATER QUALITY AND LAND RESOURCES, A STORMWATER PERMIT WILL REQUIRE SELF-MONITORING REPORTS (WEEKLY, >1" RAIN EVENT) OR SELF-INSPECTION REPORTS AFTER EACH CONSTRUCTION PHASE, BASED ON ELEMENTS OF THE EASC PLAN.

DATE	SEPTEMBER, 2012
DRAWN BY	JSR
CHECKED BY	DEC, P.E.
SCALE	NOT TO SCALE

STANDARD DETAIL
GUIDELINES FOR SEDIMENT CONTROL BMPs
SHEET 1 OF 3

CITY OF WILMINGTON
NORTH CAROLINA
ENGINEERING
PO BOX 1810
WILMINGTON, NC 28402
(910) 341-7807

SD 3-104

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____
Signed: _____

Approved Construction Plan

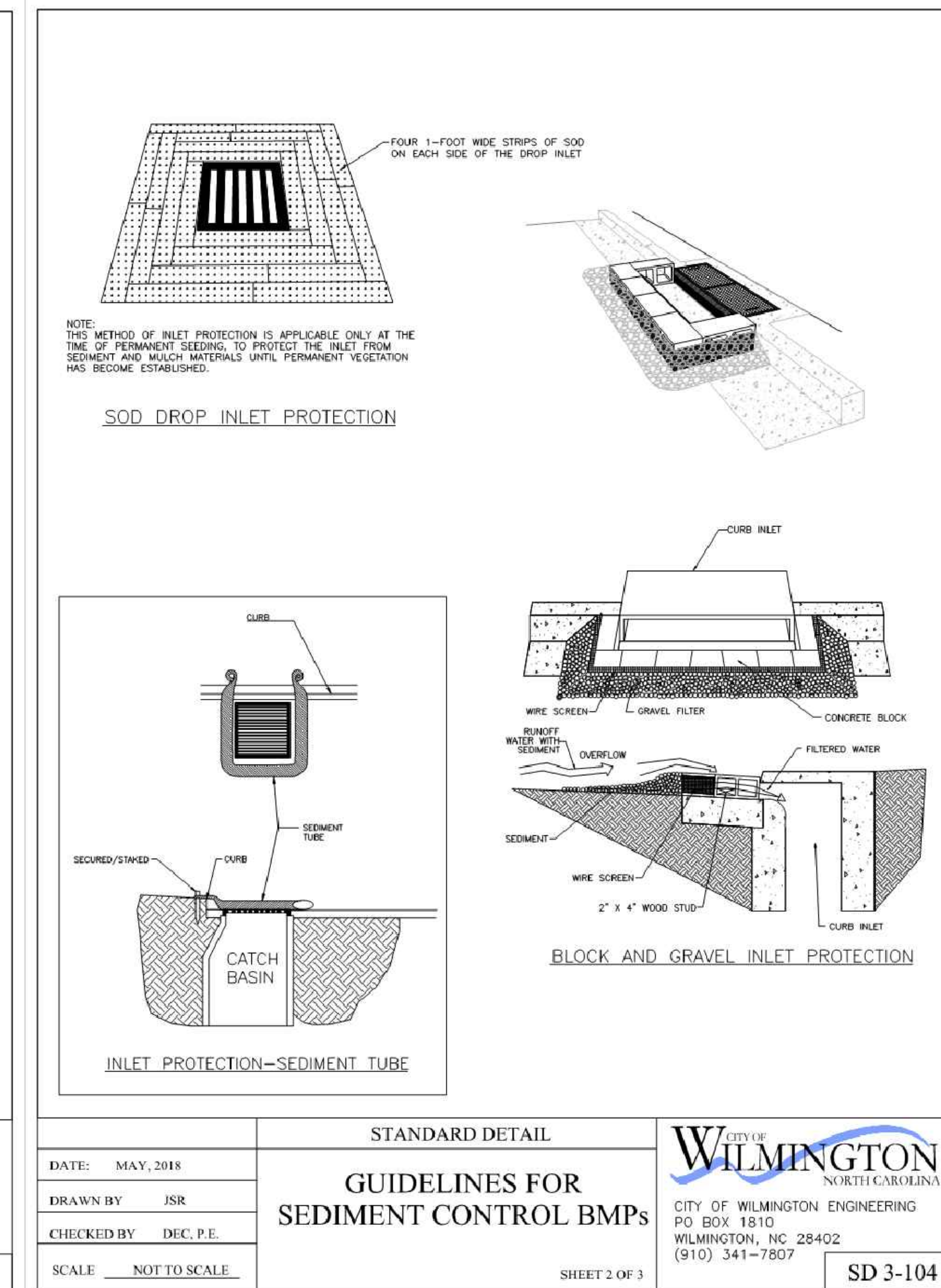
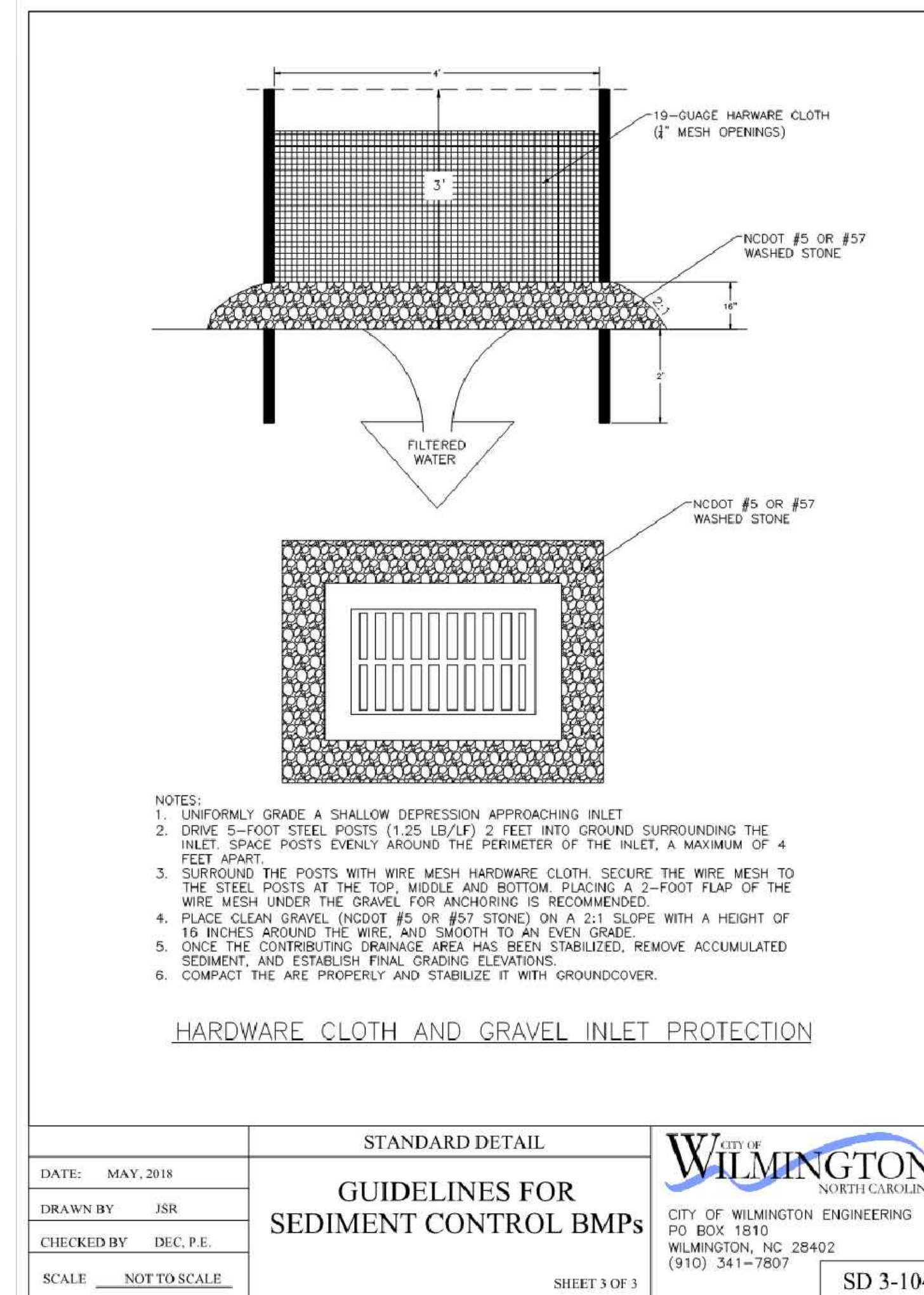
Name: _____ Date: _____

Planning: _____
Traffic: _____
Fire: _____



330 Walnut Street
Philadelphia, PA
19106-3685
o. 215.922.8080





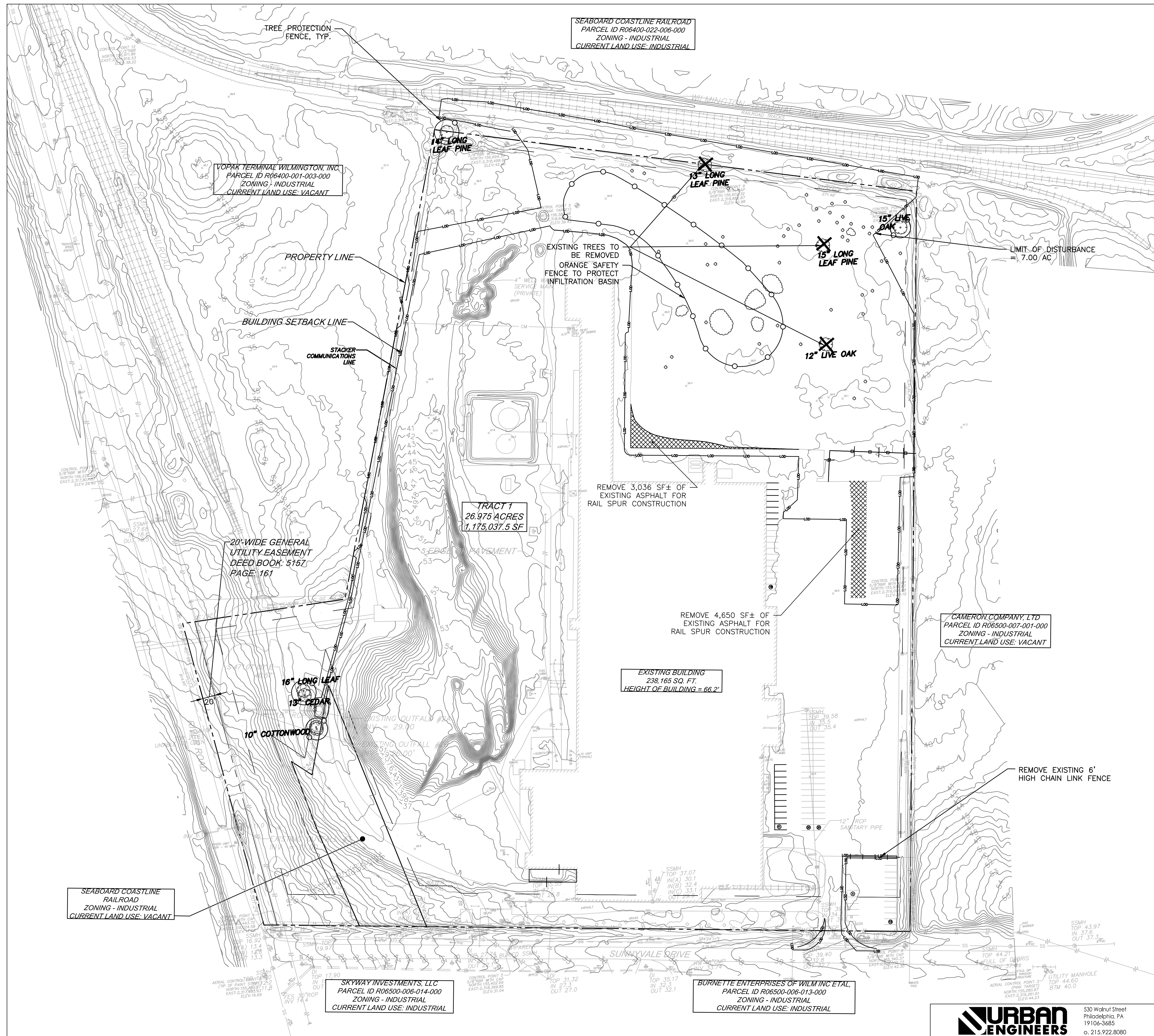
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit # _____
Signed: _____

Approved Construction Plan
Name _____ Date _____
Planning _____
Traffic _____
Fire _____

530 Walnut Street
Philadelphia, PA
19106-3685
o. 215.922.8080

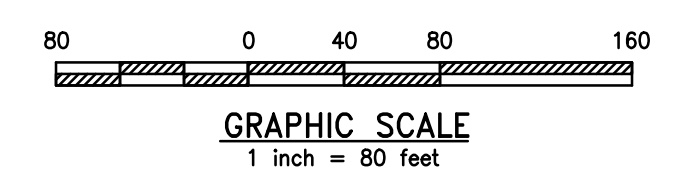
1	JAB	3/30/2020	RESPONSE TO 12/19 TRC COMMENTS
REV	BY	DATE	DESCRIPTION
LOCATION 838 SUNNYVALE DR., WILMINGTON, NC			
TITLE WILMINGTON WALLBOARD PLANT PROPOSED INDUSTRIAL SIDETRACK & STORMWATER MANAGEMENT IMPROVEMENTS EROSION & SEDIMENT CONTROL - DETAILS 2			
DN	JAB	DATE 03/30/2020	DRAWING NUMBER
CHK	MJT	DATE 03/30/2020	C-204

DEMOLITION LEGEND	
	TREE PROTECTION FENCE
	REMOVE TREE
	REMOVE FENCE
	LIMIT OF DISTURBANCE
	ASPHALT REMOVAL



WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit # _____
Signed: _____

Approved Construction Plan	
Name	Date
Planning	
Traffic	
Fire	



1	JAB	3/30/2020	RESPONSE TO 12/19 TRC COMMENTS
REV	BY	DATE	DESCRIPTION
LOCATION 838 SUNNYVALE DR., WILMINGTON, NC			
TITLE WILMINGTON WALLBOARD PLANT PROPOSED INDUSTRIAL SIDETRACK & STORMWATER MANAGEMENT IMPROVEMENTS DEMOLITION PLAN - OVERALL			
DN	JAB	DATE 03/30/2020	DRAWING NUMBER
CHK	MJT	DATE 03/30/2020	C-205



URBAN ENGINEERS
530 Walnut Street
Philadelphia, PA
19106-3485
o. 215.922.8080

SKYWAY INVESTMENTS, LLC
PARCEL ID R06500-006-014-000
ZONING - INDUSTRIAL
CURRENT LAND USE: INDUSTRIAL

BURNETTE ENTERPRISES OF WILM INC ET AL,
PARCEL ID R06500-006-013-000
ZONING - INDUSTRIAL
CURRENT LAND USE: INDUSTRIAL

SEABOARD COASTLINE RAILROAD
ZONING - INDUSTRIAL
CURRENT LAND USE: VACANT

VOPAK TERMINAL WILMINGTON, INC
PARCEL ID R06400-001-003-000
ZONING - INDUSTRIAL
CURRENT LAND USE: VACANT

SEABOARD COASTLINE RAILROAD
PARCEL ID R06400-022-006-000
ZONING - INDUSTRIAL
CURRENT LAND USE: INDUSTRIAL

CAMERON COMPANY, LTD
PARCEL ID R06500-007-001-000
ZONING - INDUSTRIAL
CURRENT LAND USE: VACANT



SEABOARD COASTLINE RAILROAD
 PARCEL ID R06400-022-006-000
 ZONING - INDUSTRIAL
 CURRENT LAND USE: INDUSTRIAL

VOPAK TERMINAL WILMINGTON, INC.
 PARCEL ID R06400-001-003-000
 ZONING - INDUSTRIAL
 CURRENT LAND USE: VACANT

TRACT 1
 26.975 ACRES
 1,175,037.5 SF

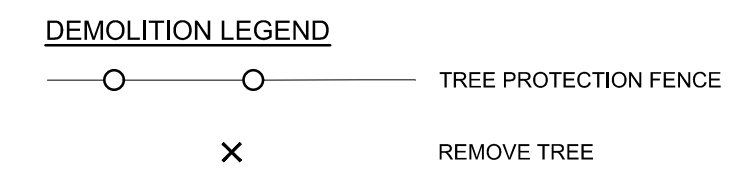
EXISTING BUILDING
 238,165 SQ. FT.
 HEIGHT OF BUILDING = 66.2'

CAMERON COMPANY, LTD
 PARCEL ID R06500-007-001-000
 ZONING - INDUSTRIAL
 CURRENT LAND USE: VACANT

SEABOARD COASTLINE RAILROAD
 ZONING - INDUSTRIAL
 CURRENT LAND USE: VACANT

SKYWAY INVESTMENTS, LLC
 PARCEL ID R06500-006-014-000
 ZONING - INDUSTRIAL
 CURRENT LAND USE: INDUSTRIAL

BURNETTE ENTERPRISES OF WILM INC ET AL,
 PARCEL ID R06500-006-013-000
 ZONING - INDUSTRIAL
 CURRENT LAND USE: INDUSTRIAL



TREE PROTECTION NOTES:

PRIOR TO ANY CLEARING, GRADING, OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVE OF TREES. AND NO CONSTRUCTION WORKERS, TOOLS, MATERIALS OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.

TREE REMOVAL NOTES:

NO PERSON, DIRECTLY OR INDIRECTLY, SHALL REMOVE ANY TREE FROM PUBLIC OR PRIVATE PROPERTY WITHOUT FIRST OBTAINING A TREE REMOVAL PERMIT FROM THE CITY MANAGER. A TREE REMOVAL PERMIT IS REQUIRED BEFORE ANY CLEARING, GRADING OR OTHER AUTHORIZATIONS MAY BE ISSUED INCLUDING SOIL AND SEDIMENTATION CONTROL PERMITS AND BUILDING PERMITS. AN APPROVED TREE REMOVAL PERMIT FOR NEW CONSTRUCTION SHALL APPLY TO THE ENTIRE SITE. THE TREE REMOVAL PERMIT AND APPROVED TREE PRESERVATION PLAN SHALL BE POSTED AT THE JOB SITE WITH OTHER PERMITS FOR THE DURATION OF WORK ON THE SITE. A TREE REMOVAL PERMIT MAY BE EITHER ATTACHED TO THE SUBMITTED SITE PLAN OR THE SITE PLAN MAY BE CLEARLY MARKED FOR EITHER APPROVAL OR DENIAL.

PROPERTY ADDRESS & PARCEL ID:

838 SUNNYVALE DRIVE
 WILMINGTON, NC 28412

PARCEL ID: R06400-001-002-000

PROPERTY OWNER:

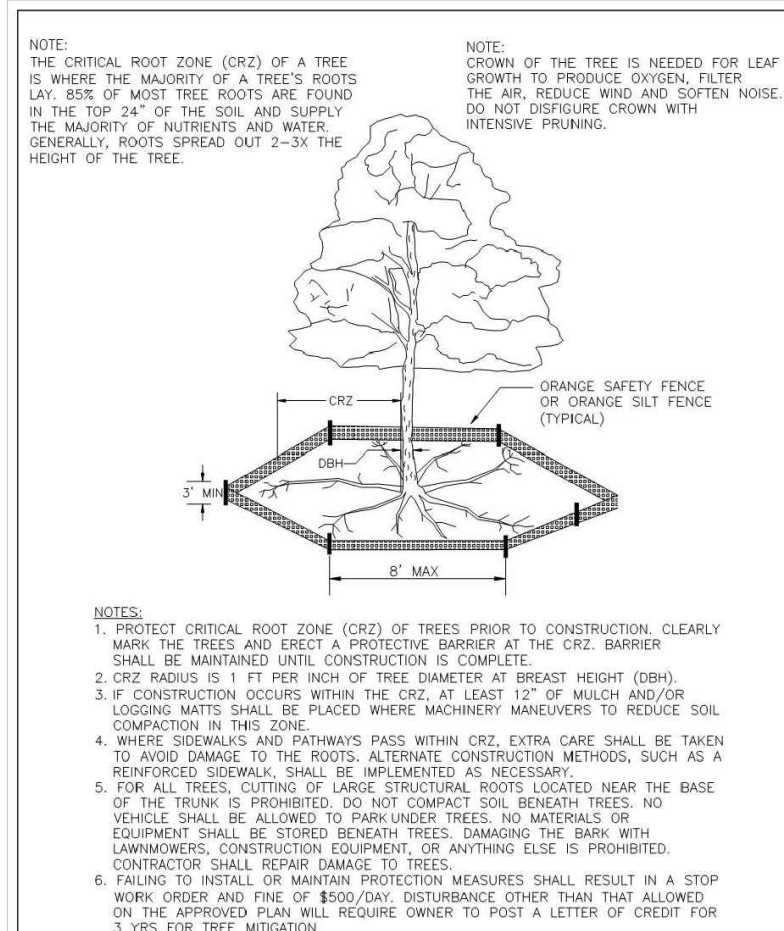
NATIONAL GYPSUM COMPANY
 2001 REXFORD ROAD
 CHARLOTTE, NC 28211

SITE DATA:

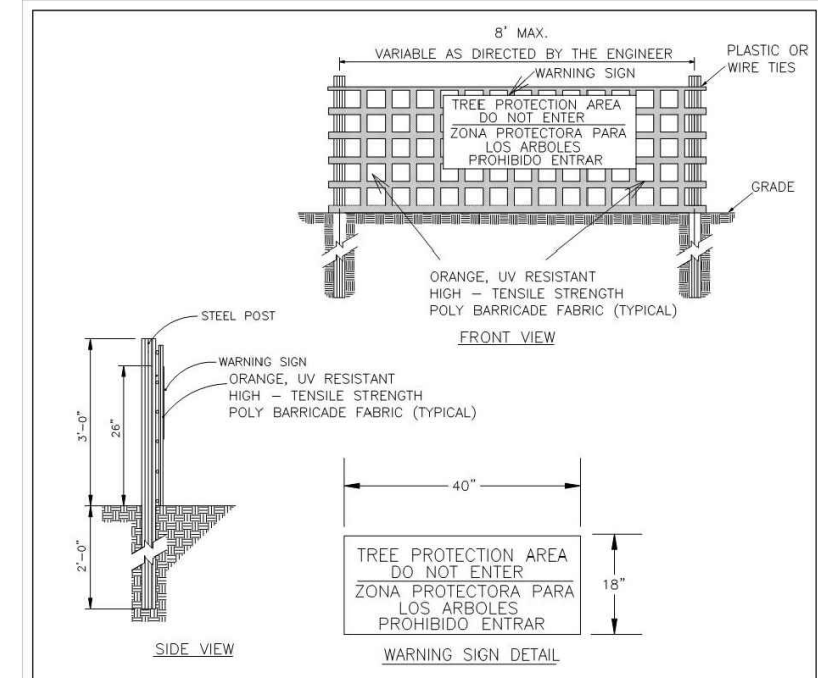
NUMBER OF BUILDINGS: 1
 NUMBER OF FLOORS: 1
 ROOF AREA: 238,165 SF
 TRACT PROPERTY: 26.975 AC.
 ZONED: INDUSTRIAL
 CAMA LAND USE: URBAN

Approved Construction Plan	
Name	Date
Planning	
Traffic	
Fire	

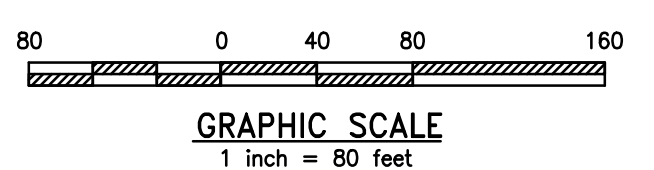
WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit # _____
 Signed: _____



DATE	BY	DESCRIPTION
1/20/20	JAB	DESIGN
1/20/20	JAB	DESIGN
1/20/20	JAB	DESIGN



DATE	BY	DESCRIPTION
1/20/20	JAB	DESIGN
1/20/20	JAB	DESIGN
1/20/20	JAB	DESIGN



National Gypsum COMPANY

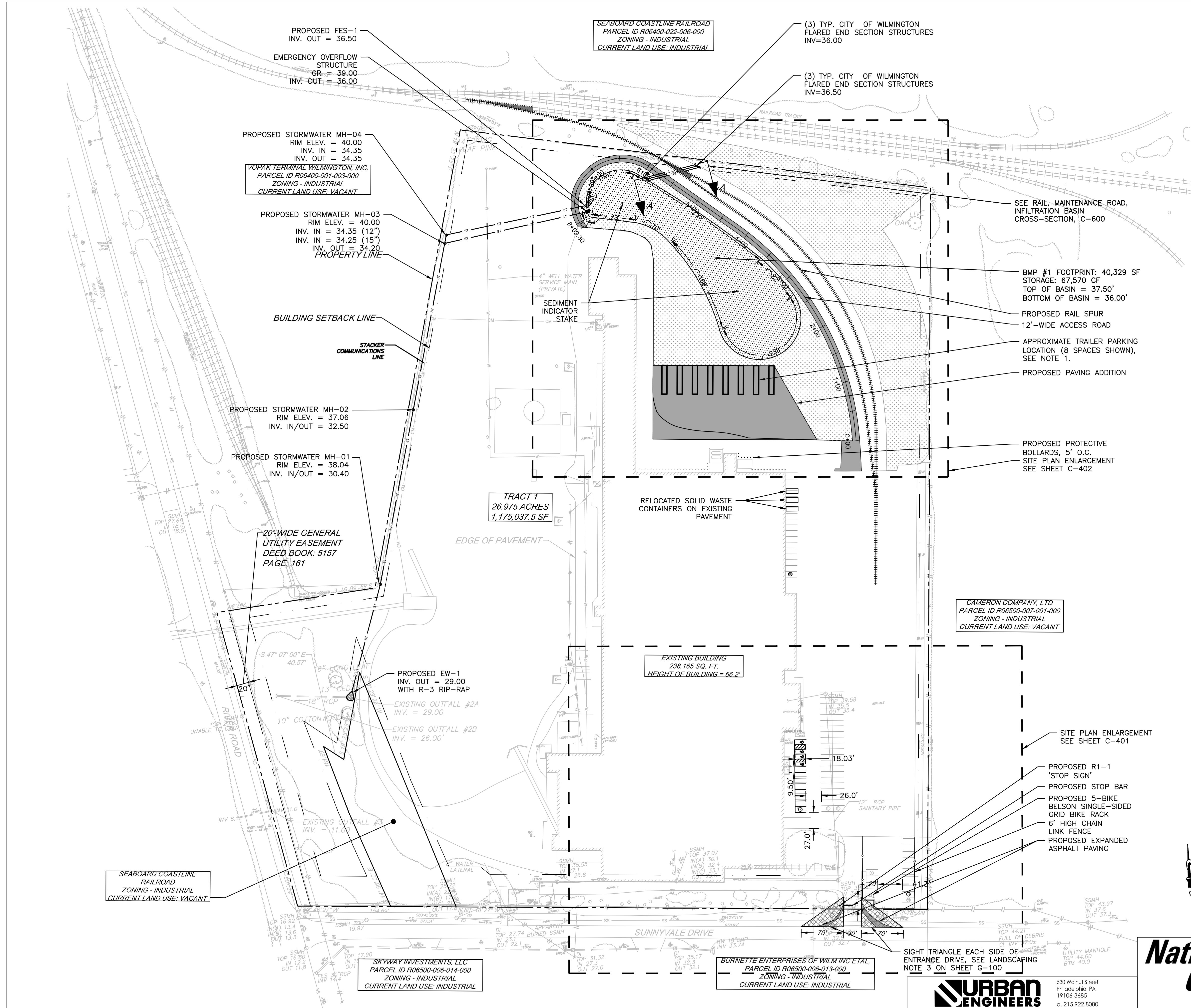
URBAN ENGINEERS
 530 Walnut Street
 Philadelphia, PA
 19106-3685
 o. 215.922.8080

REV	BY	DATE	DESCRIPTION
1	JAB	3/30/2020	RESPONSE TO 12/19 TRC COMMENTS

LOCATION: 838 SUNNYVALE DR., WILMINGTON, NC

TITLE: WILMINGTON WALLBOARD PLANT PROPOSED INDUSTRIAL SIDETRACK & STORMWATER MANAGEMENT IMPROVEMENTS TREE PROTECTION AND REMOVAL PLAN

DN	JAB	DATE	03/30/2020	DRAWING NUMBER	C-206
CHK	MJT	DATE	03/30/2020		



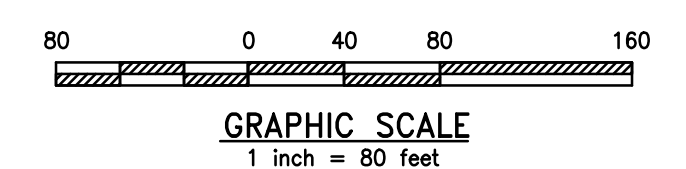
- SITE LEGEND**
- PROPOSED ASPHALT PAVING
 - 6' HIGH CHAIN LINK FENCE
 - RETENTION BASIN AREA
 - ADA ACCESSIBLE ROUTE
 - PROPOSED LAWN AREA
 - RAIL SPUR
 - BOLLARDS
 - STRIPING
 - BIKE RACK
- UTILITIES LEGEND**
- PROPOSED STORMWATER PIPE
 - SECONDARY OUTLET CONTROL STRUCTURE
 - HEADWALL/ENDWALL
 - MANHOLE

NOTES:
 1. THE EXACT INTENT OF THE EXPANDED PAVEMENT IS UNDETERMINED AT THIS TIME. TRAILER PARKING IS CURRENTLY SHOWN AS A PLACE HOLDER.

CITY OF WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit # _____
 Signed: _____

Approved Construction Plan

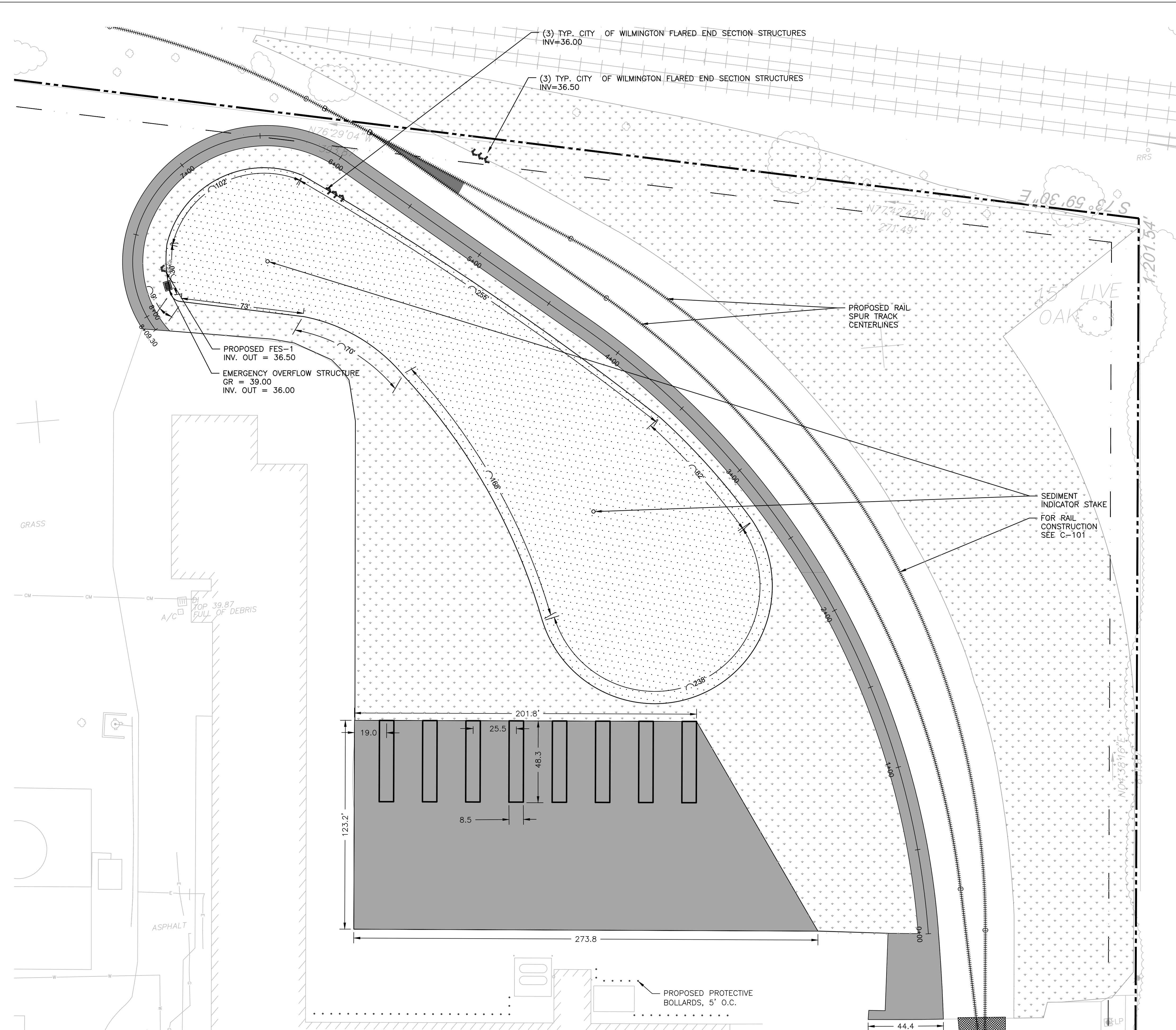
Name	Date
Planning	
Traffic	
Fire	



1	JAB	3/30/2020	RESPONSE TO 12/19 TRC COMMENTS
REV	BY	DATE	DESCRIPTION
LOCATION 838 SUNNYVALE DR., WILMINGTON, NC			
TITLE WILMINGTON WALLBOARD PLANT PROPOSED INDUSTRIAL SIDETRACK & STORMWATER MANAGEMENT IMPROVEMENTS SITE PLAN - OVERALL			
DGN	JAB	DATE 03/30/2020	DRAWING NUMBER
CHK	MJT	DATE 03/30/2020	C-400



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 19106-3685
 o. 215.922.8080



- SITE LEGEND**
- PROPOSED ASPHALT PAVING
 - 6' HIGH CHAIN LINK FENCE
 - RETENTION BASIN AREA
 - ADA ACCESSIBLE ROUTE
 - PROPOSED LAWN AREA
 - RAIL SPUR
 - BOLLARDS
 - STRIPING
 - BIKE RACK
- UTILITIES LEGEND**
- PROPOSED STORMWATER PIPE
 - SECONDARY OUTLET CONTROL STRUCTURE
 - HEADWALL/ENDWALL
 - MANHOLE

Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

 Date: _____ Permit # _____

 Signed: _____

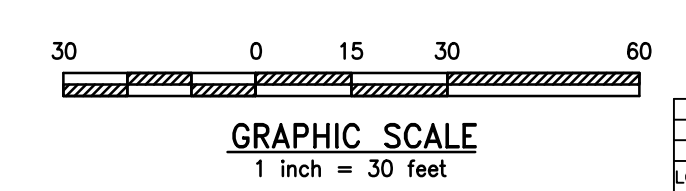
Approved Construction Plan

 Name: _____ Date: _____

 Planning: _____

 Traffic: _____

 Fire: _____



1	JAB	3/30/2020	RESPONSE TO 12/19 TRC COMMENTS
REV	BY	DATE	DESCRIPTION
LOCATION 838 SUNNYVALE DR., WILMINGTON, NC			
TITLE WILMINGTON WALLBOARD PLANT PROPOSED INDUSTRIAL SIDETRACK & STORMWATER MANAGEMENT IMPROVEMENTS SITE PLAN - ENLARGEMENT 2			
DGN	JAB	DATE 03/30/2020	DRAWING NUMBER
CHK	MJT	DATE 03/30/2020	C-402

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SEABOARD COASTLINE RAILROAD
 PARCEL ID R06400-022-006-000
 ZONING - INDUSTRIAL
 CURRENT LAND USE - INDUSTRIAL

VOPAK TERMINAL WILMINGTON, INC.
 PARCEL ID R06400-001-003-000
 ZONING - INDUSTRIAL
 CURRENT LAND USE - VACANT

TRACT 1
 26.975 ACRES
 1,175,037.5 SF

EXISTING BUILDING
 238,165 SQ. FT.
 HEIGHT OF BUILDING = 66.2'

CAMERON COMPANY, LTD
 PARCEL ID R06500-007-001-000
 ZONING - INDUSTRIAL
 CURRENT LAND USE - VACANT

SEABOARD COASTLINE RAILROAD
 ZONING - INDUSTRIAL
 CURRENT LAND USE - VACANT

SKYWAY INVESTMENTS, LLC
 PARCEL ID R06500-006-014-000
 ZONING - INDUSTRIAL

BURNETTE ENTERPRISES OF WILM INC ET AL
 PARCEL ID R06500-006-013-000
 ZONING - INDUSTRIAL

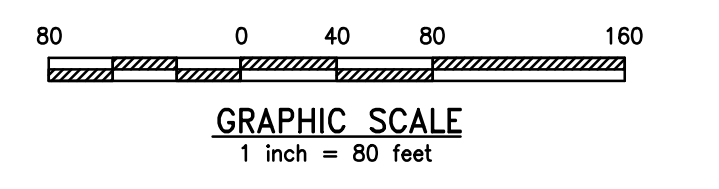
GRADING LEGEND

40	MAJOR CONTOUR
41	MINOR CONTOUR
37.86	SPOT ELEVATION
2%	SLOPES
○	TREE PROTECTION FENCE
X	REMOVE TREE
+	REMOVE FENCE

CITY OF WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit # _____
 Signed: _____

Approved Construction Plan

Name	Date
Planning	
Traffic	
Fire	

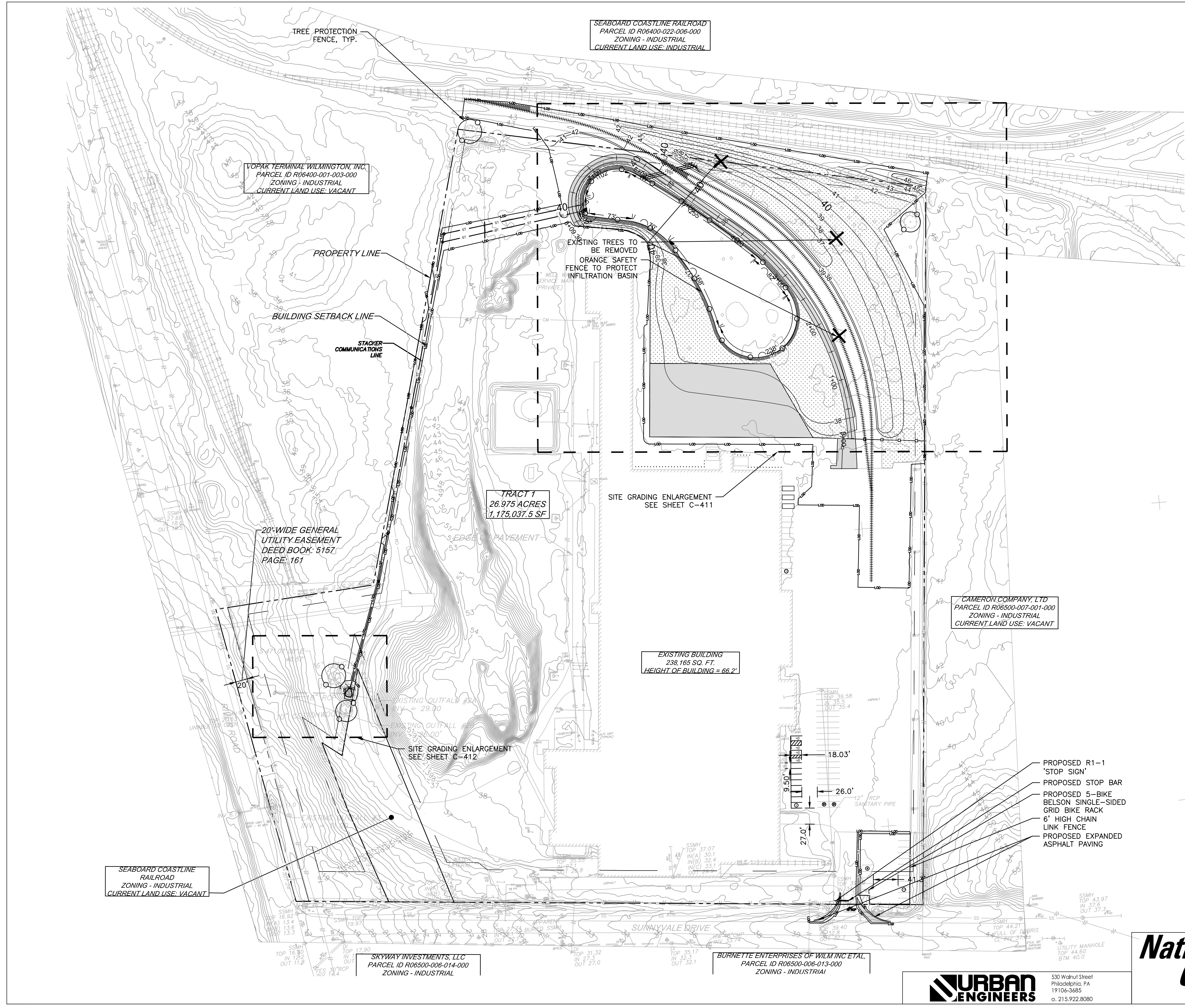


1	JAB	3/30/2020	RESPONSE TO 12/19 TRC COMMENTS
REV	BY	DATE	DESCRIPTION
LOCATION 838 SUNNYVALE DR., WILMINGTON, NC			

TITLE WILMINGTON WALLBOARD PLANT PROPOSED INDUSTRIAL SIDETRACK & STORMWATER MANAGEMENT IMPROVEMENTS GRADING PLAN - OVERALL			
DGN	JAB	DATE 03/30/2020	DRAWING NUMBER
CHK	MJT	DATE 03/30/2020	C-410

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 19106-3685
 o. 215.922.8080

National Gypsum COMPANY





GRADING LEGEND

	40		MAJOR CONTOUR
	41		MINOR CONTOUR
	+37.86		SPOT ELEVATION
	2%		SLOPES
			TREE PROTECTION FENCE
			REMOVE TREE
			REMOVE FENCE

PROPOSED FES-1
INV. OUT = 36.50
EMERGENCY OVERFLOW STRUCTURE
GR = 39.00
INV. OUT = 36.00

A/C TOP 39.87
FULL OF DEBRIS

(3) TYP. CITY OF WILMINGTON FLARED END SECTION STRUCTURES
INV=36.00

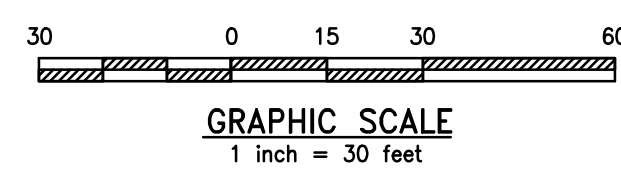
(3) TYP. CITY OF WILMINGTON FLARED END SECTION STRUCTURES
INV=36.50

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit # _____
Signed: _____

Approved Construction Plan

Name	Date
Planning	
Traffic	
Fire	

1	JAB	3/30/2020	RESPONSE TO 12/19 TRC COMMENTS
REV	BY	DATE	DESCRIPTION
LOCATION 838 SUNNYVALE DR., WILMINGTON, NC			



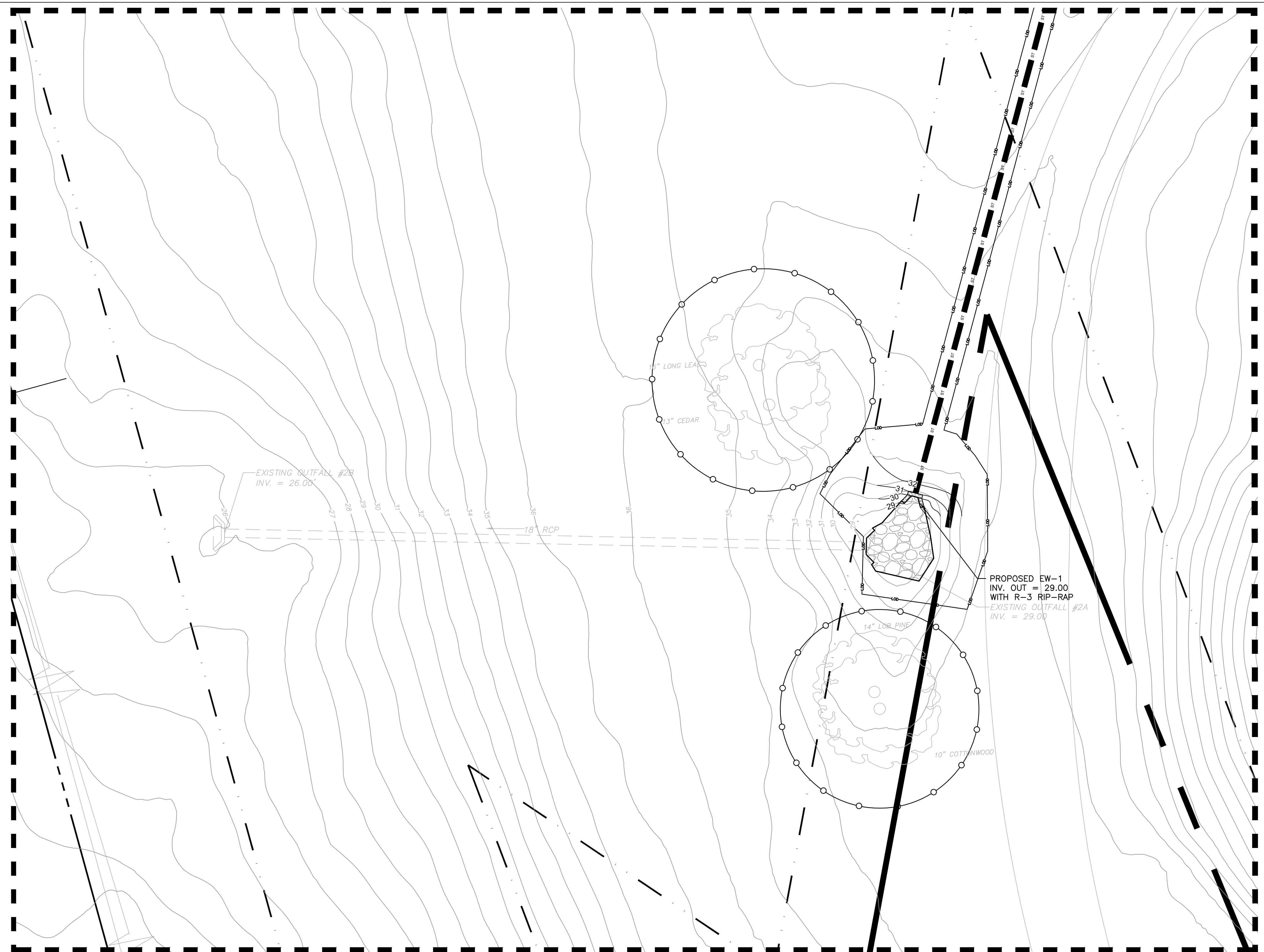
URBAN ENGINEERS
530 Walnut Street
Philadelphia, PA
19106-3685
o. 215.922.8080

National Gypsum COMPANY

TITLE WILMINGTON WALLBOARD PLANT PROPOSED INDUSTRIAL SIDETRACK & STORMWATER MANAGEMENT IMPROVEMENTS RAIL SPUR AND BASIN GRADING PLAN			
DGN	JAB	DATE 03/30/2020	DRAWING NUMBER
CHK	MJT	DATE 03/30/2020	C-411

GRADING LEGEND

	40		MAJOR CONTOUR
	41		MINOR CONTOUR
	+37.86		SPOT ELEVATION
			SLOPES

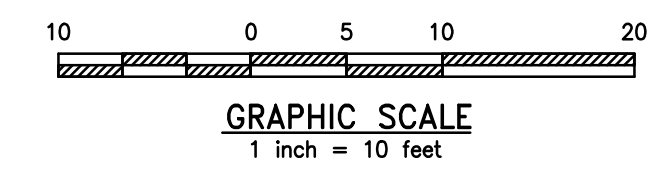


Approved Construction Plan

Name	Date
Planning	
Traffic	
Fire	

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____
Signed: _____



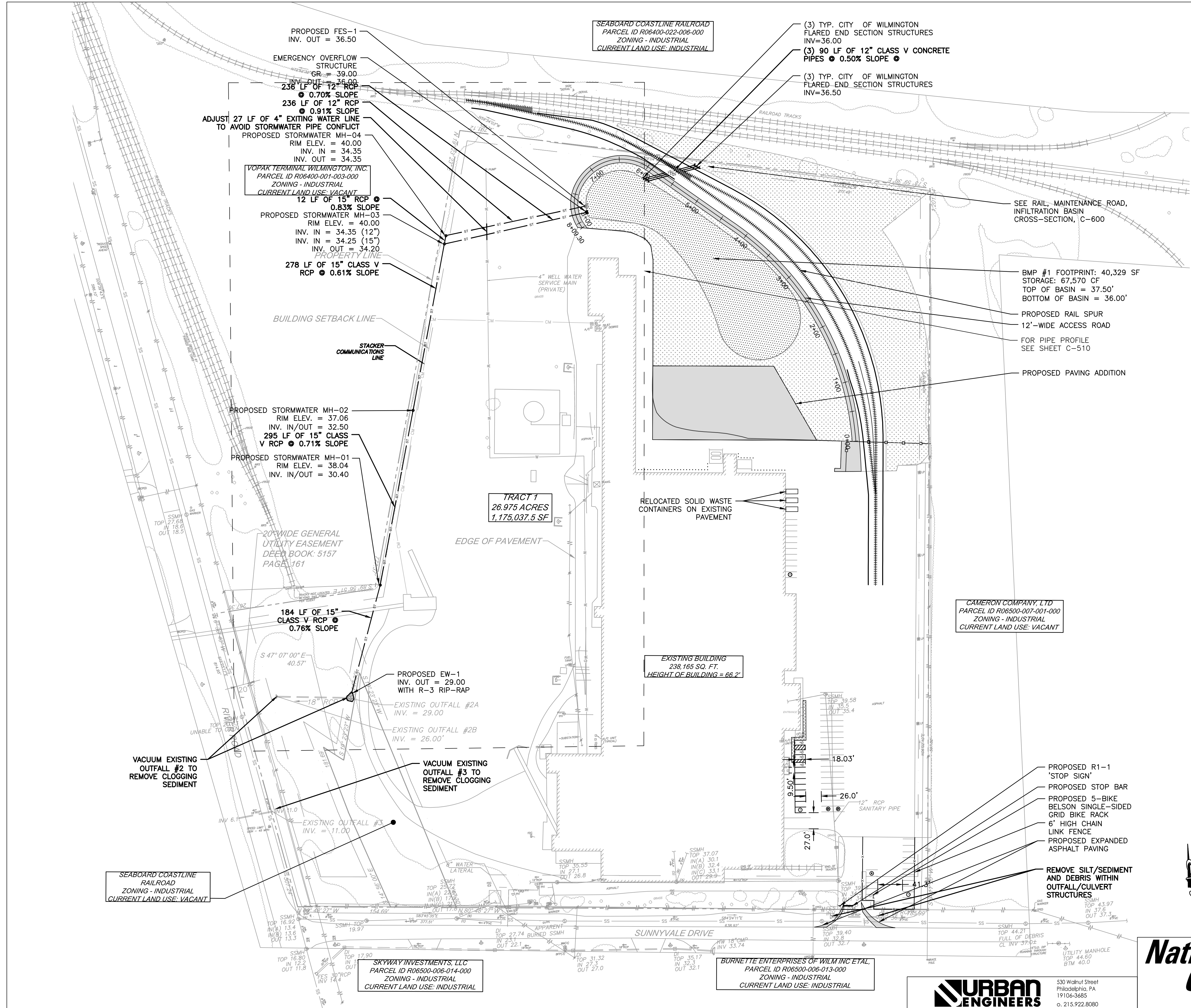
URBAN ENGINEERS
530 Walnut Street
Philadelphia, PA
19106-3685
o. 215.922.8080



1	JAB	3/30/2020	RESPONSE TO 12/19 TRC COMMENTS
REV	BY	DATE	DESCRIPTION
LOCATION 838 SUNNYVALE DR., WILMINGTON, NC			
TITLE WILMINGTON WALLBOARD PLANT PROPOSED INDUSTRIAL SIDETRACK & STORMWATER MANAGEMENT IMPROVEMENTS ENDWALL GRADING DETAIL			
DGN	JAB	DATE 03/30/2020	DRAWING NUMBER
CHK	MJT	DATE 03/30/2020	C-412

UTILITIES LEGEND

- ST — ST — PROPOSED STORMWATER PIPE
- SECONDARY OUTLET CONTROL STRUCTURE
- HEADWALL/ENDWALL
- MANHOLE



BMP #1 FOOTPRINT: 40,329 SF
 STORAGE: 67,570 CF
 TOP OF BASIN = 37.50'
 BOTTOM OF BASIN = 36.00'

TRACT 1
 26.975 ACRES
 1,175,037.5 SF

EXISTING BUILDING
 238,165 SQ. FT.
 HEIGHT OF BUILDING = 66.2'

CAMERON COMPANY, LTD
 PARCEL ID R06500-007-001-000
 ZONING - INDUSTRIAL
 CURRENT LAND USE: VACANT

VOPAK TERMINAL WILMINGTON, INC.
 PARCEL ID R06400-001-003-000
 ZONING - INDUSTRIAL
 CURRENT LAND USE: VACANT

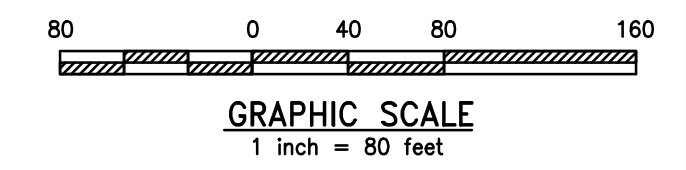
SKYWAY INVESTMENTS, LLC
 PARCEL ID R06500-006-014-000
 ZONING - INDUSTRIAL
 CURRENT LAND USE: INDUSTRIAL

BURNETTE ENTERPRISES OF WILM INC ETAL,
 PARCEL ID R06500-006-013-000
 ZONING - INDUSTRIAL
 CURRENT LAND USE: INDUSTRIAL

WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit # _____
 Signed: _____

Approved Construction Plan

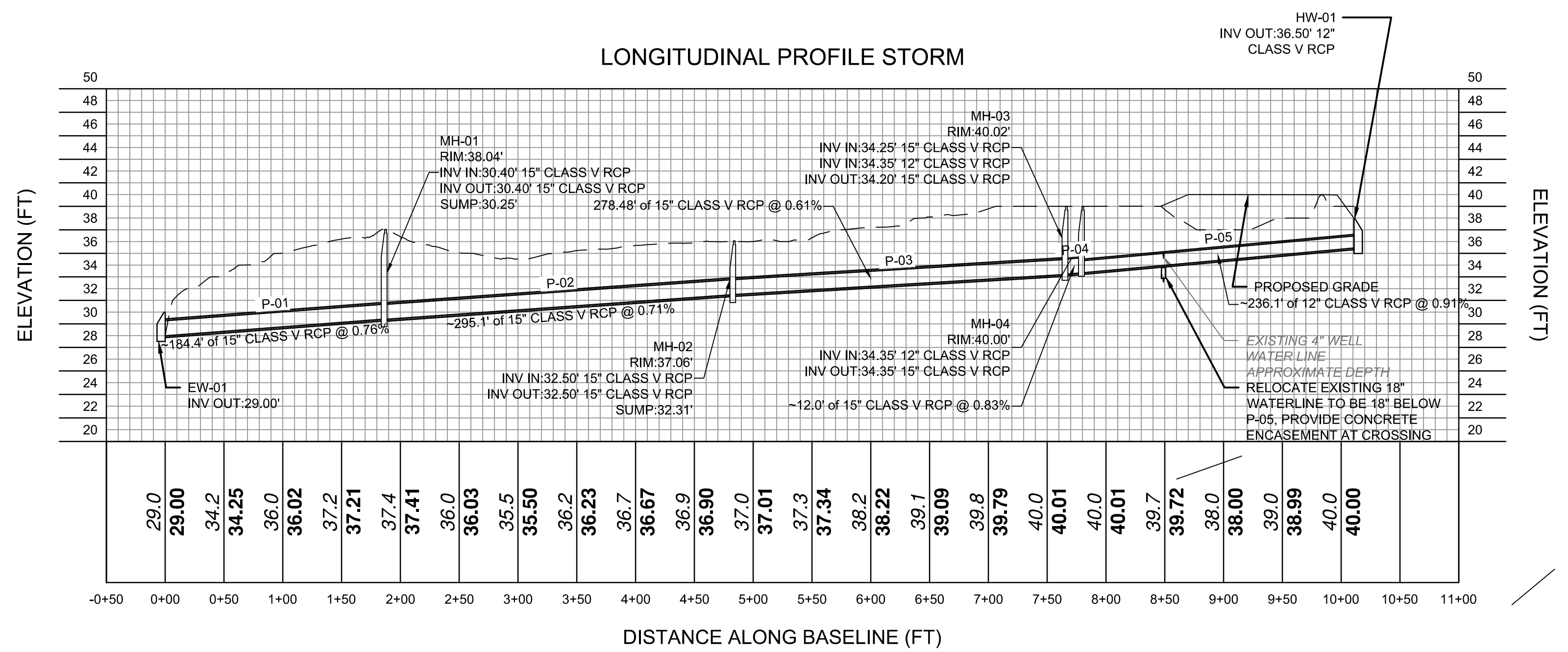
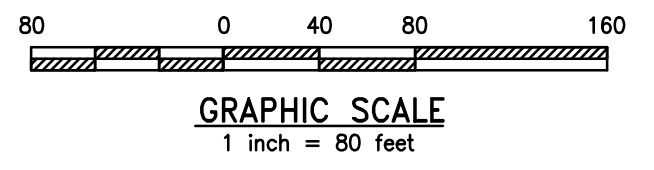
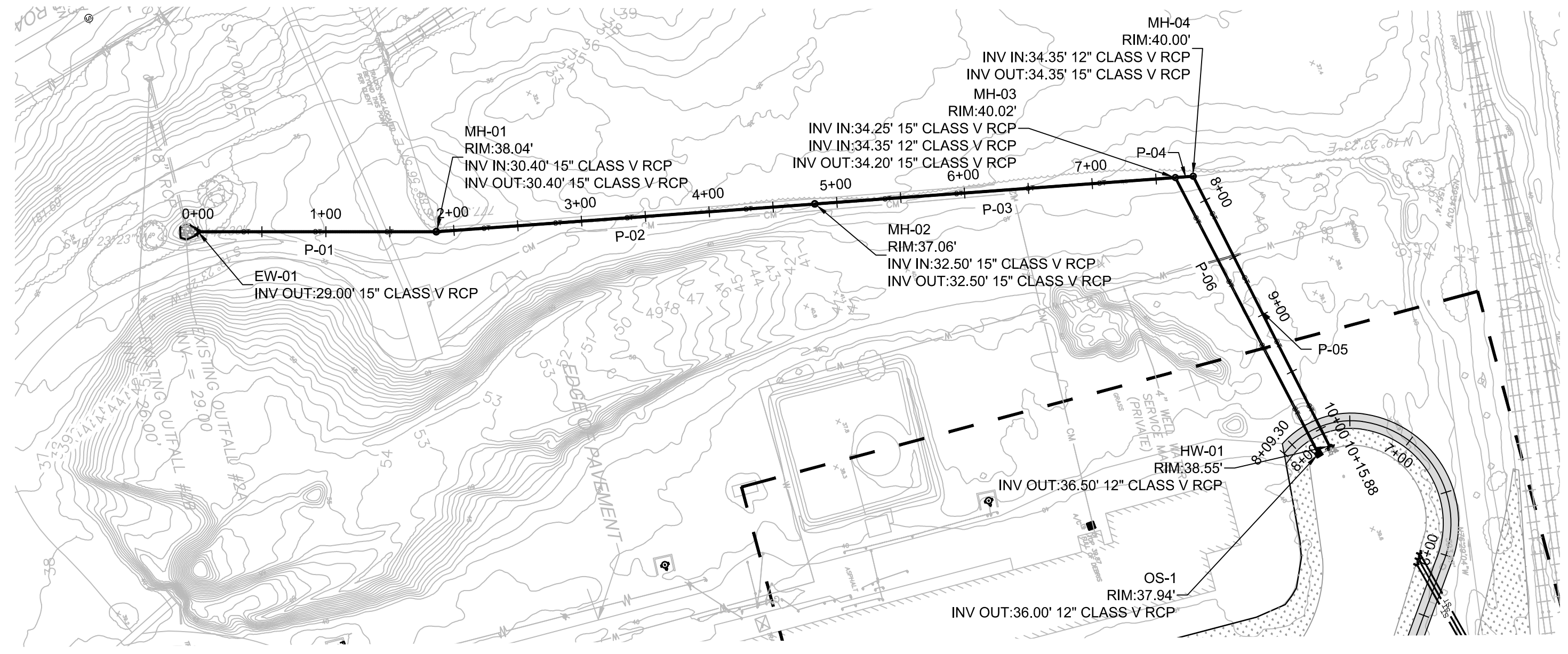
Name	Date
Planning	
Traffic	
Fire	



1	JAB	3/30/2020	RESPONSE TO 12/19 TRC COMMENTS
REV	BY	DATE	DESCRIPTION
LOCATION 838 SUNNYVALE DR., WILMINGTON, NC			
TITLE WILMINGTON WALLBOARD PLANT PROPOSED INDUSTRIAL SIDETRACK & STORMWATER MANAGEMENT IMPROVEMENTS UTILITY PLAN - OVERALL			
DGN	JAB	DATE 03/30/2020	DRAWING NUMBER
CHK	MJT	DATE 03/30/2020	C-500



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CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit # _____
Signed: _____

Approved Construction Plan

Name: _____ Date: _____

Planning: _____

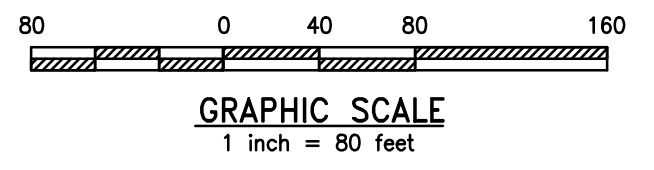
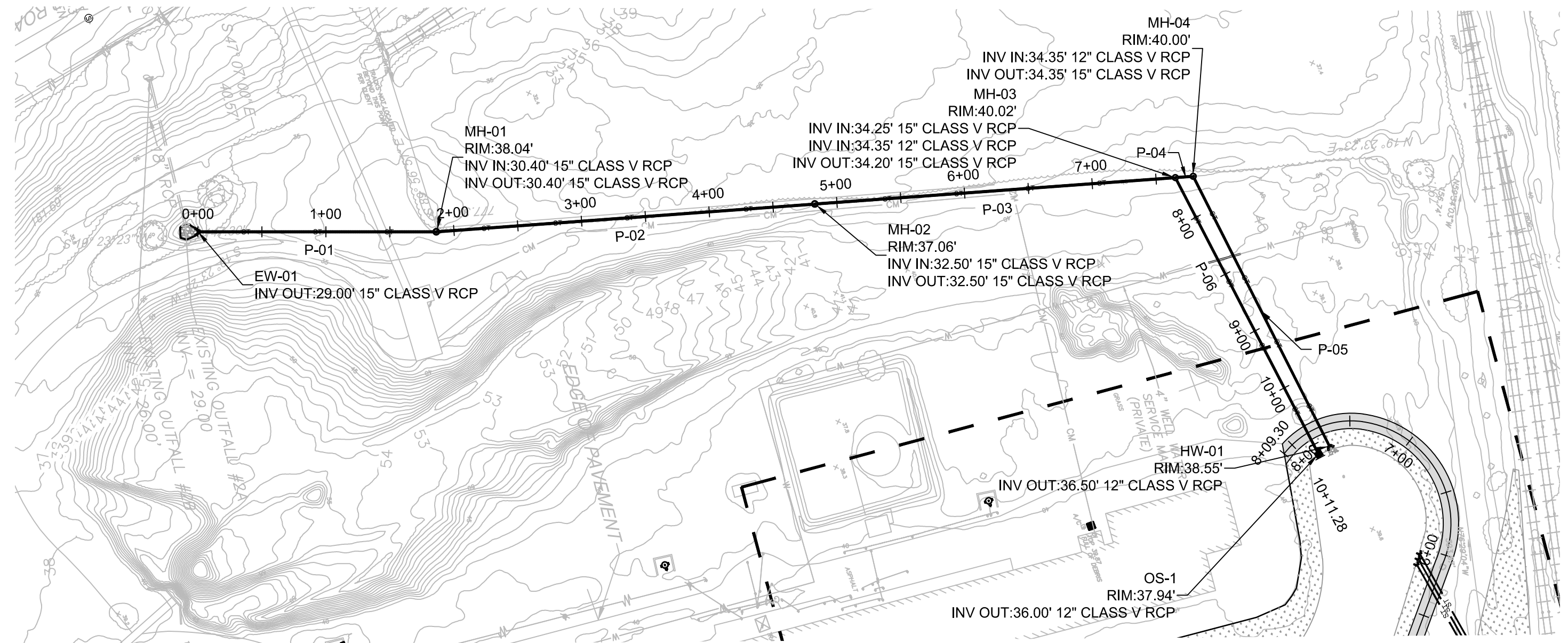
Traffic: _____

Fire: _____

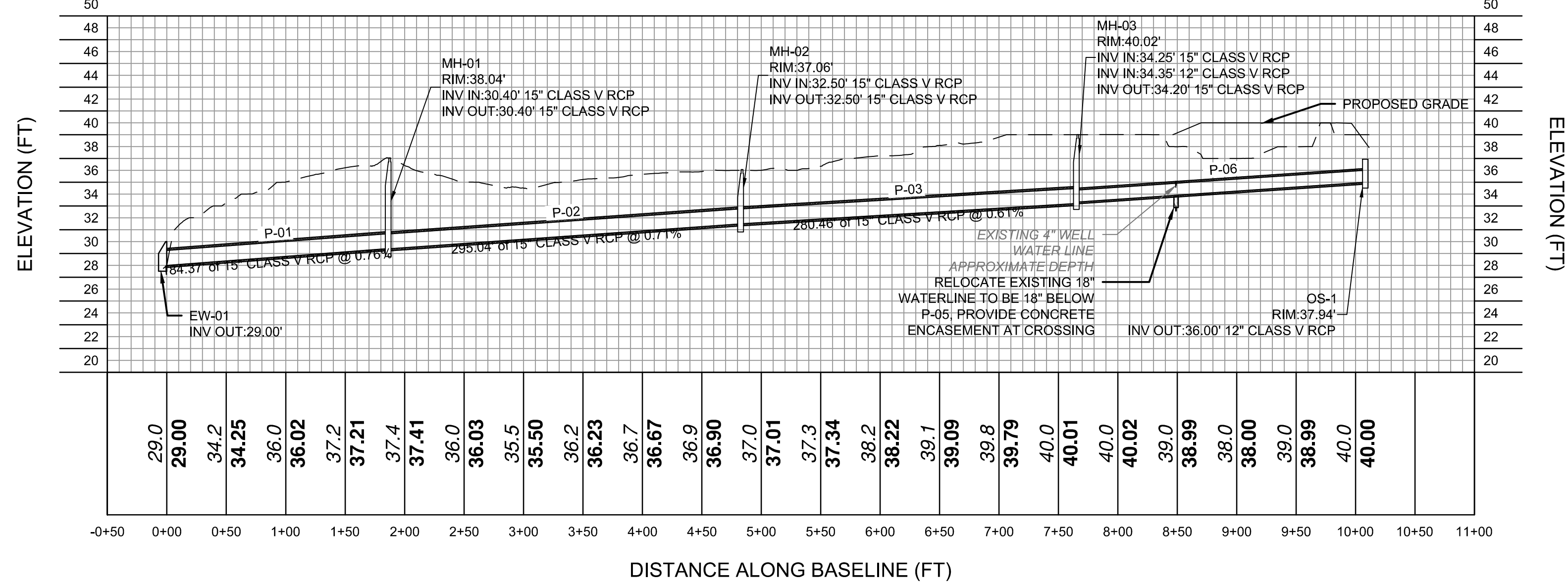
1	JAB	3/30/2020	RESPONSE TO 12/19 TRC COMMENTS
REV	BY	DATE	DESCRIPTION
LOCATION: 838 SUNNYVALE DR., WILMINGTON, NC			
TITLE: WILMINGTON WALLBOARD PLANT PROPOSED INDUSTRIAL SIDETRACK & STORMWATER MANAGEMENT IMPROVEMENTS UTILITY PROFILE - STORM			
DGN	JAB	DATE: 03/30/2020	DRAWING NUMBER: C-501
CHK	MJT	DATE: 03/30/2020	

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Philadelphia, PA
19106-3685
o. 215.922.8080

National Gypsum COMPANY



LONGITUDINAL PROFILE EMERGENCY OUTFALL



Public Services • Engineering Division

 APPROVED STORMWATER MANAGEMENT PLAN

 Date: _____ Permit #: _____

 Signed: _____

Approved Construction Plan

 Name: _____ Date: _____

 Planning: _____

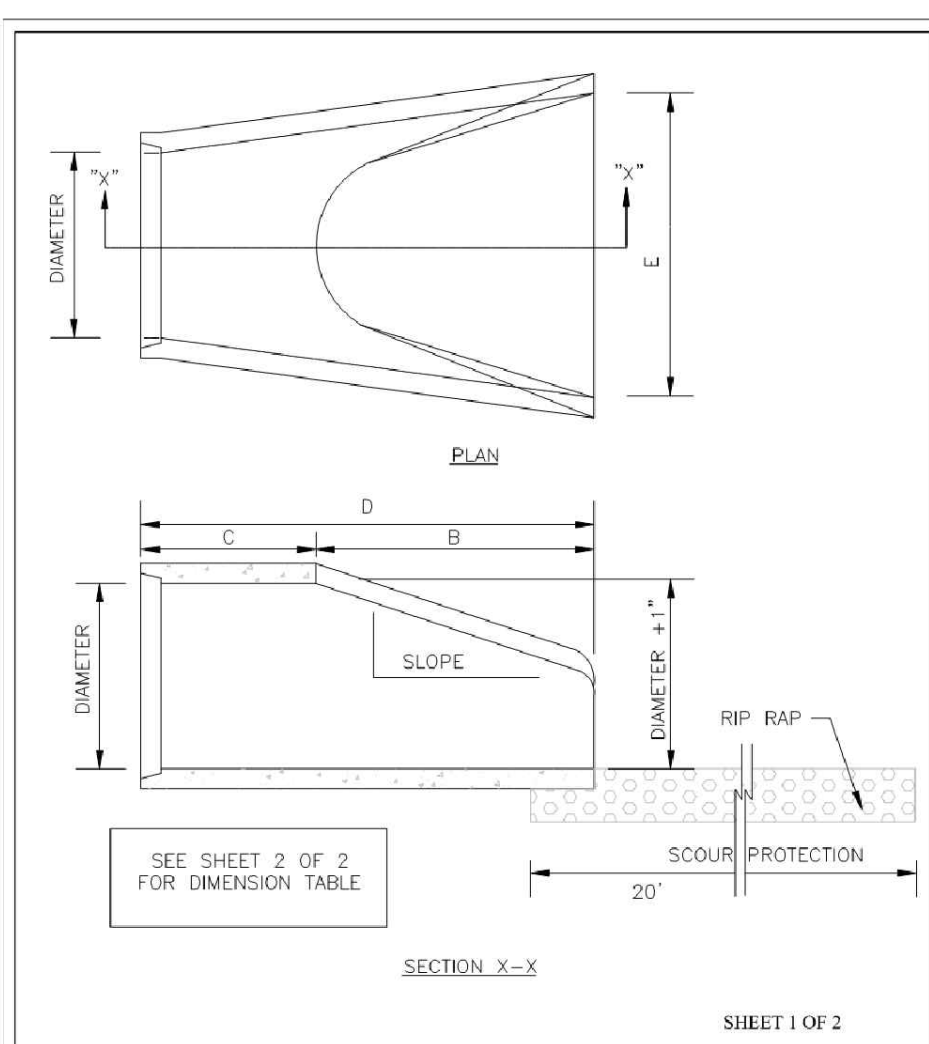
 Traffic: _____

 Fire: _____

1	JAB	3/30/2020	RESPONSE TO 12/19 TRC COMMENTS
REV	BY	DATE	DESCRIPTION
LOCATION: 838 SUNNYVALE DR., WILMINGTON, NC			
TITLE: WILMINGTON WALLBOARD PLANT PROPOSED INDUSTRIAL SIDETRACK & STORMWATER MANAGEMENT IMPROVEMENTS EMERGENCY OUTFALL UTILITY PROFILE			
DN	JAB	DATE: 03/30/2020	DRAWING NUMBER
CHK	MJT	DATE: 03/30/2020	C-502



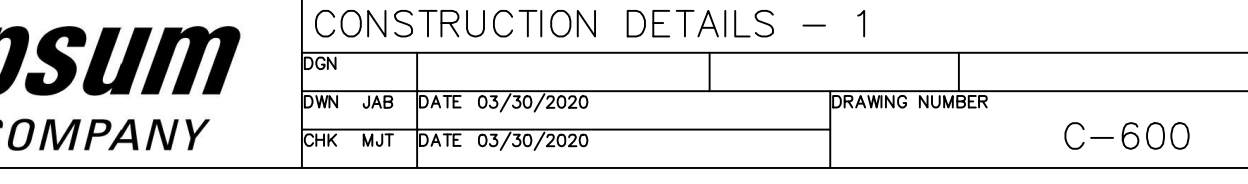
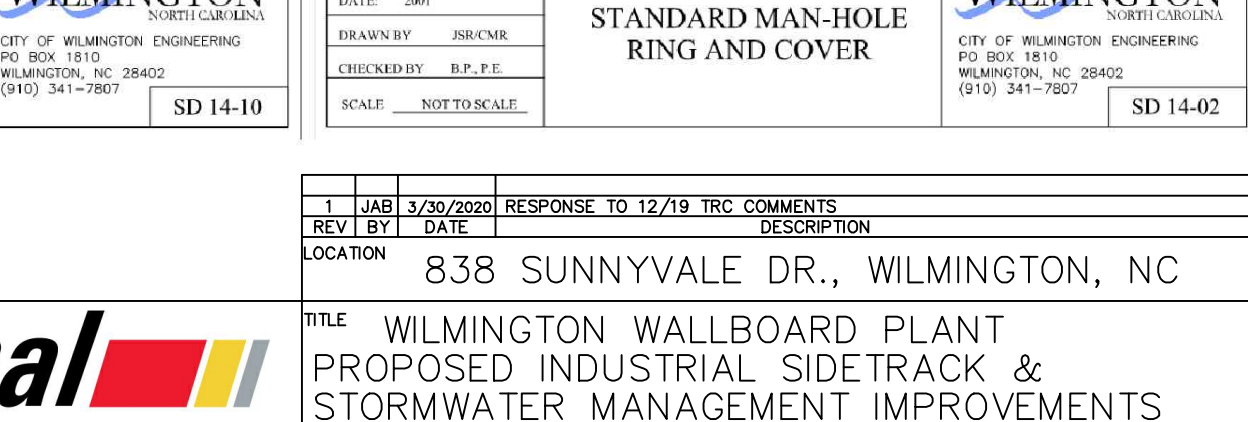
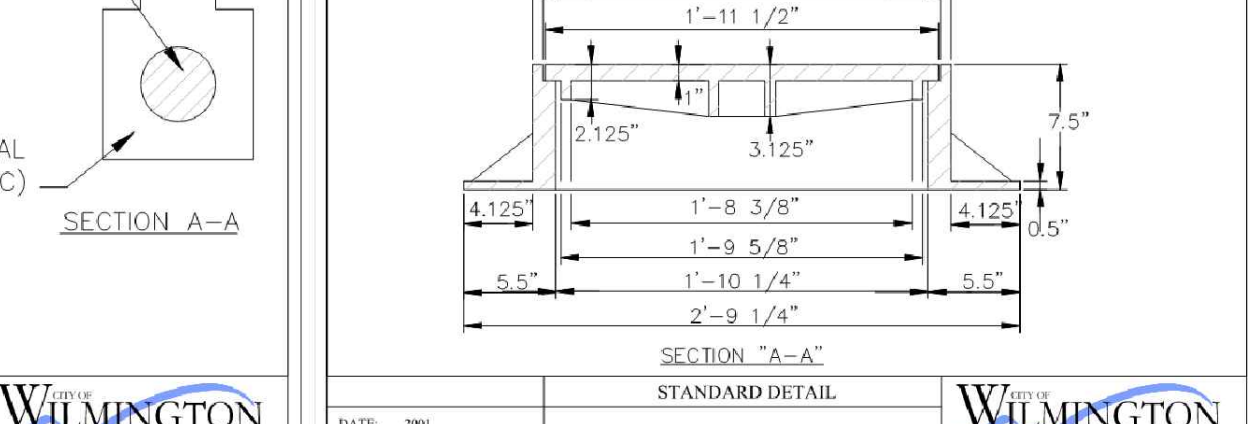
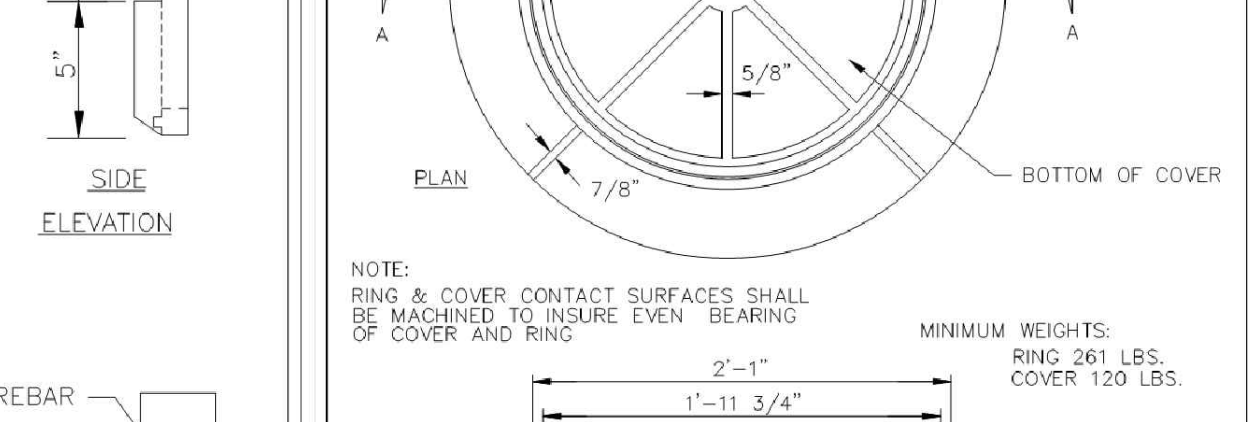
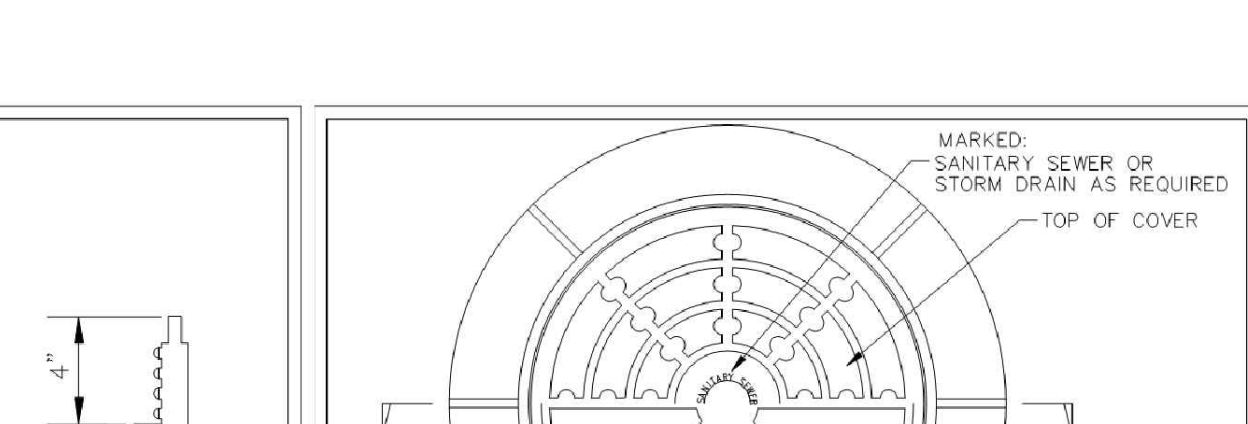
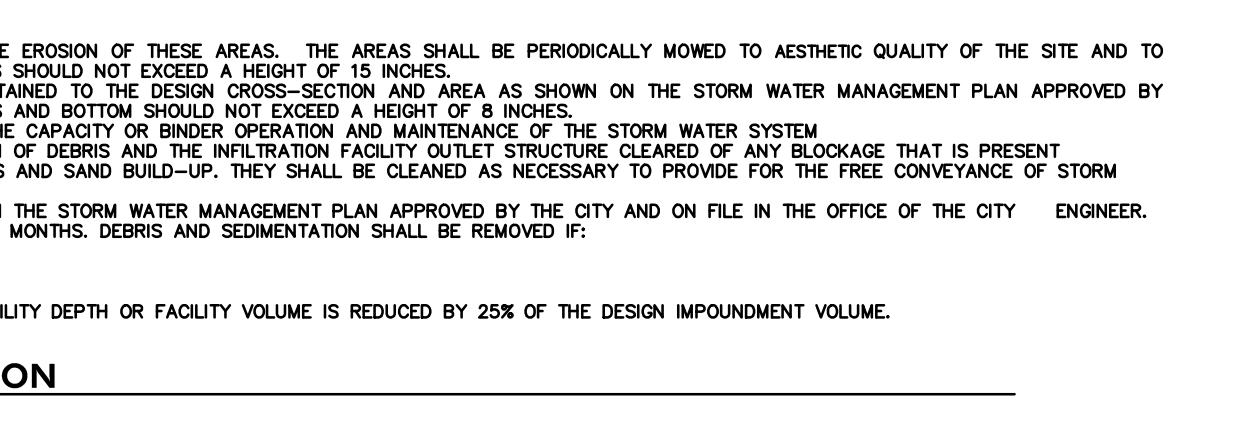
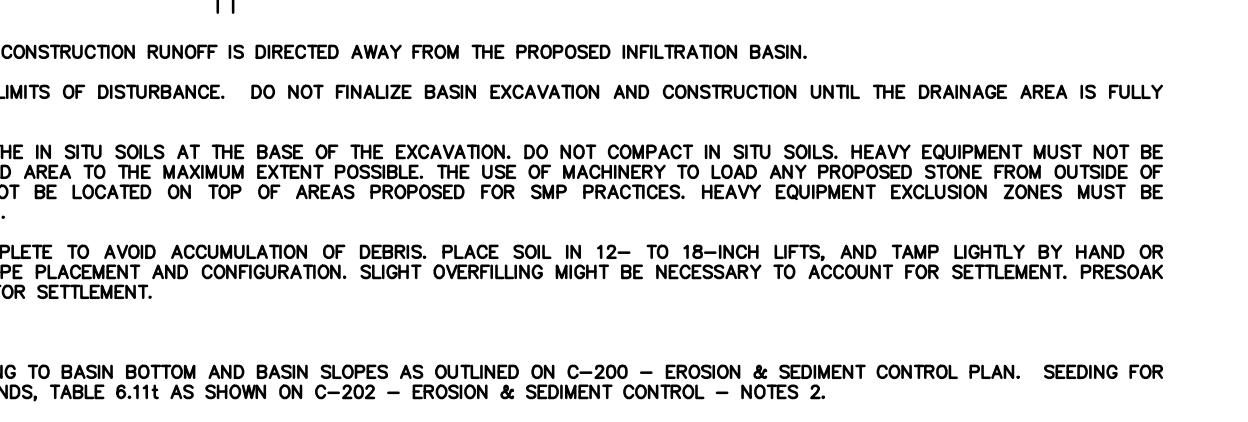
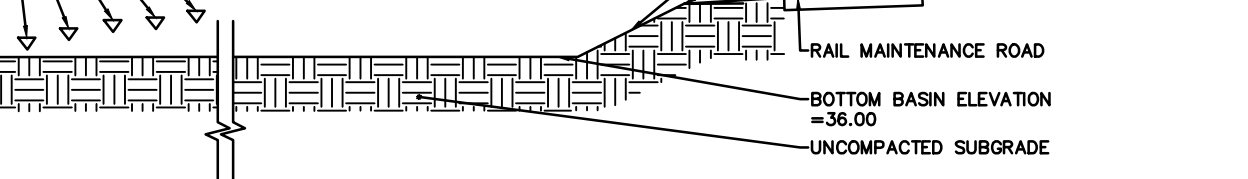
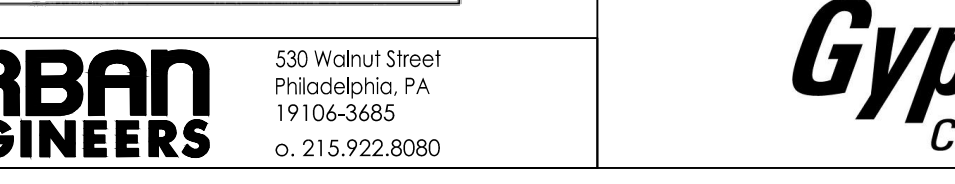
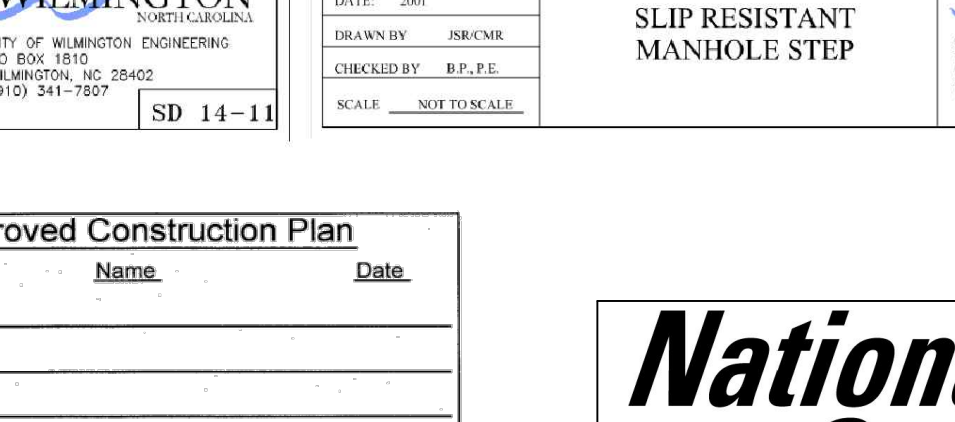
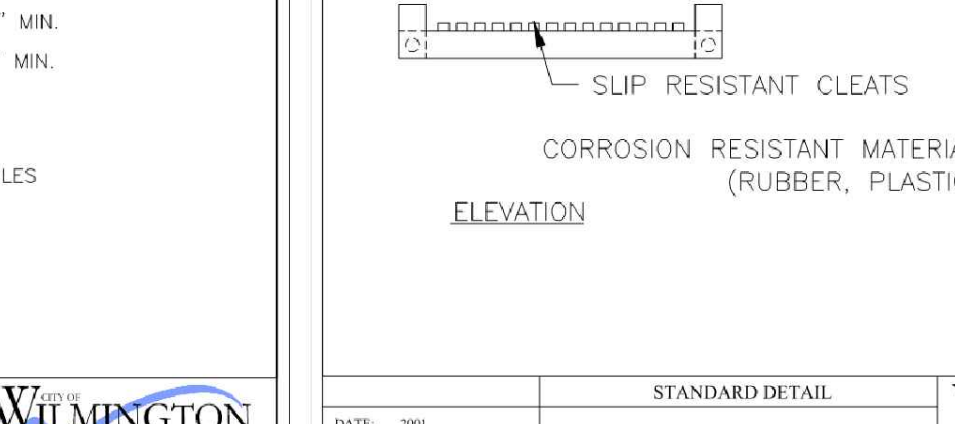
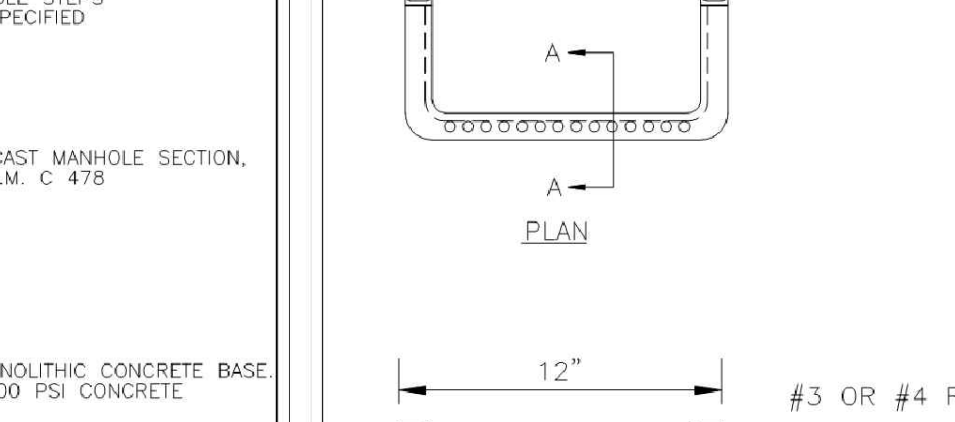
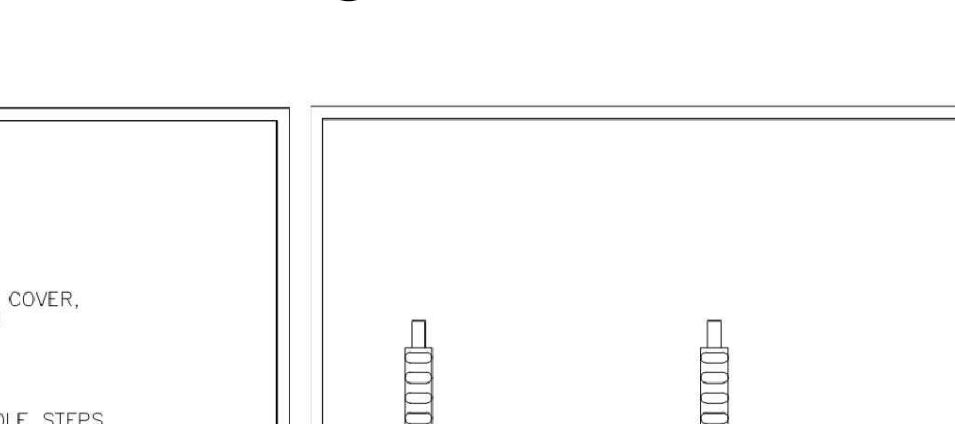
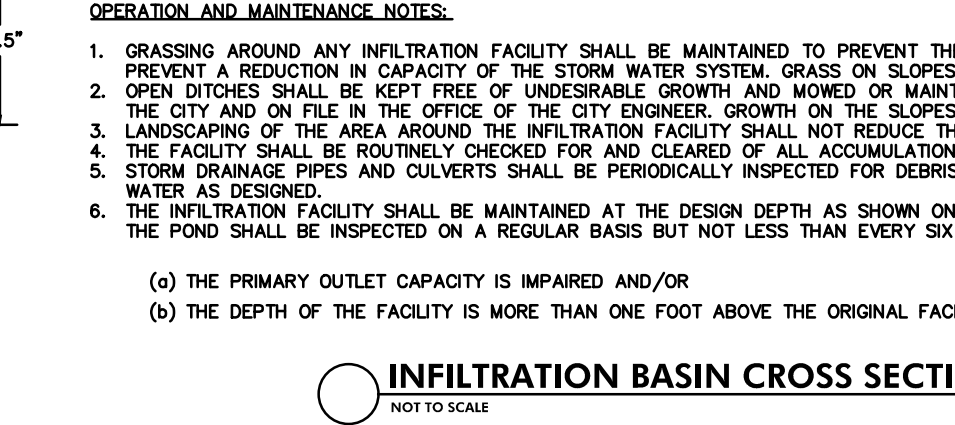
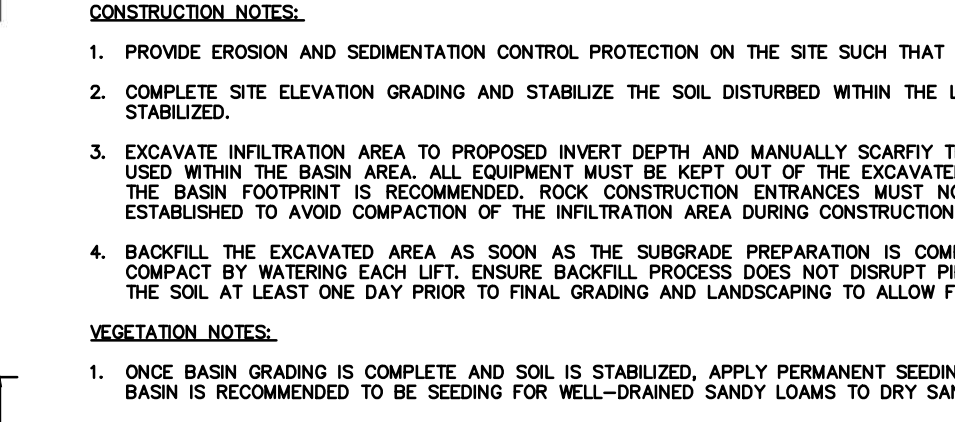
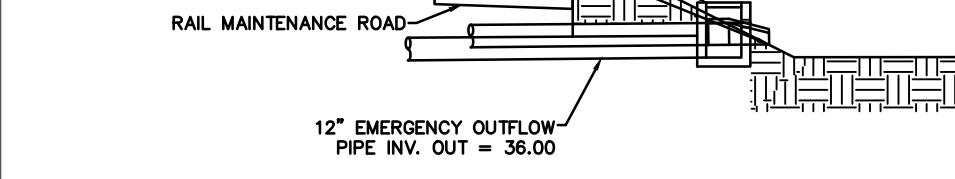
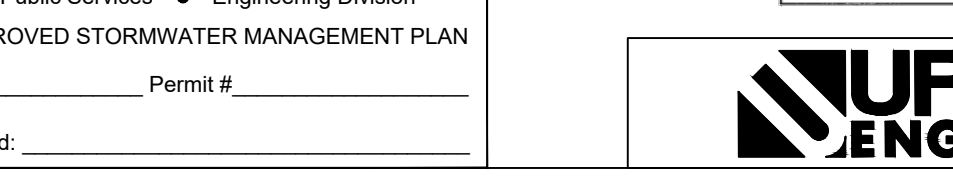
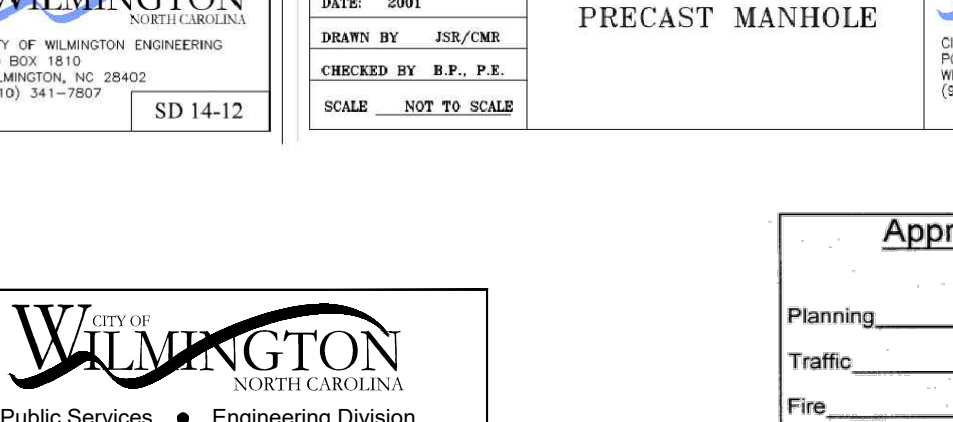
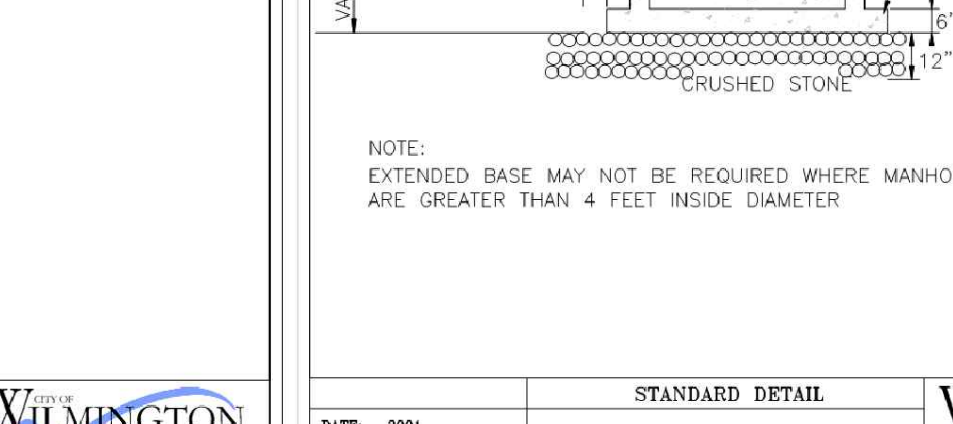
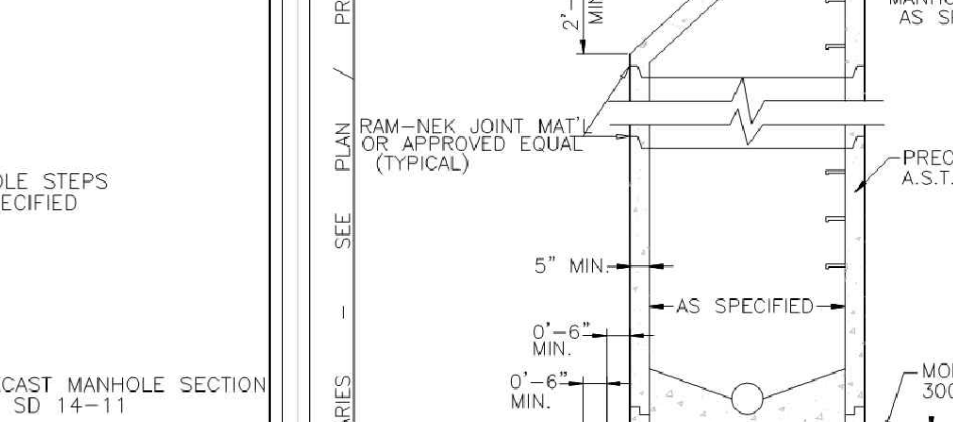
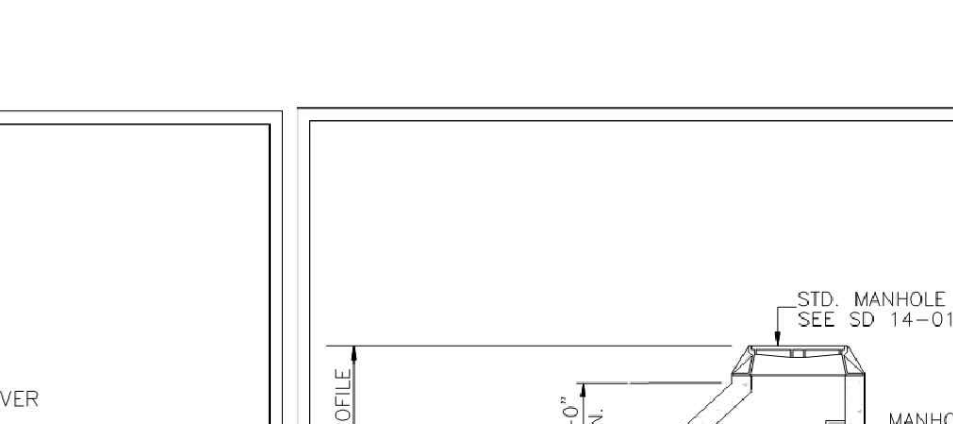
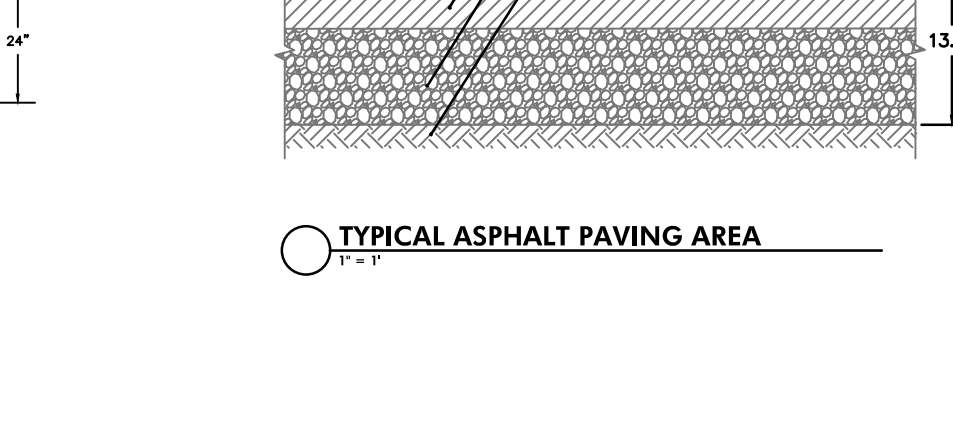
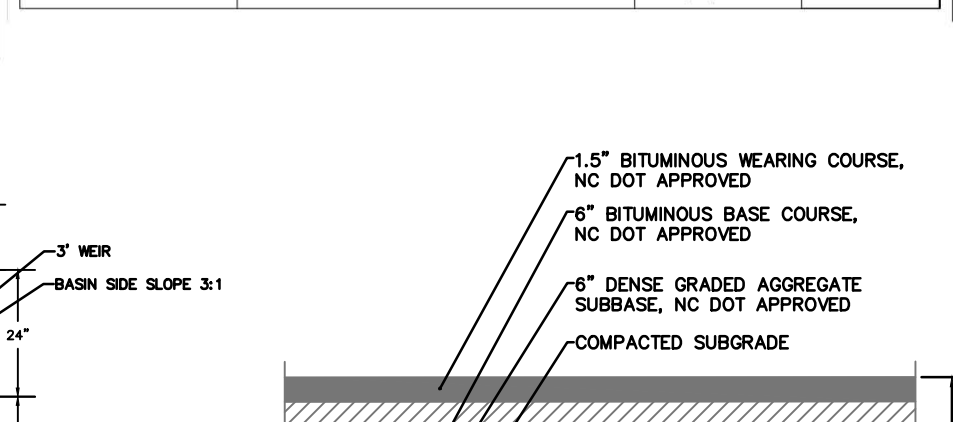
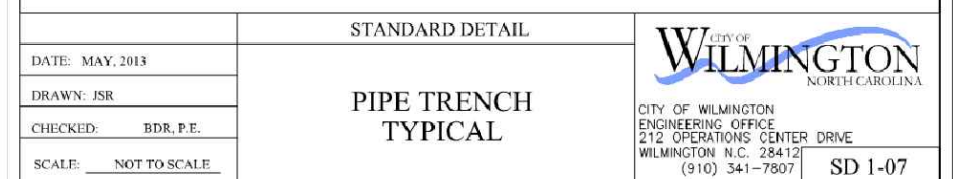
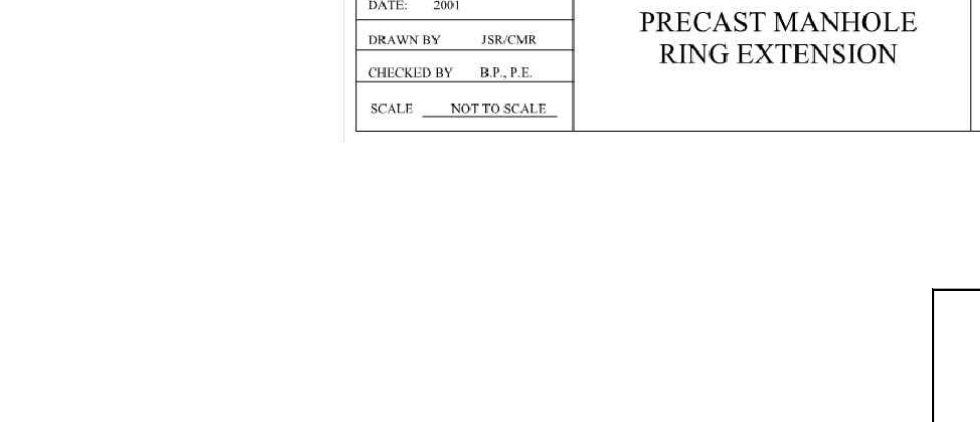
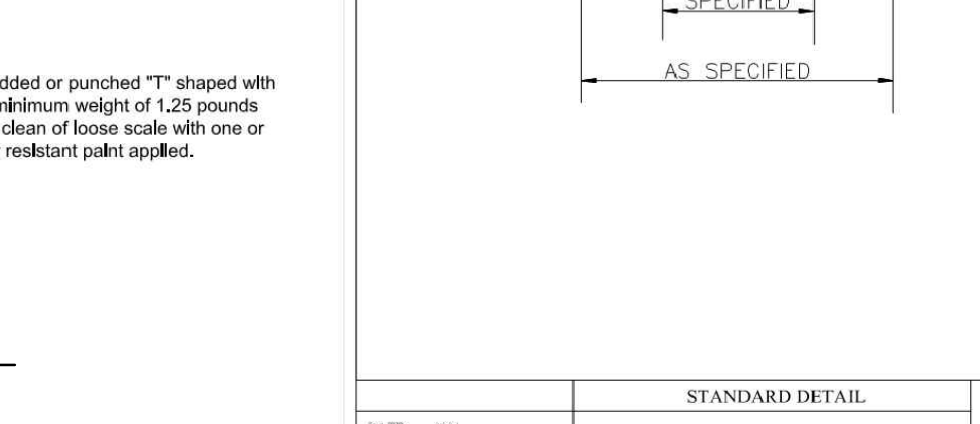
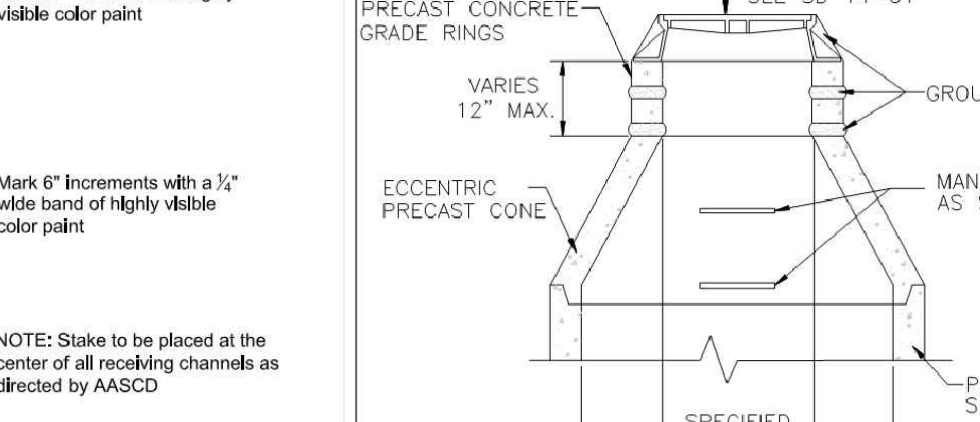
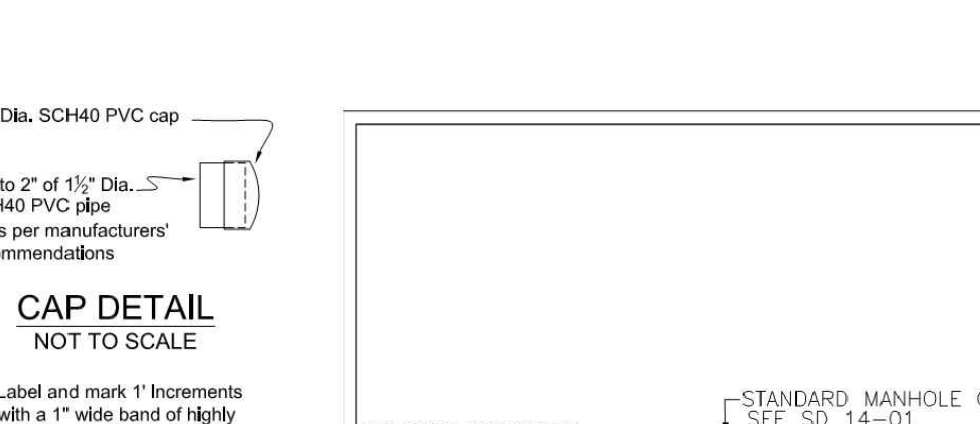
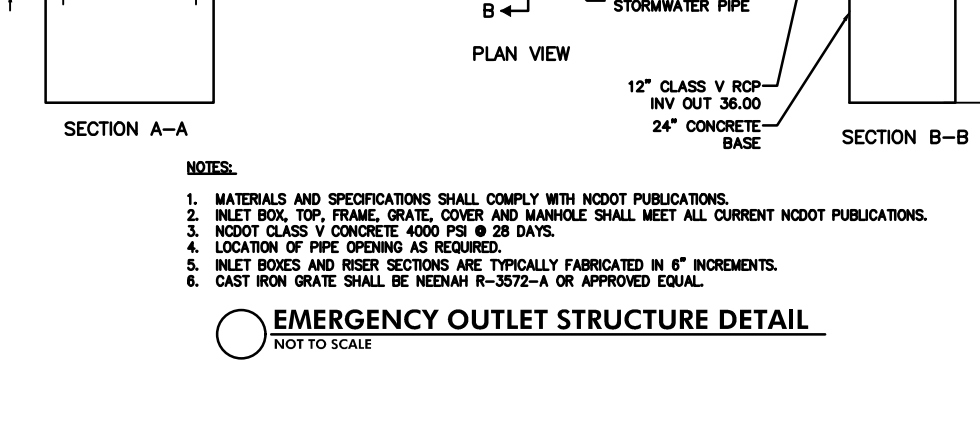
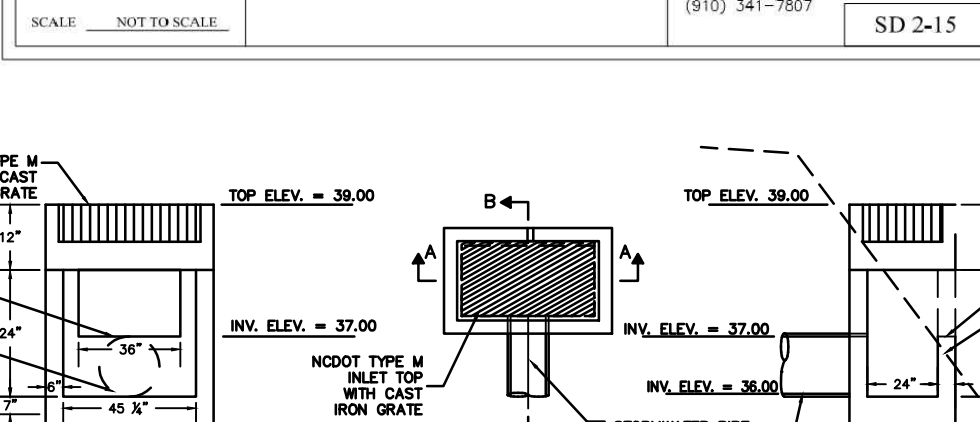
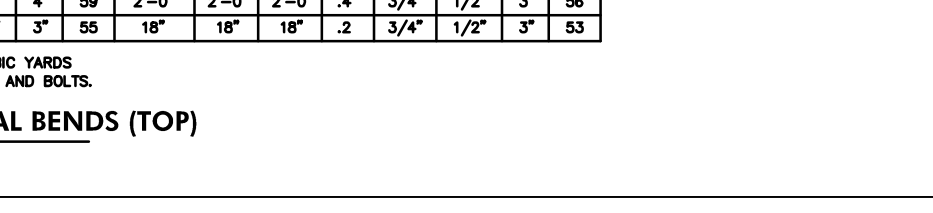
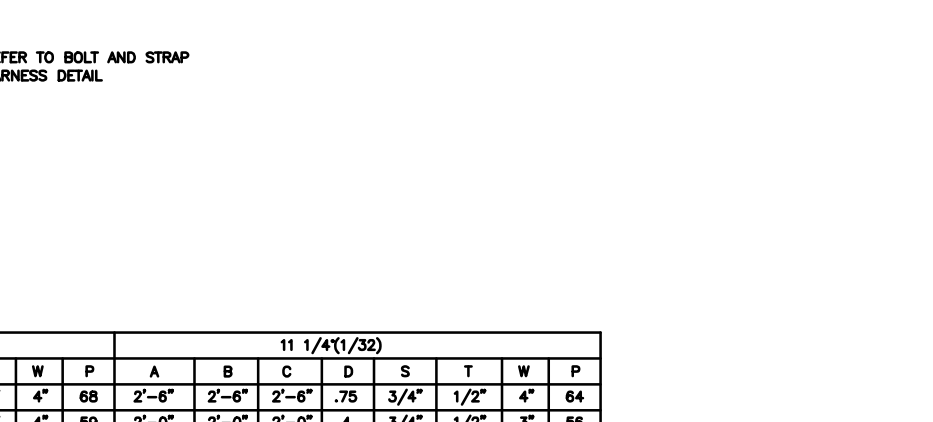
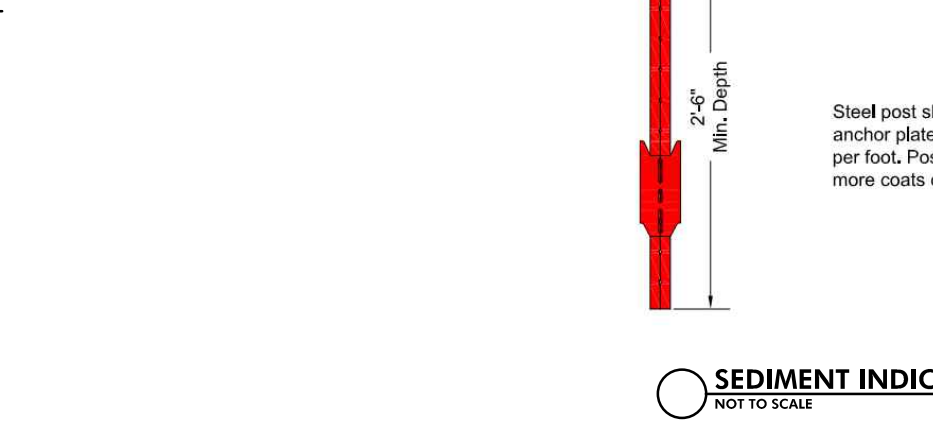
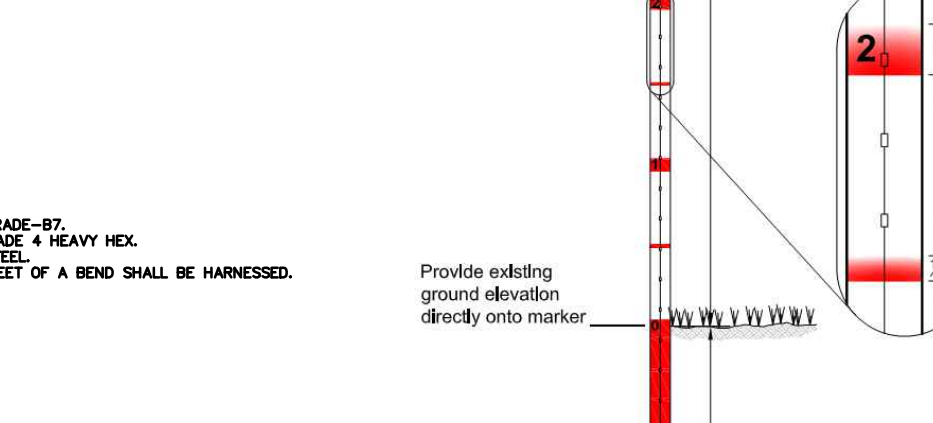
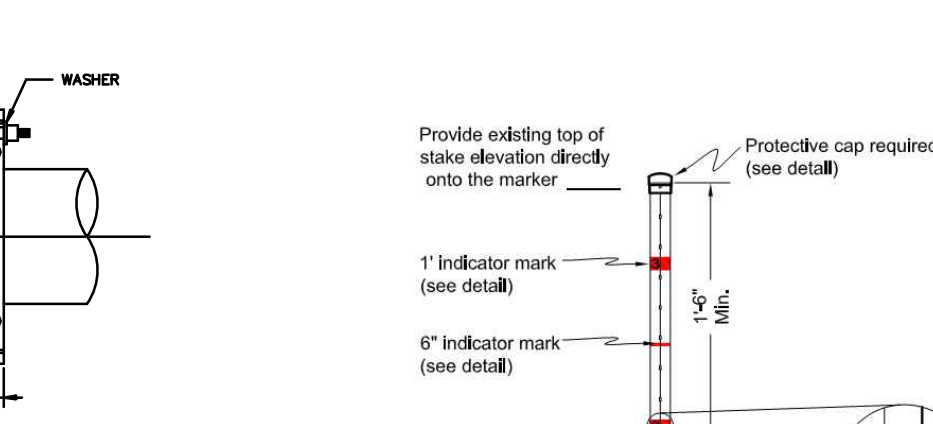
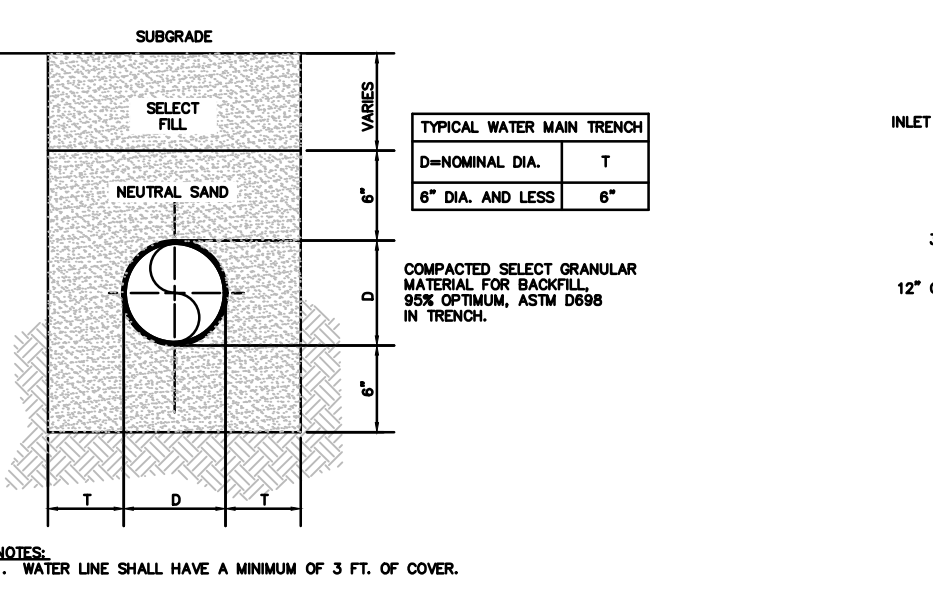
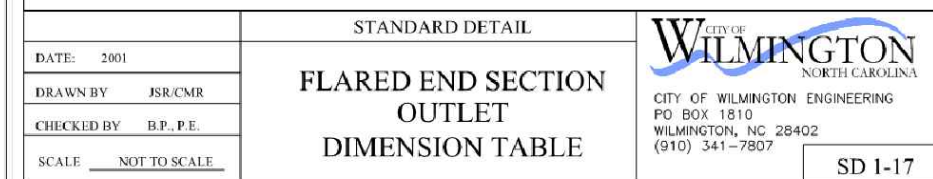
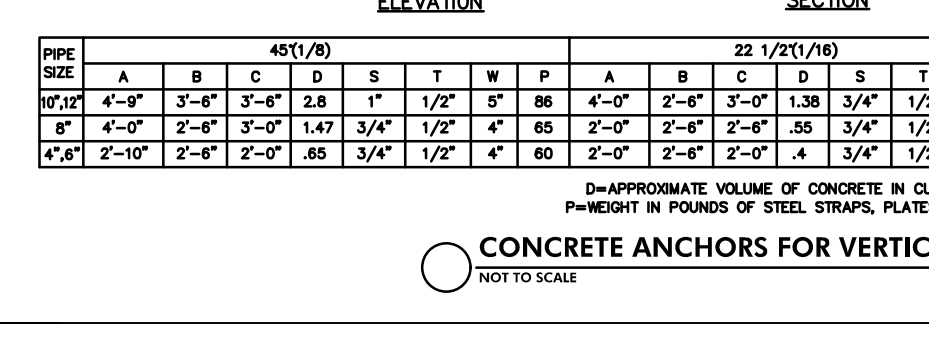
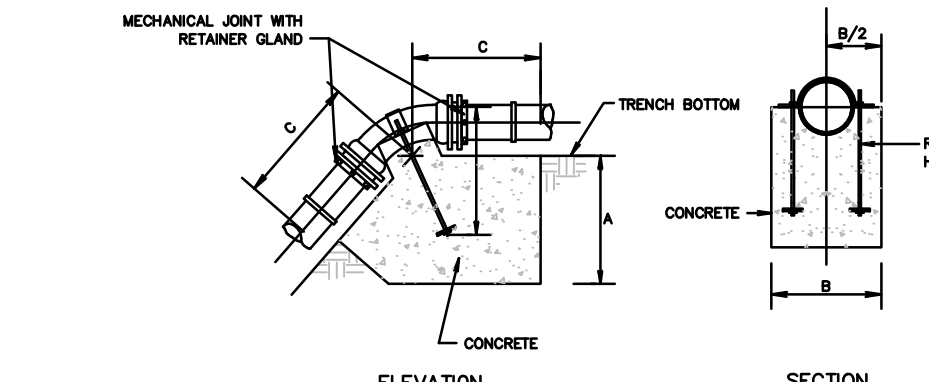
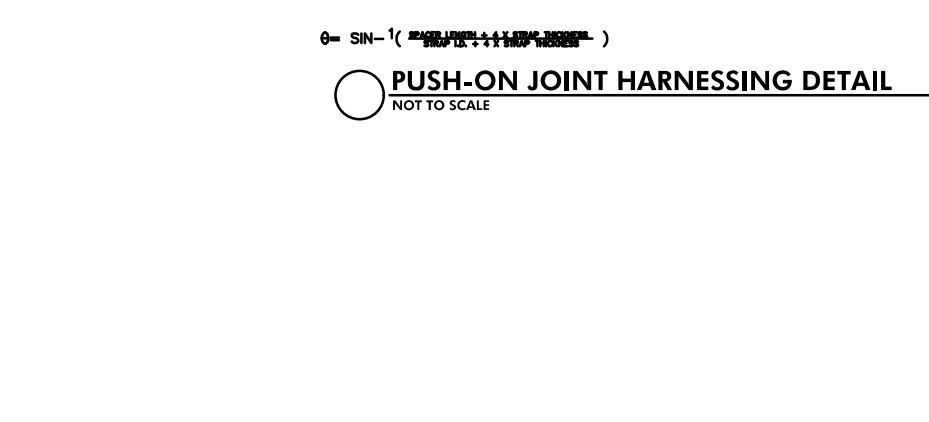
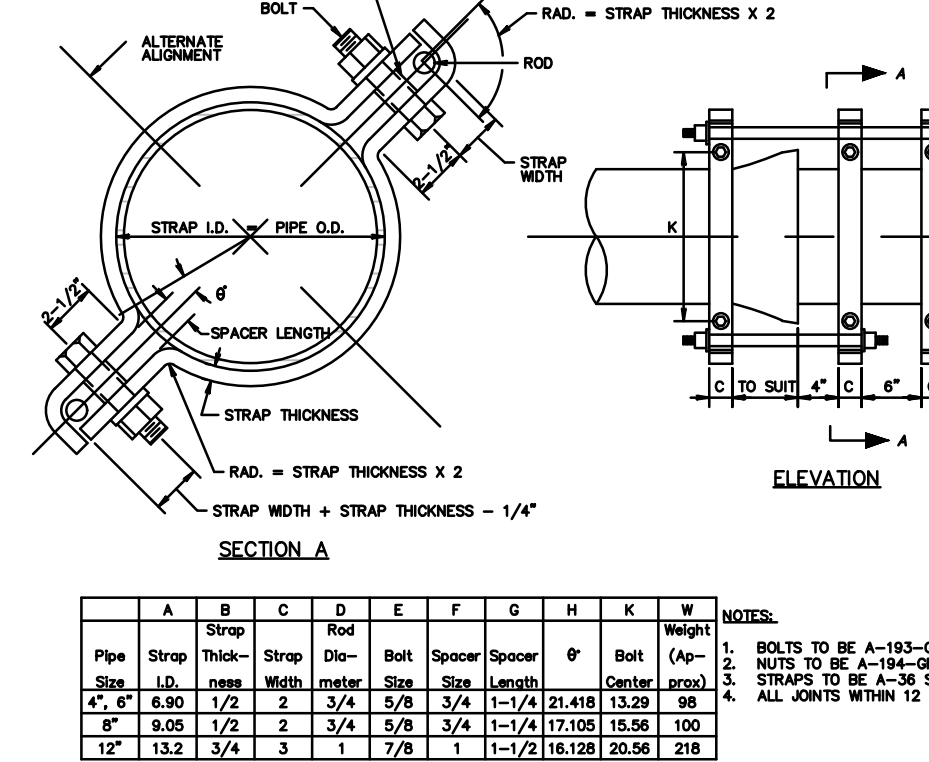
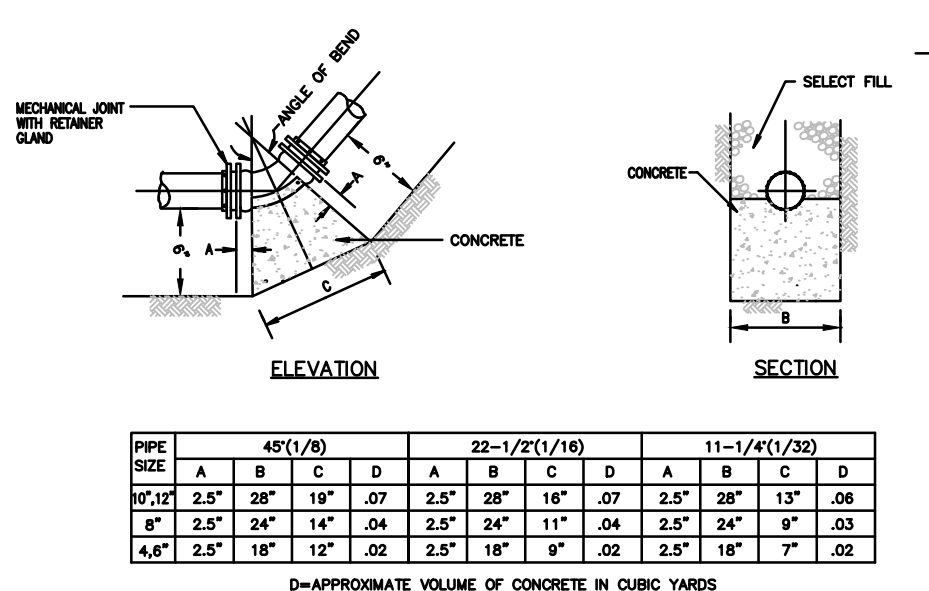
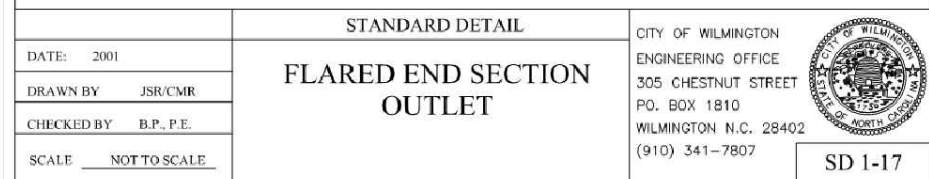
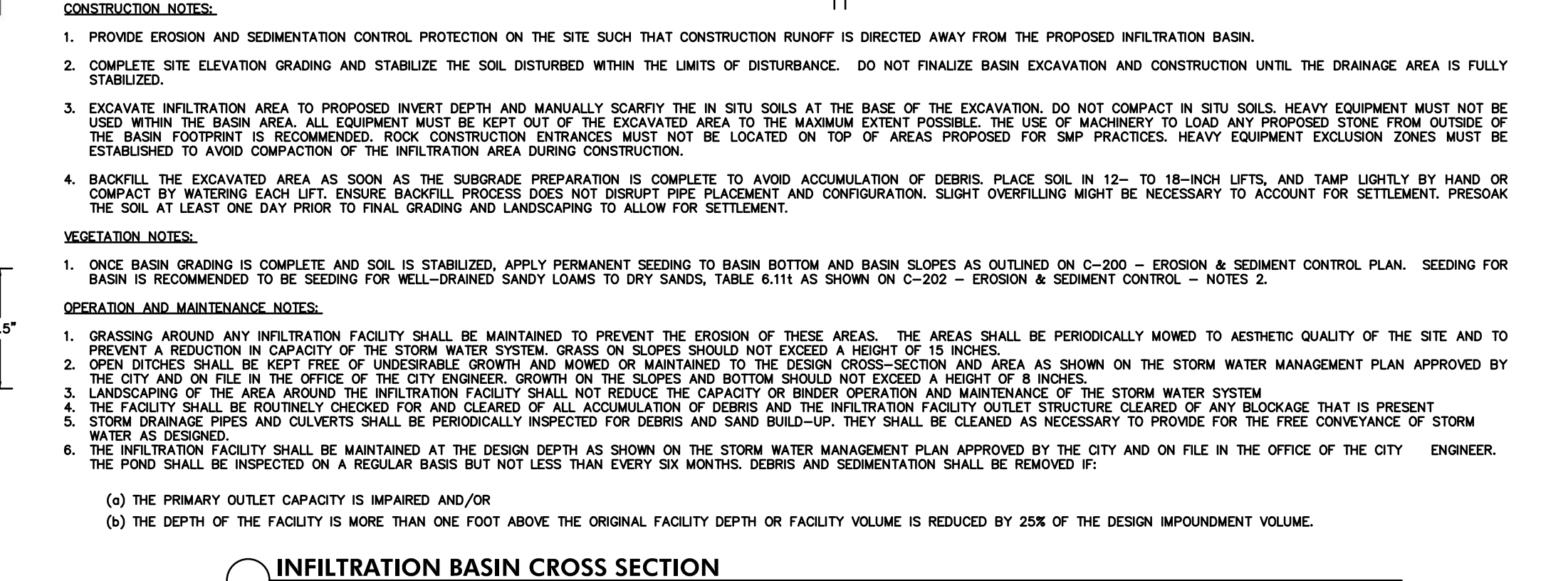
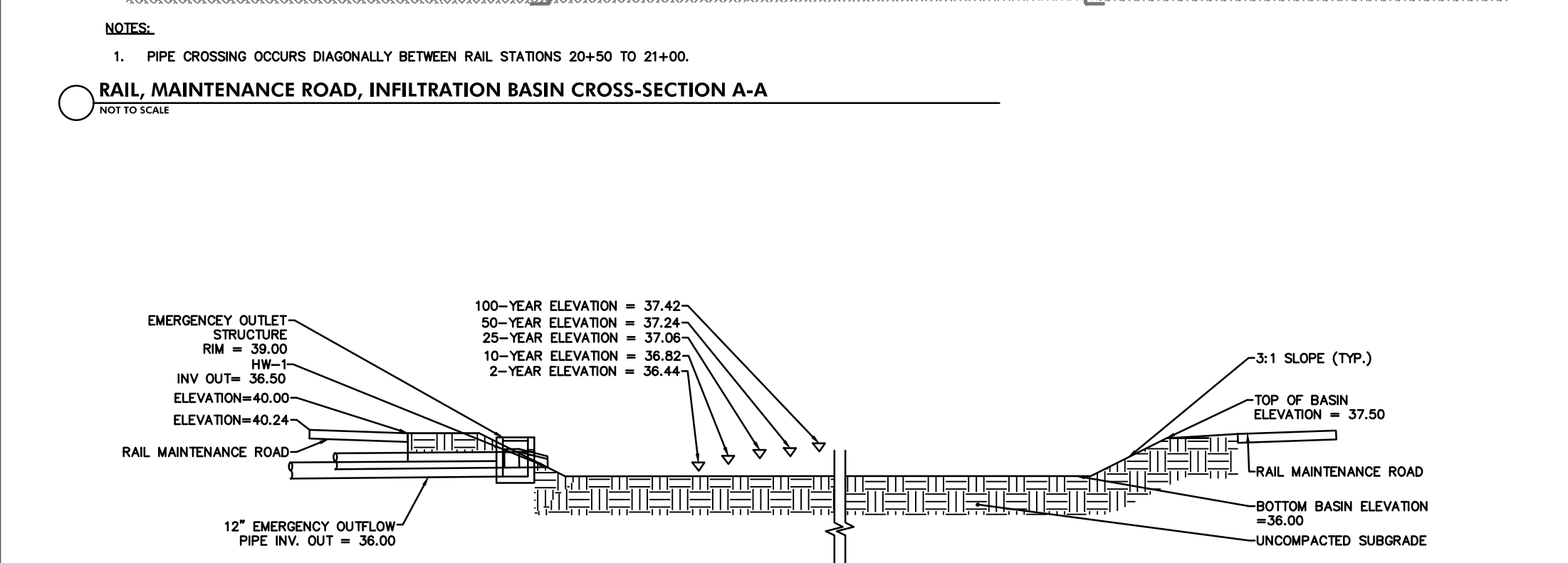
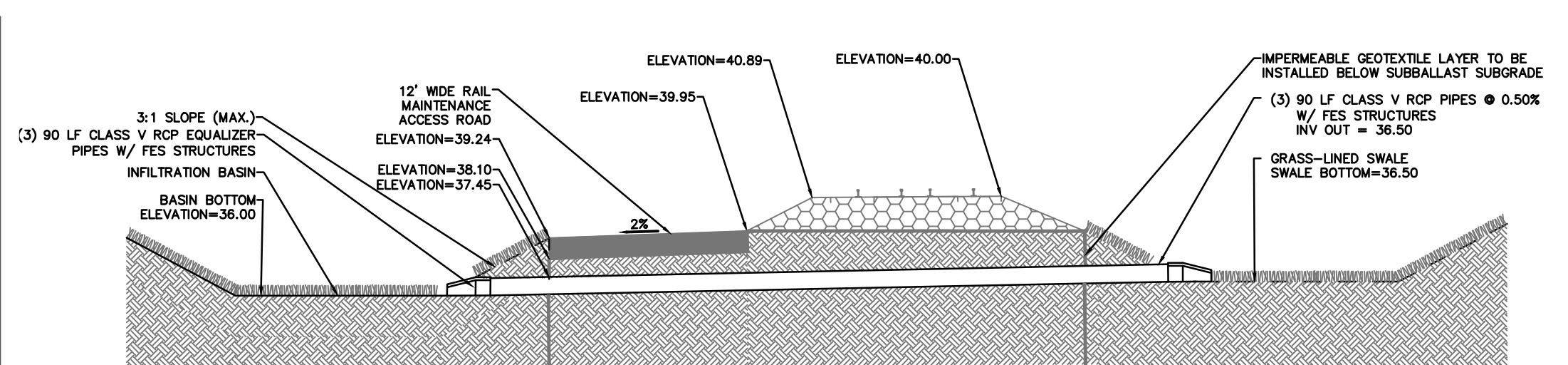
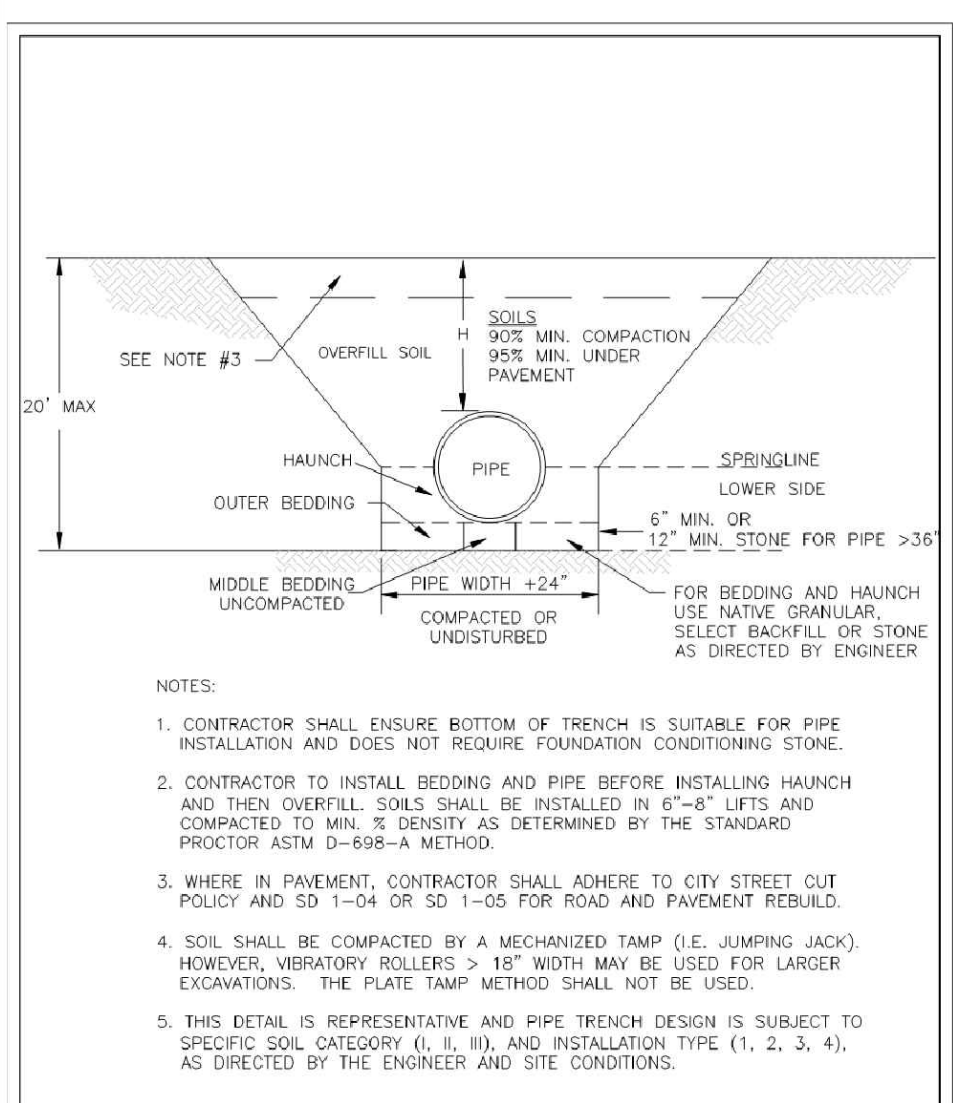
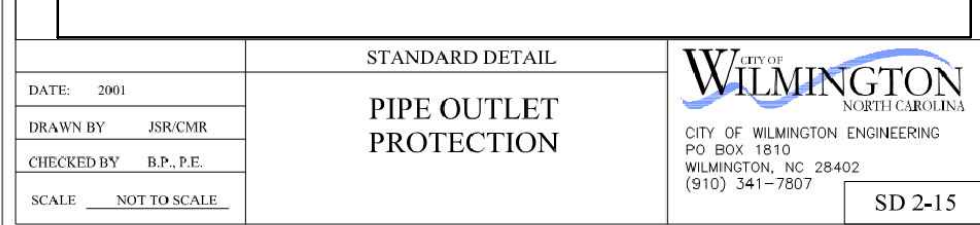
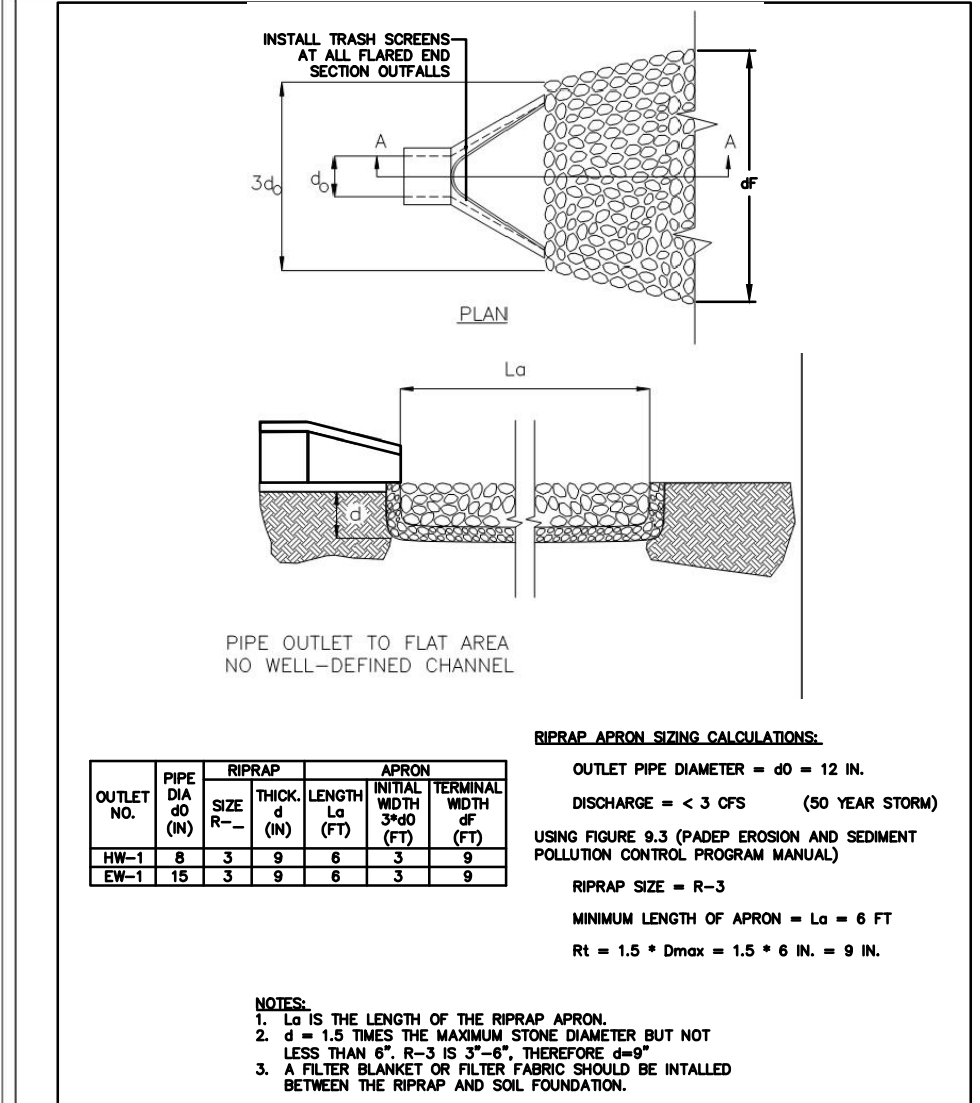
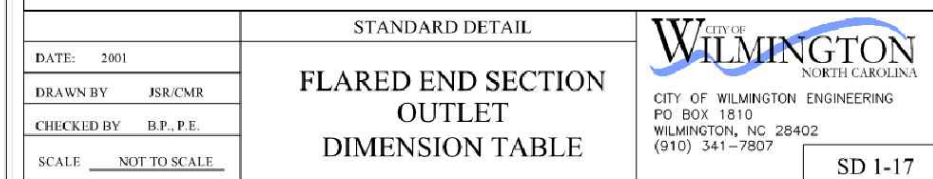
530 Walnut Street
 Philadelphia, PA
 19106-3685
 o. 215.922.8080



NOTE:
1. STRUCTURAL DESIGN OF END SECTION SHALL CONFORM WITH THAT OF STANDARD REINFORCED CONCRETE.

PIPE DIAMETER	WALL THICKNESS	SLOPE	B	C	D	E	UNIT WEIGHT
12	2 1/4	3:1	24	49	73	24	730
15	2 1/4	3:1	27	48	73	30	910
18	2 1/2	3:1	27	48	73	36	1190
21	2 3/4	3:1	36	37	73	42	1370
24	3	3:1	42	31	1/2	73	1770
27	3 1/4	3:1	48	25	1/2	73	2130
30	3 1/2	3:1	54	19	3/4	73	2380
33	3 3/4	3:1	60	36	96	66	3870
36	4	3:1	63	34	3/4	97	5320
42	4 1/2	3:1	63	35	98	78	5920
48	5	3:1	72	26	98	84	7470
54	5 1/2	2.4:1	66	34	100	90	8810
60	6	2:1	60	39	99	96	11180
72	7	2:1	78	21	99	108	13880

DIMENSIONS IN INCHES WEIGHTS IN POUNDS



Approved Construction Plan

Name: _____ Date: _____

Planning: _____

Traffic: _____

Fire: _____

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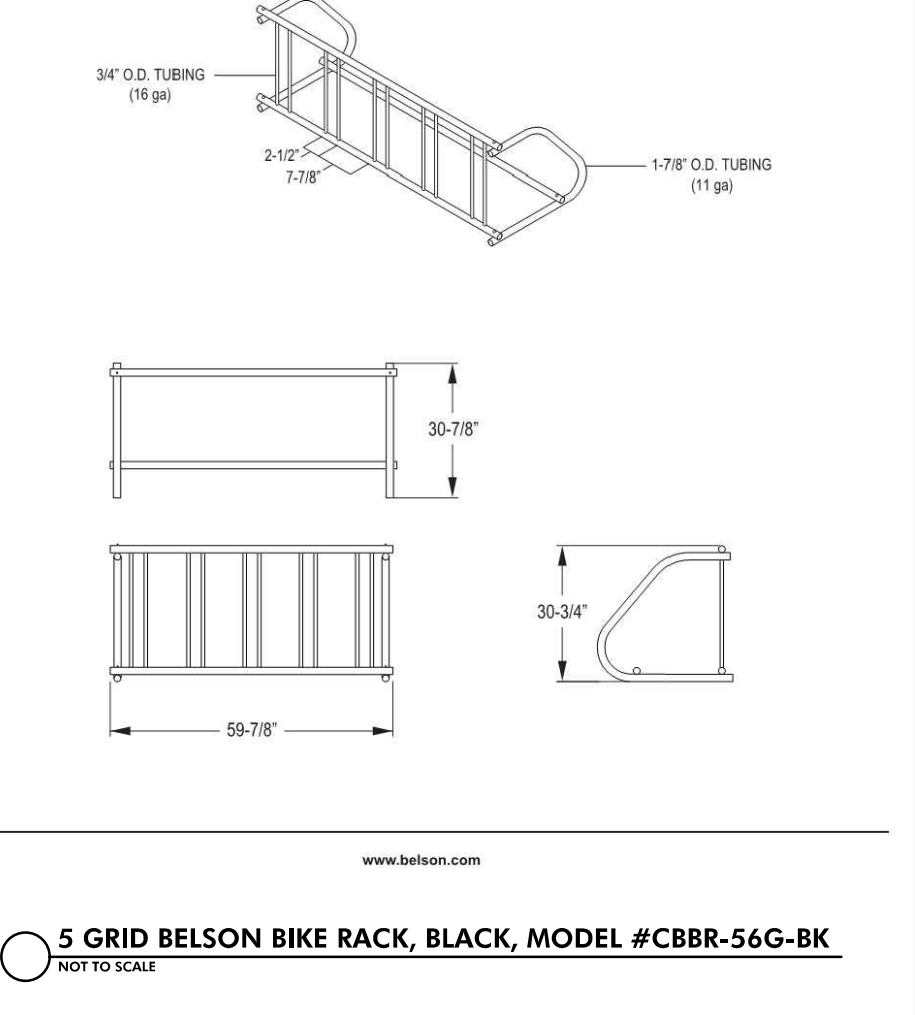
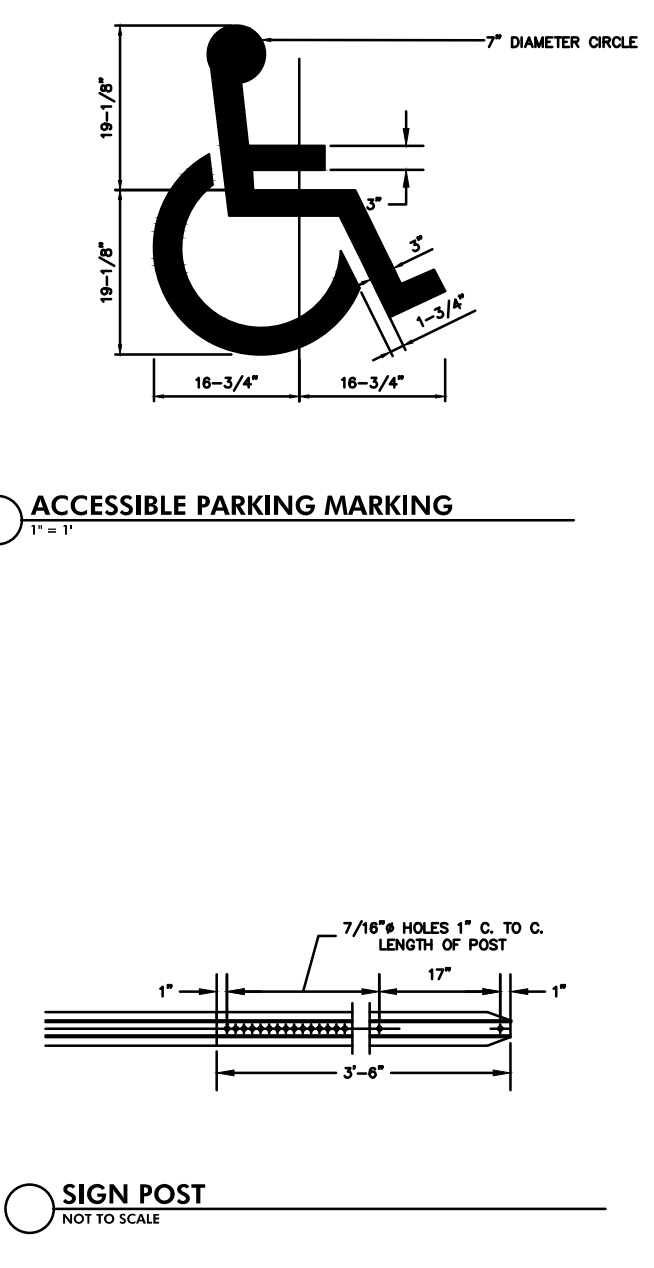
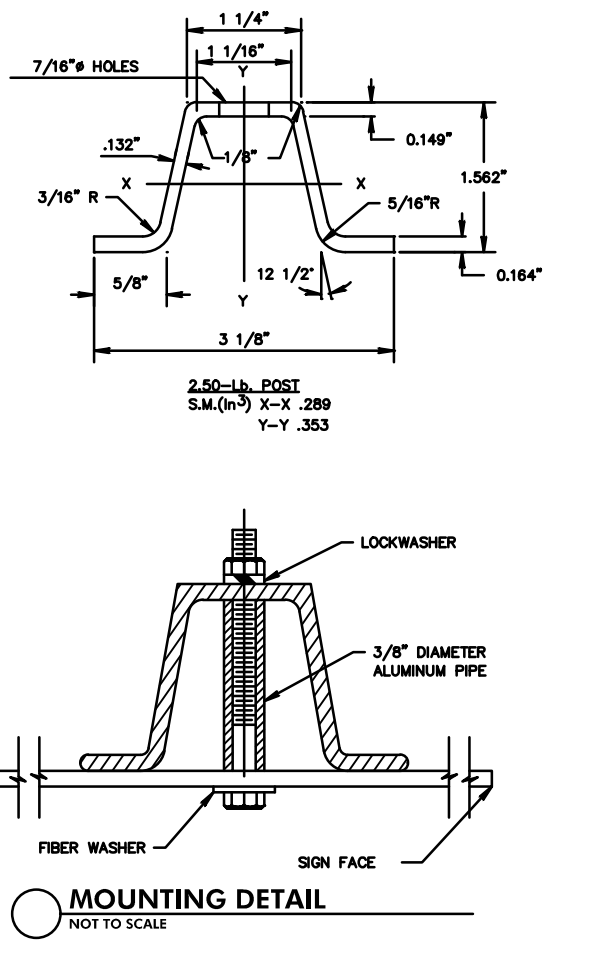
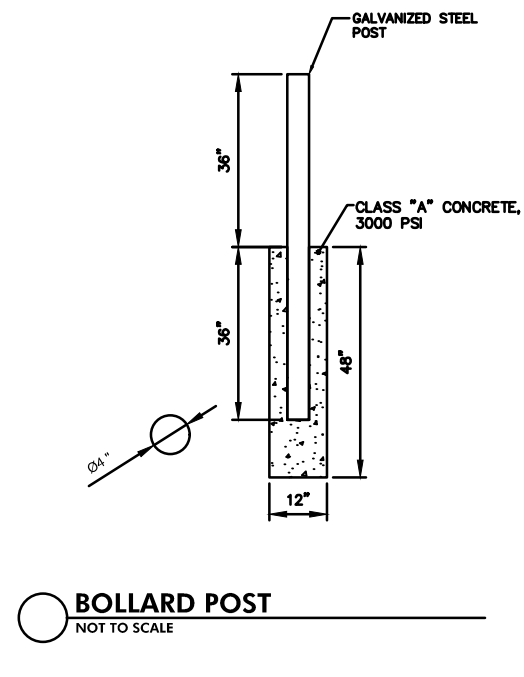
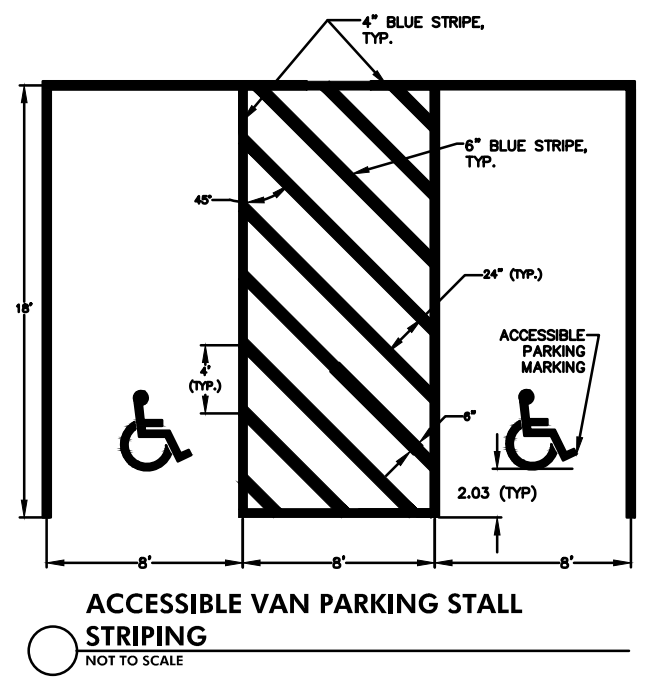
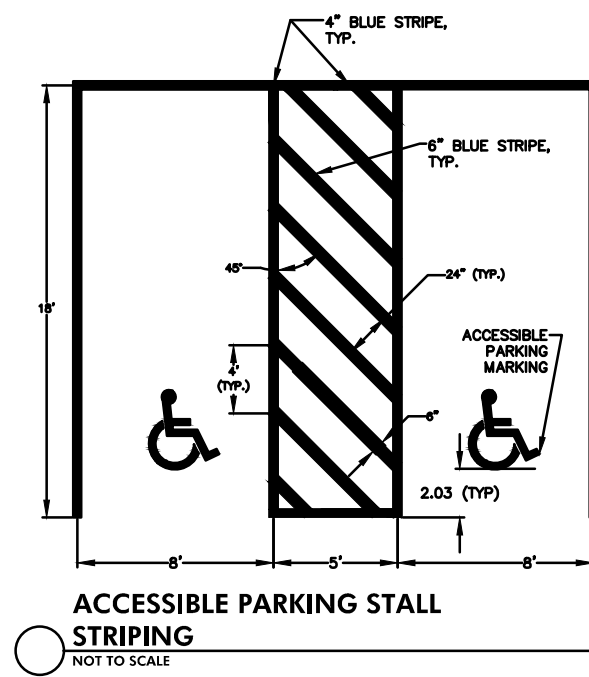
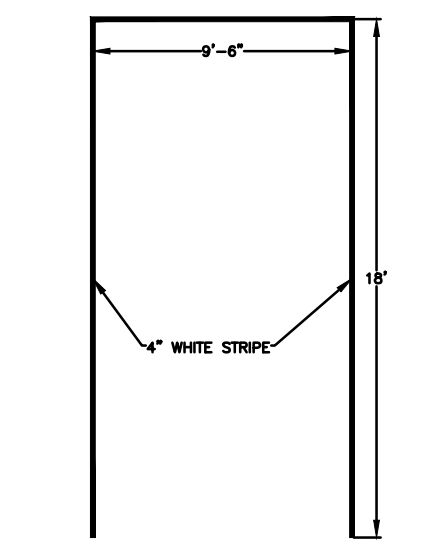
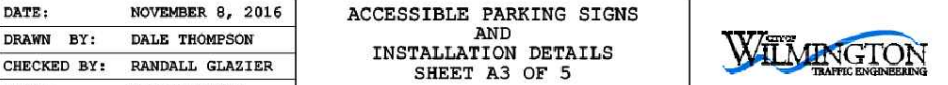
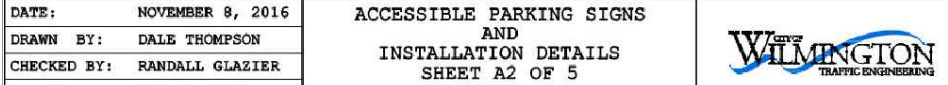
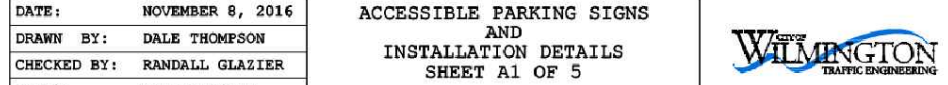
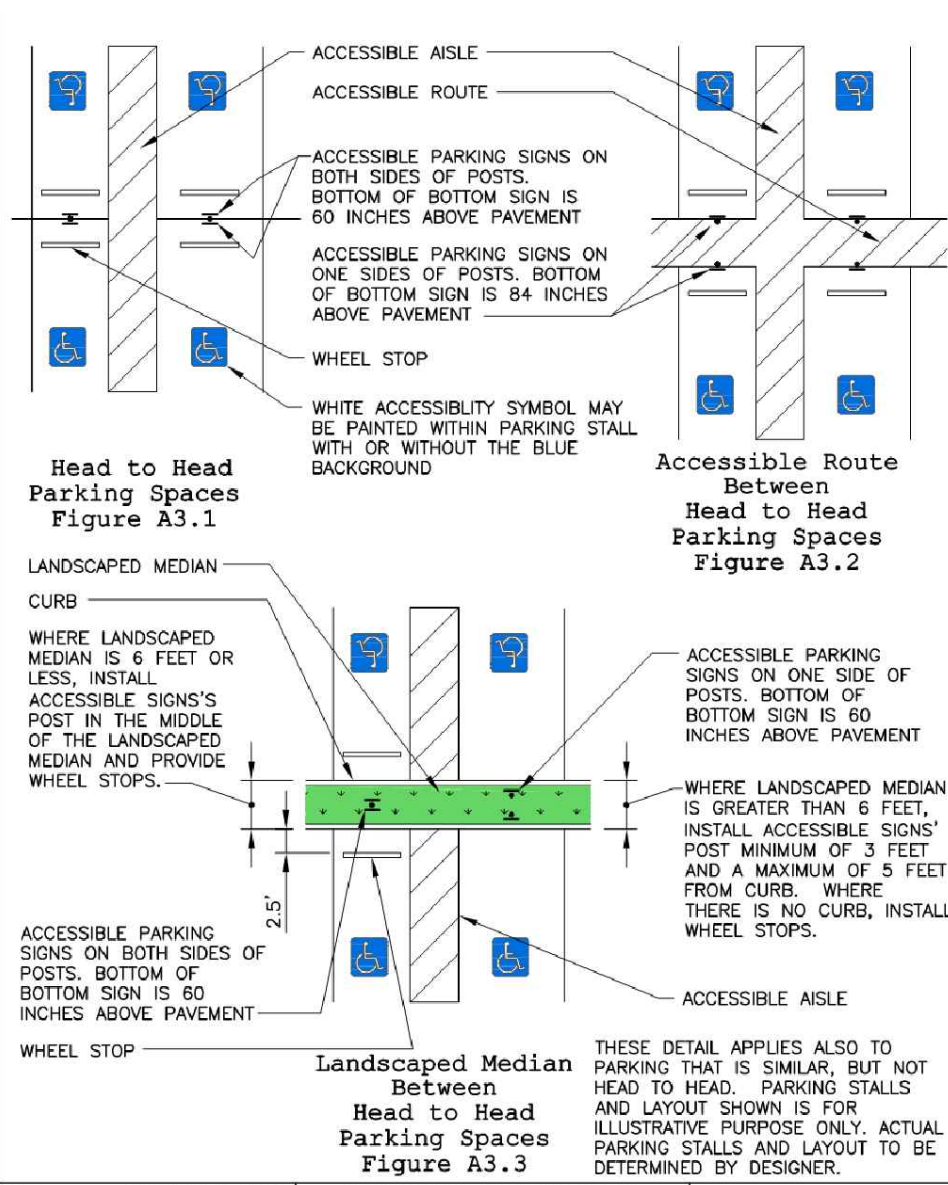
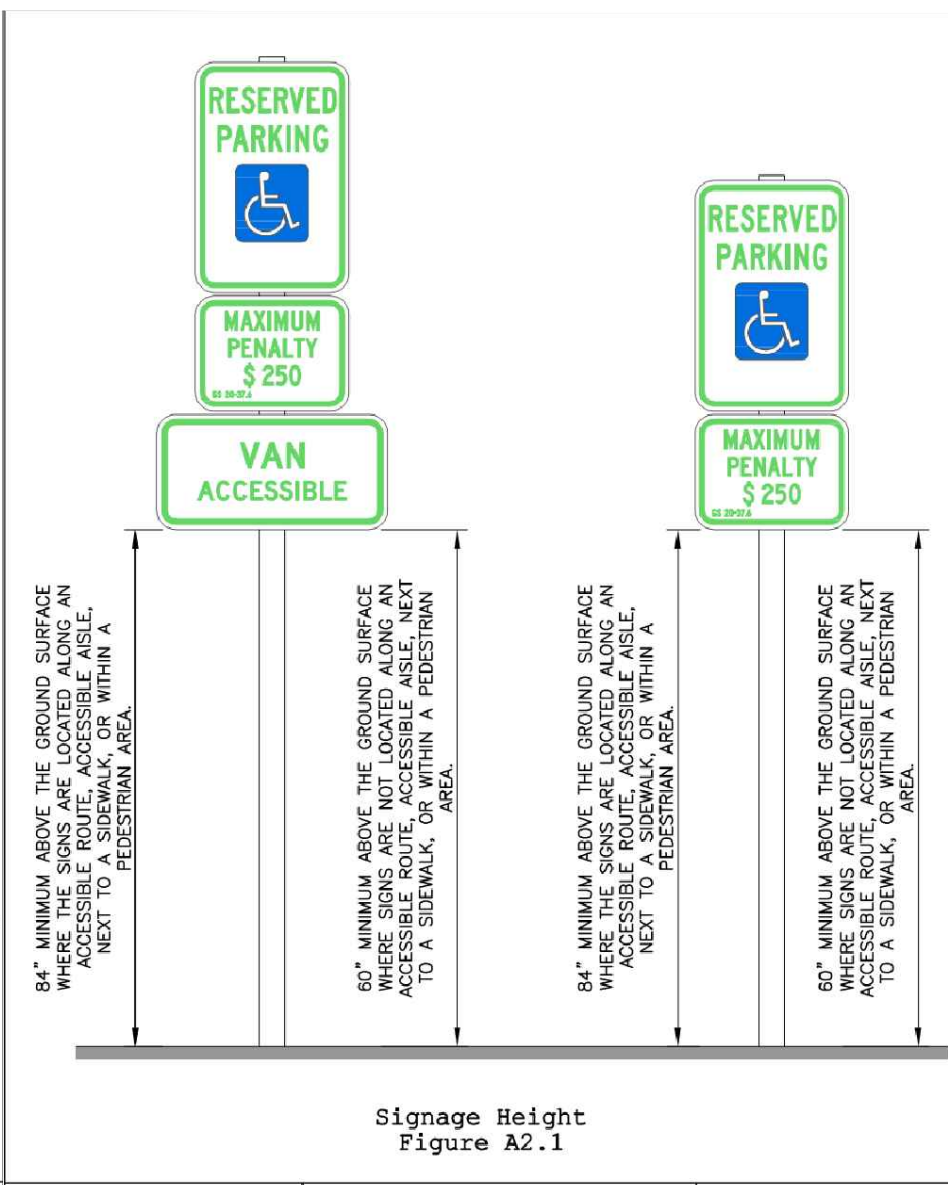
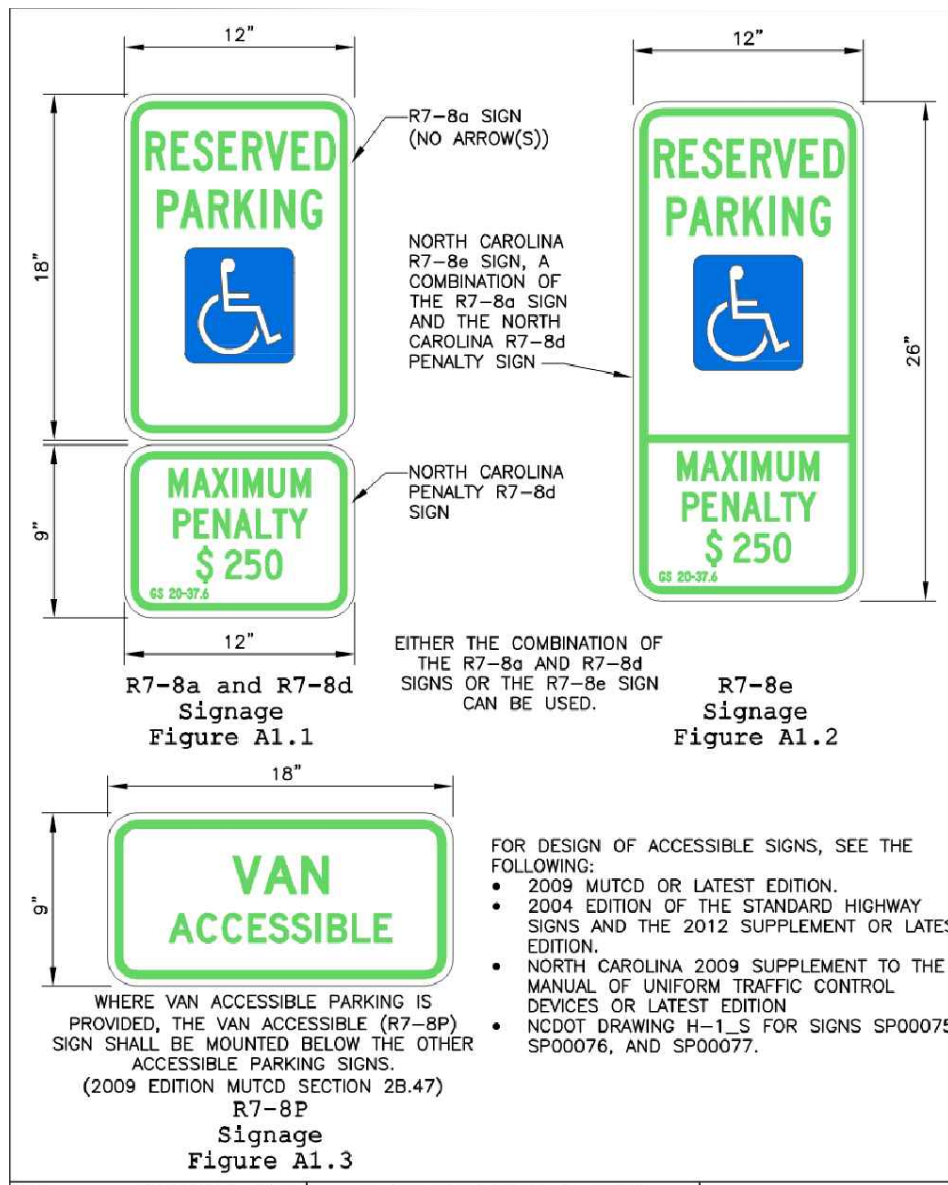
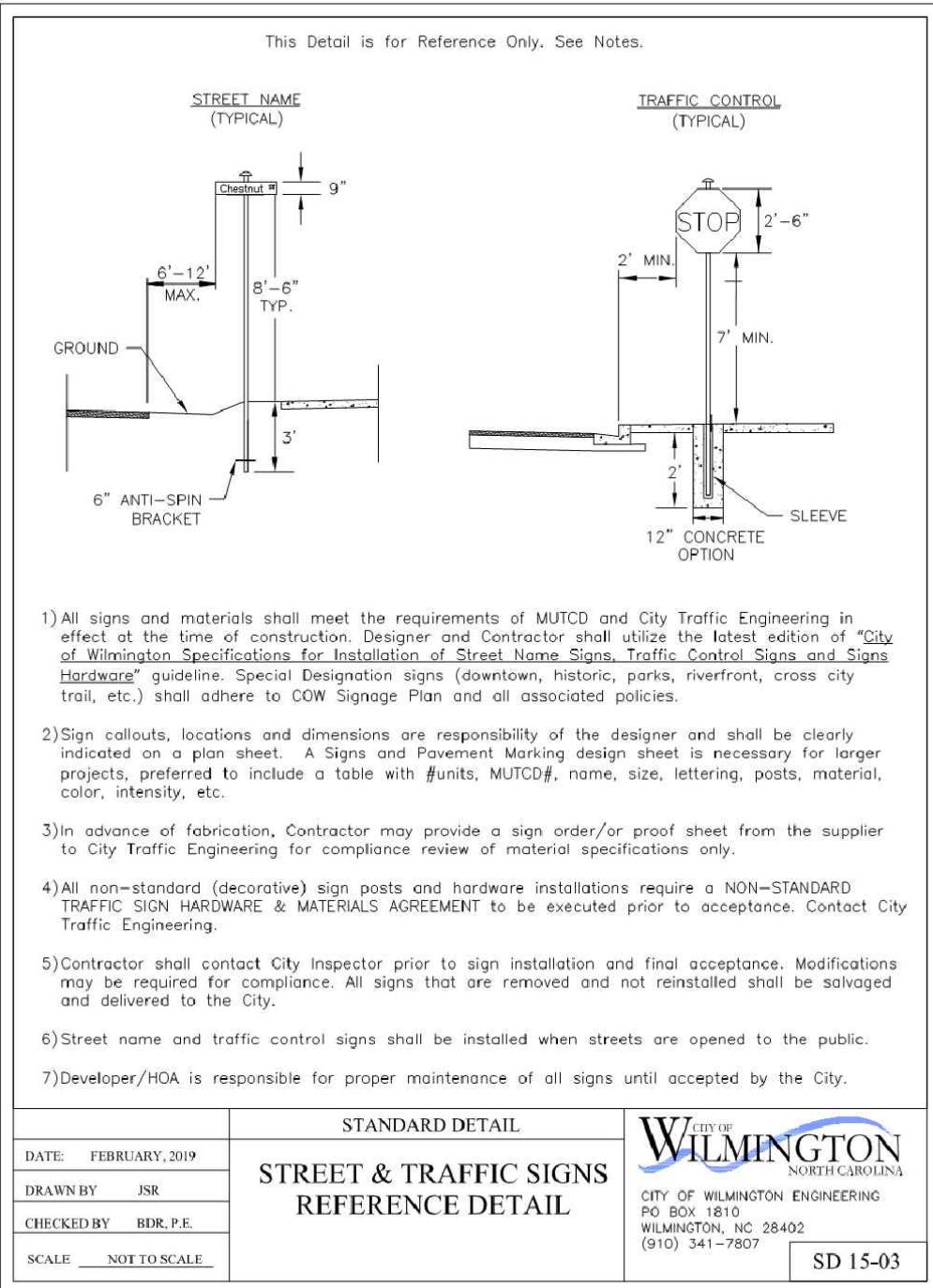
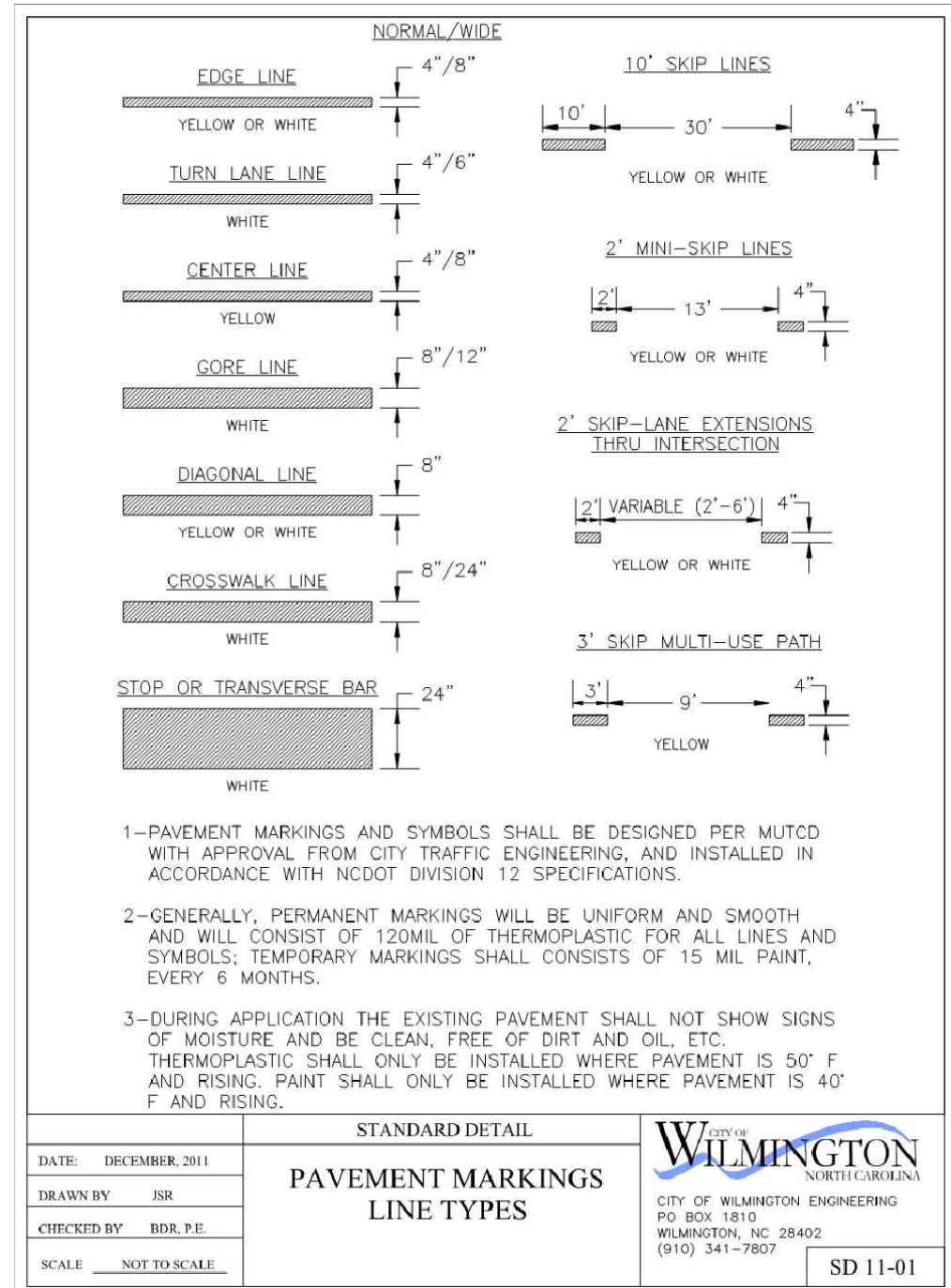
National Gypsum COMPANY

WILMINGTON WALLBOARD PLANT
PROPOSED INDUSTRIAL SIDETRACK &
STORMWATER MANAGEMENT IMPROVEMENTS
CONSTRUCTION DETAILS - 1

DATE: 03/30/2020
DRAWING NUMBER: C-600

PIPE SIZE	45°(1/8)										22-1/2(1/16)										11-1/4(1/32)									
	A	B	C	D	E	F	G	H	K	W	A	B	C	D	E	F	G	H	K	W	A	B	C	D	E	F	G	H	K	W
12"	4'-0"	3'-6"	3'-0"	2'-8"	2'-4"	2'-0"	1'-8"	1'-4"	1'-0"	0'-8"	4'-0"	3'-6"	3'-0"	2'-8"	2'-4"	2'-0"	1'-8"	1'-4"	1'-0"	0'-8"	4'-0"	3'-6"	3'-0"	2'-8"	2'-4"	2'-0"	1'-8"	1'-4"	1'-0"	0'-8"
15"	4'-0"	3'-6"	3'-0"	2'-8"	2'-4"	2'-0"	1'-8"	1'-4"	1'-0"	0'-8"	4'-0"	3'-6"	3'-0"	2'-8"	2'-4"	2'-0"	1'-8"	1'-4"	1'-0"	0'-8"	4'-0"	3'-6"	3'-0"	2'-8"	2'-4"	2'-0"	1'-8"	1'-4"	1'-0"	0'-8"
18"	4'-0"	3'-6"	3'-0"	2'-8"	2'-4"	2'-0"	1'-8"	1'-4"	1'-0"	0'-8"	4'-0"	3'-6"	3'-0"	2'-8"	2'-4"	2'-0"	1'-8"	1'-4"	1'-0"	0'-8"	4'-0"	3'-6"	3'-0"	2'-8"	2'-4"	2'-0"	1'-8"	1'-4"	1'-0"	0'-8"

D=APPROXIMATE VOLUME OF CONCRETE IN CUBIC YARDS
W=WEIGHT IN POUNDS OF STEEL STRAPS, PLATES AND BOLTS.



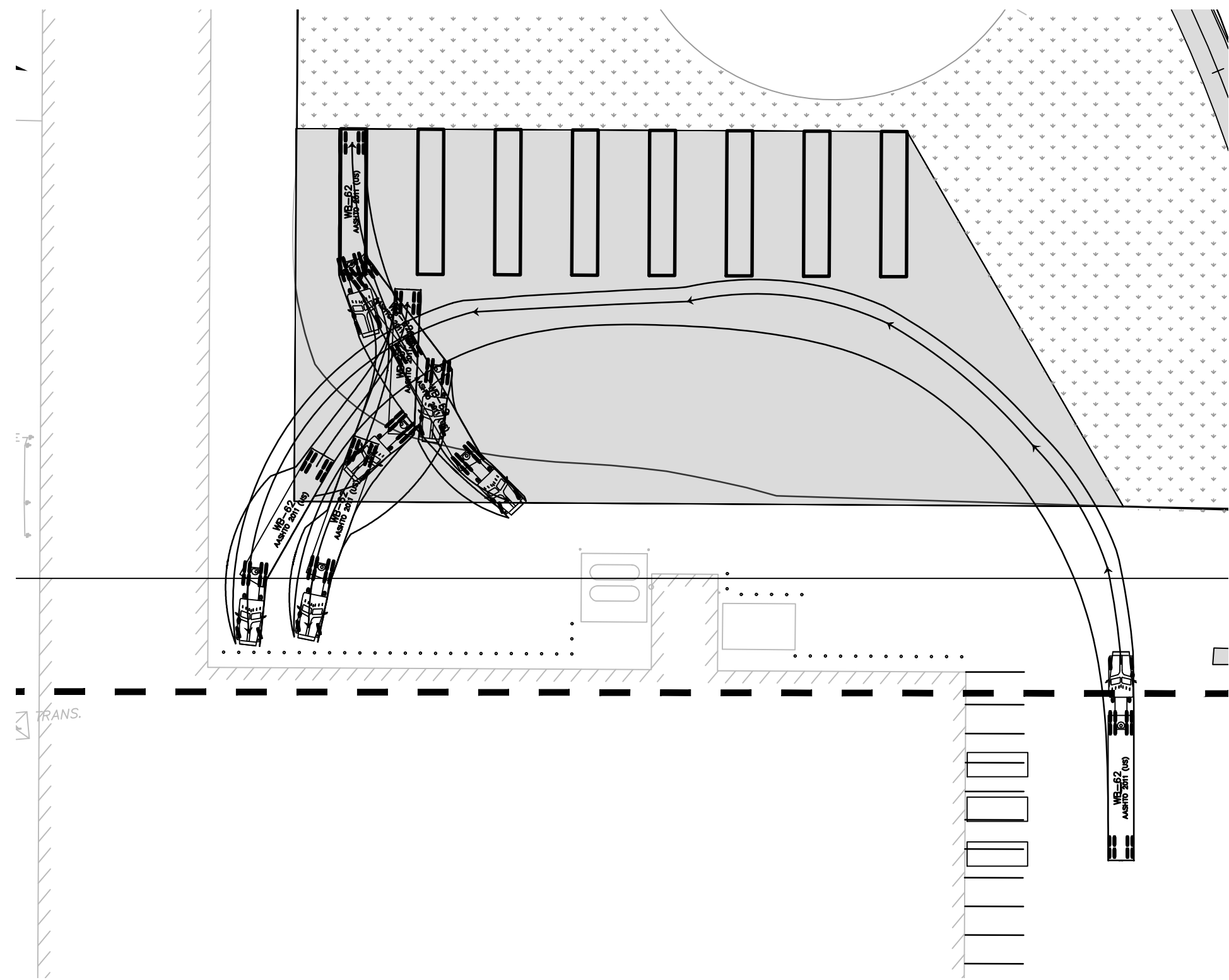
CITY OF WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: Permit #
 Signed: _____

Approved Construction Plan
 Name: _____ Date: _____
 Planning: _____
 Traffic: _____
 Fire: _____

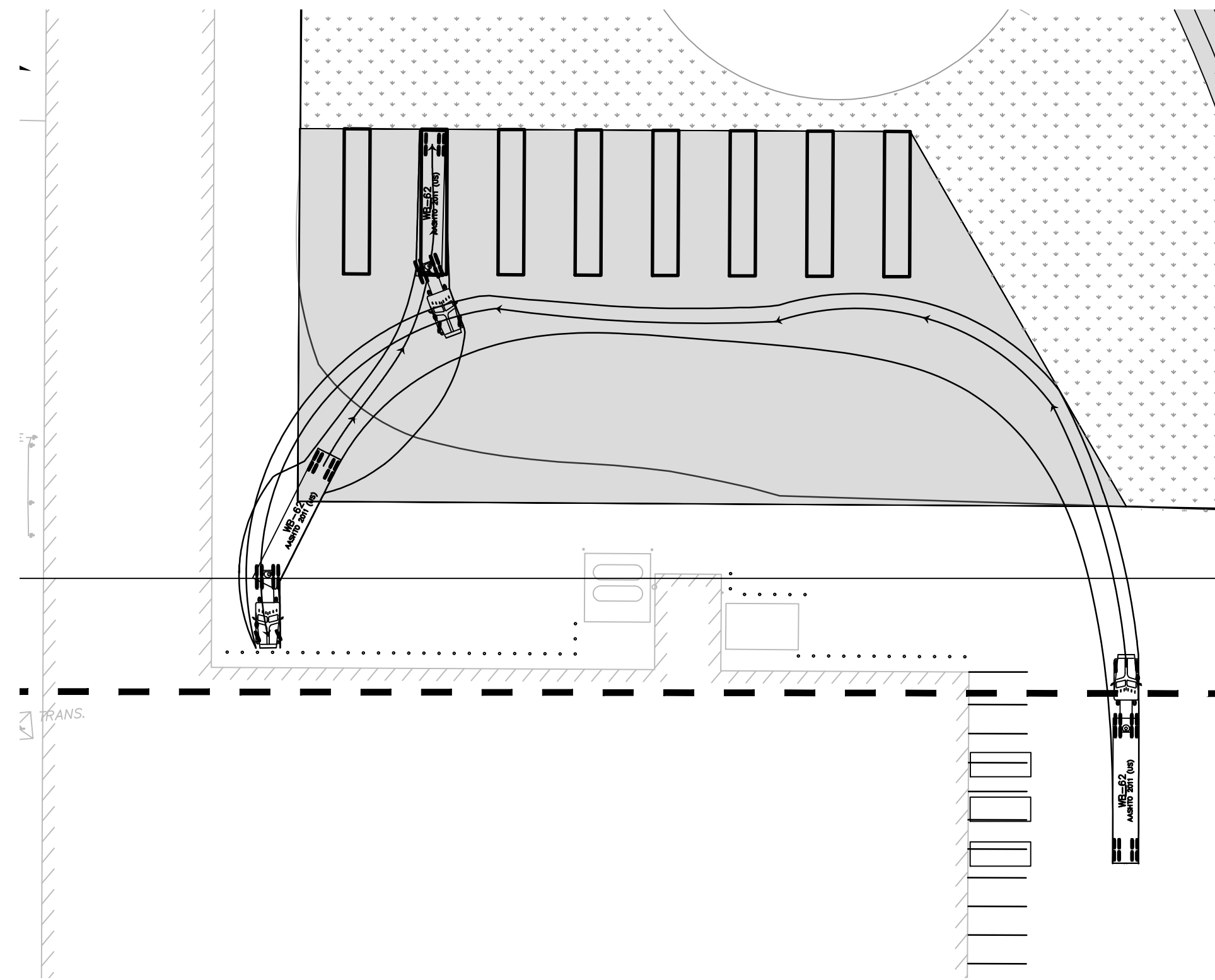
URBAN ENGINEERS
 530 Walnut Street
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 o. 215.922.8080

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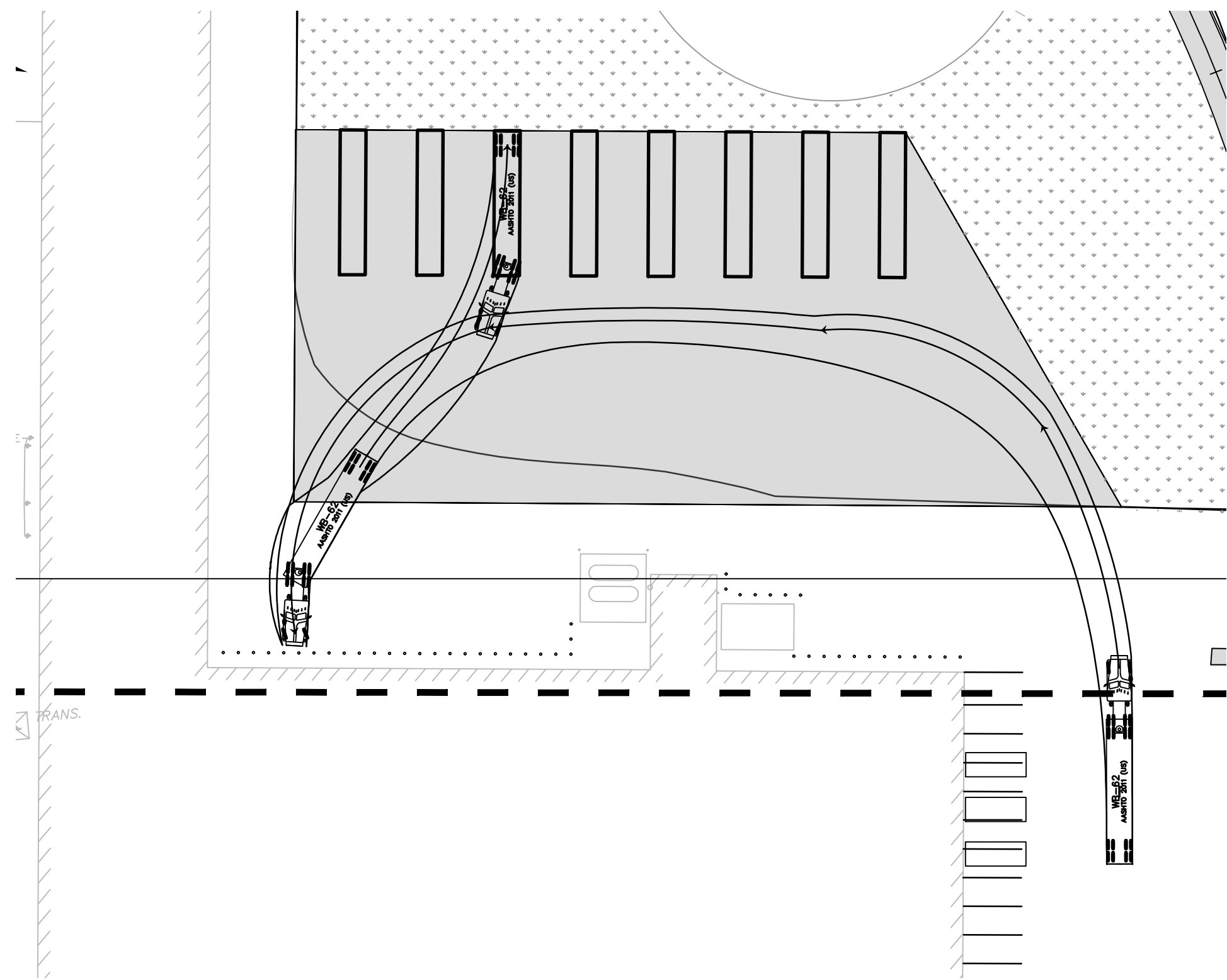
1	JAB	3/30/2020	RESPONSE TO 12/19 TRC COMMENTS
REV	BY	DATE	DESCRIPTION
LOCATION: 838 SUNNYVALE DR., WILMINGTON, NC			
TITLE: WILMINGTON WALLBOARD PLANT PROPOSED INDUSTRIAL SIDETRACK & STORMWATER MANAGEMENT IMPROVEMENTS CONSTRUCTION DETAILS - 2			
DGN	JAB	DATE: 03/30/2020	DRAWING NUMBER: C-601
CHK	MJT	DATE: 03/30/2020	



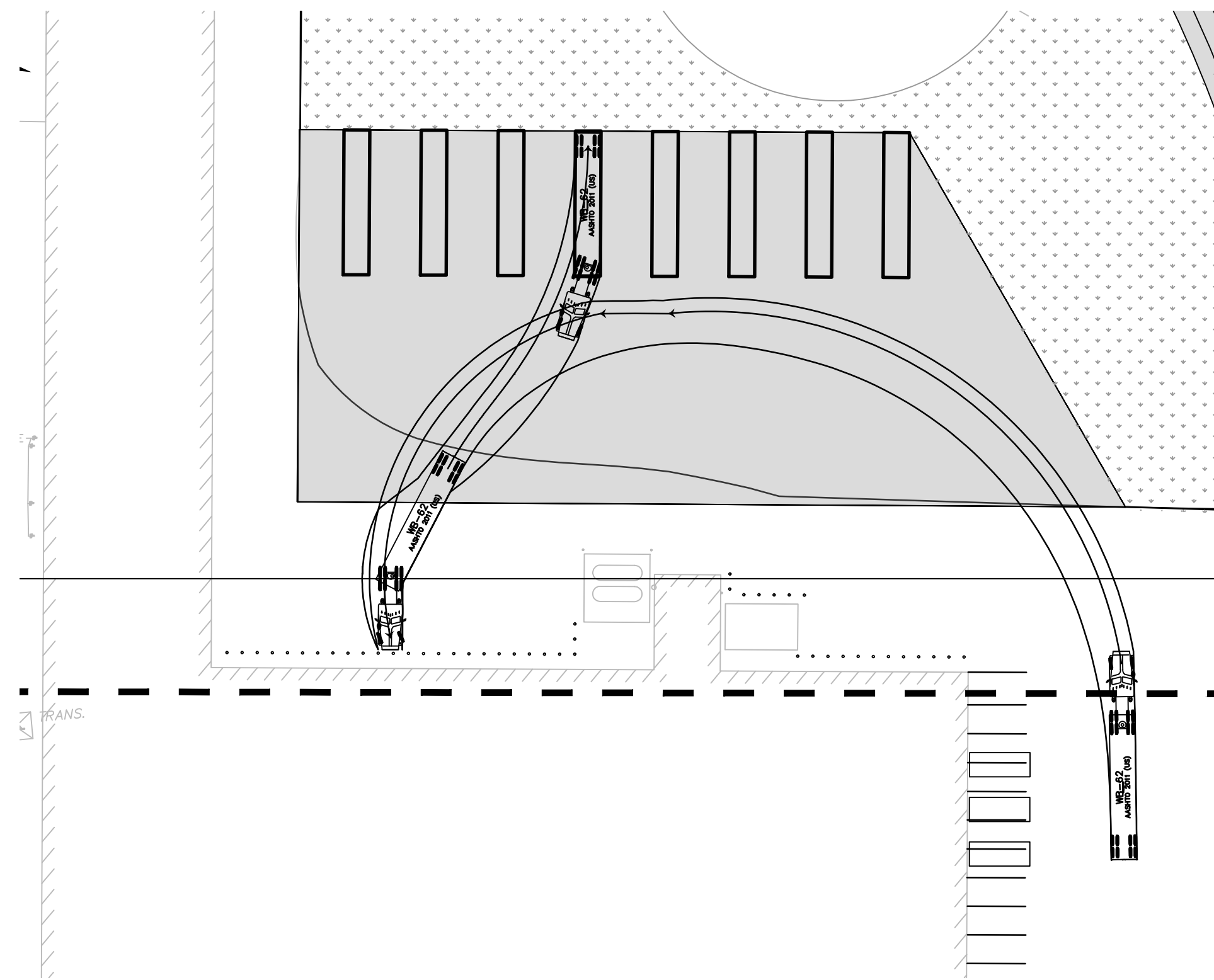
WB-62 TRUCK TURNING MANEUVER - SPOT 1
SCALE: 1" = 40'



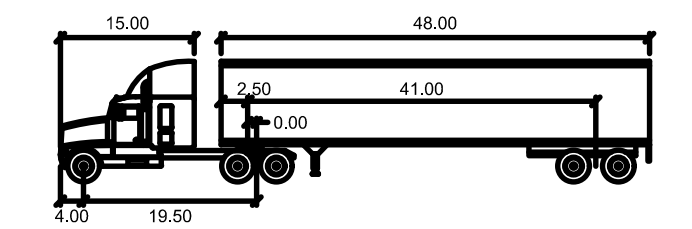
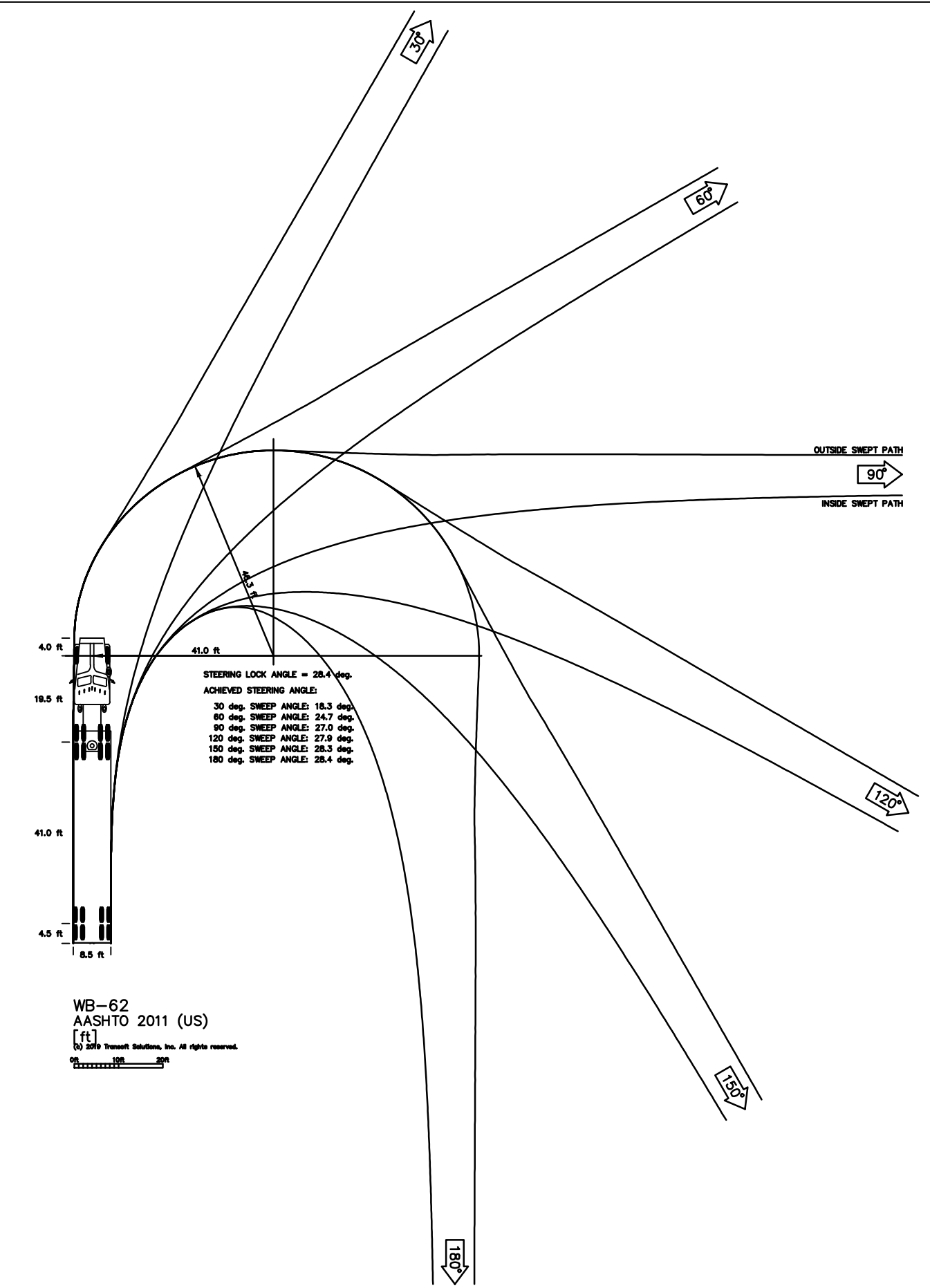
WB-62 TRUCK TURNING MANEUVER - SPOT 2
SCALE: 1" = 40'



WB-62 TRUCK TURNING MANEUVER - SPOT 3
SCALE: 1" = 40'



WB-62 TRUCK TURNING MANEUVER - SPOT 4
SCALE: 1" = 40'

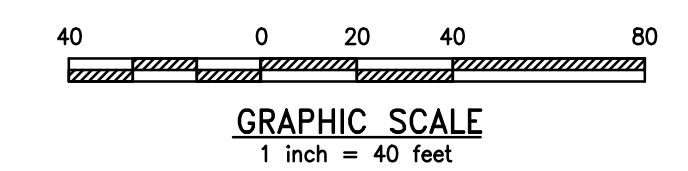


WB-62			
feet			
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
Tractor Track	: 8.50	Articulating Angle	: 70.0
Trailer Track	: 8.50		

CITY OF WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit #: _____
 Signed: _____

Approved Construction Plan
 Name: _____ Date: _____
 Planning: _____
 Traffic: _____
 Fire: _____

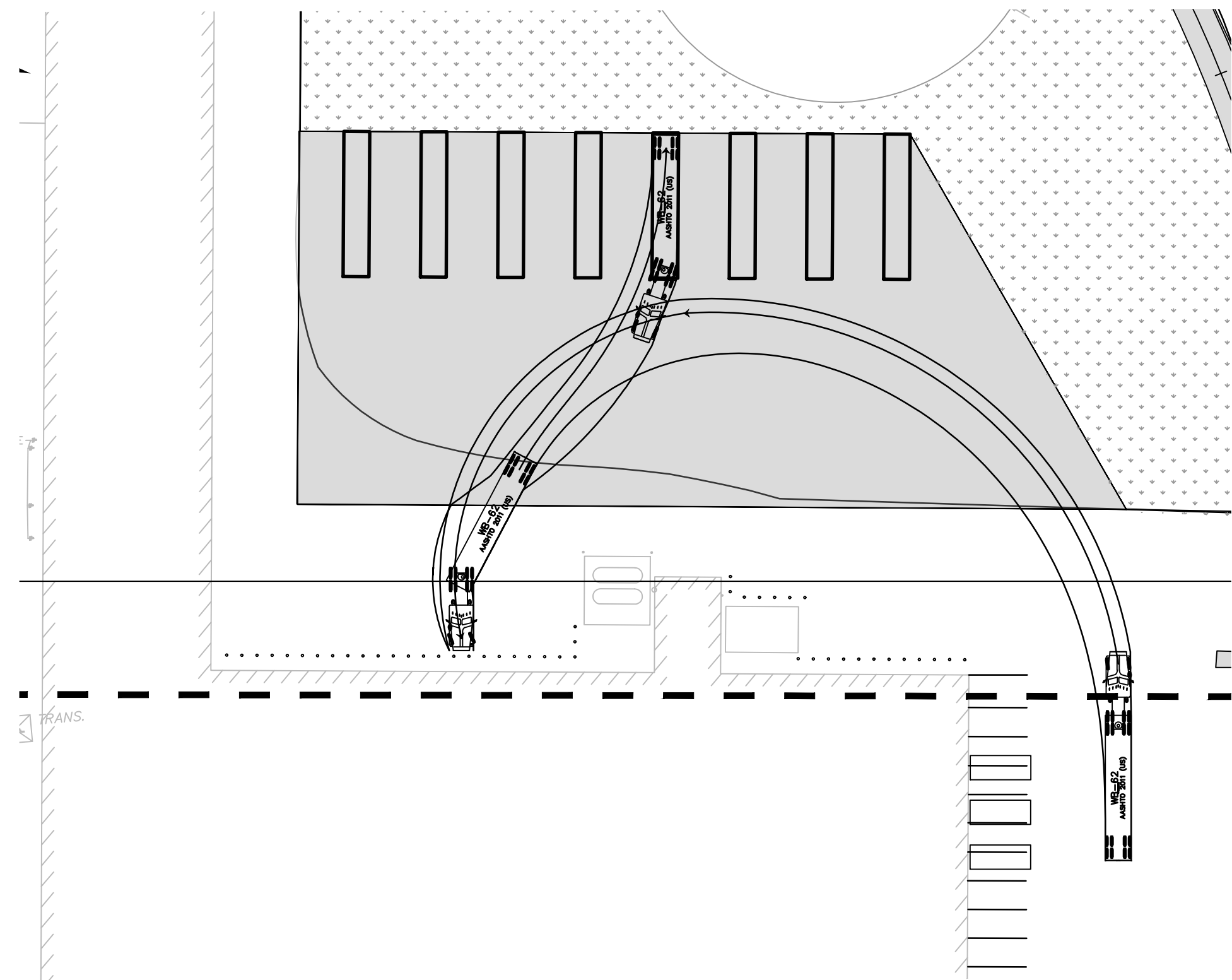
- NOTE:**
1. PROTECTIVE BOLLARDS WILL BE INSTALLED AT 5-FOOT ON CENTER, IF NECESSARY TO PROTECT THE BUILDING.
 2. DESIGN SPEED FOR TURNING MANEUVER - SPOT 1: 2 MPH.
 3. DESIGN SPEED FOR TURNING MANEUVERS - SPOTS 2-4: 6 MPH.



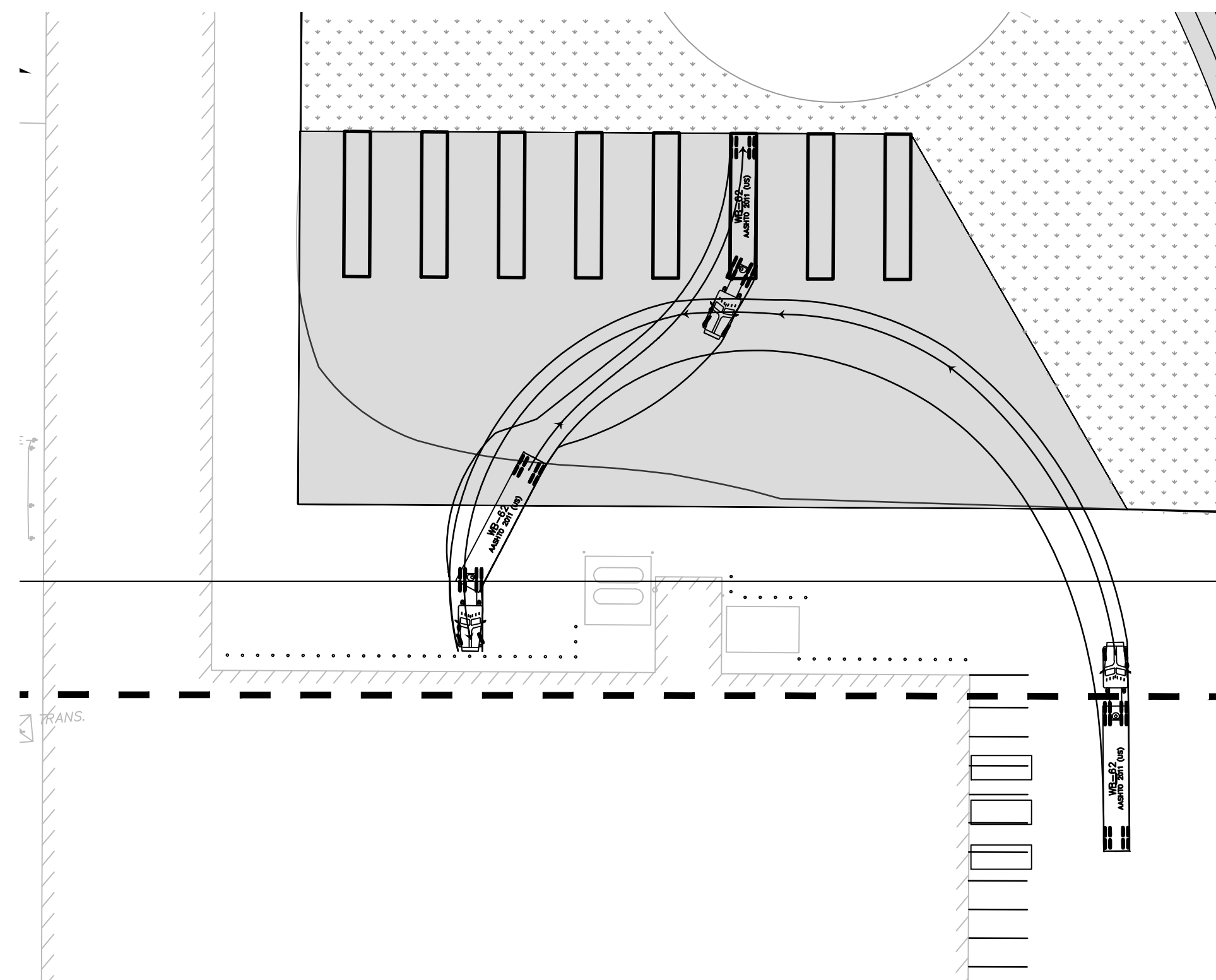
URBAN ENGINEERS
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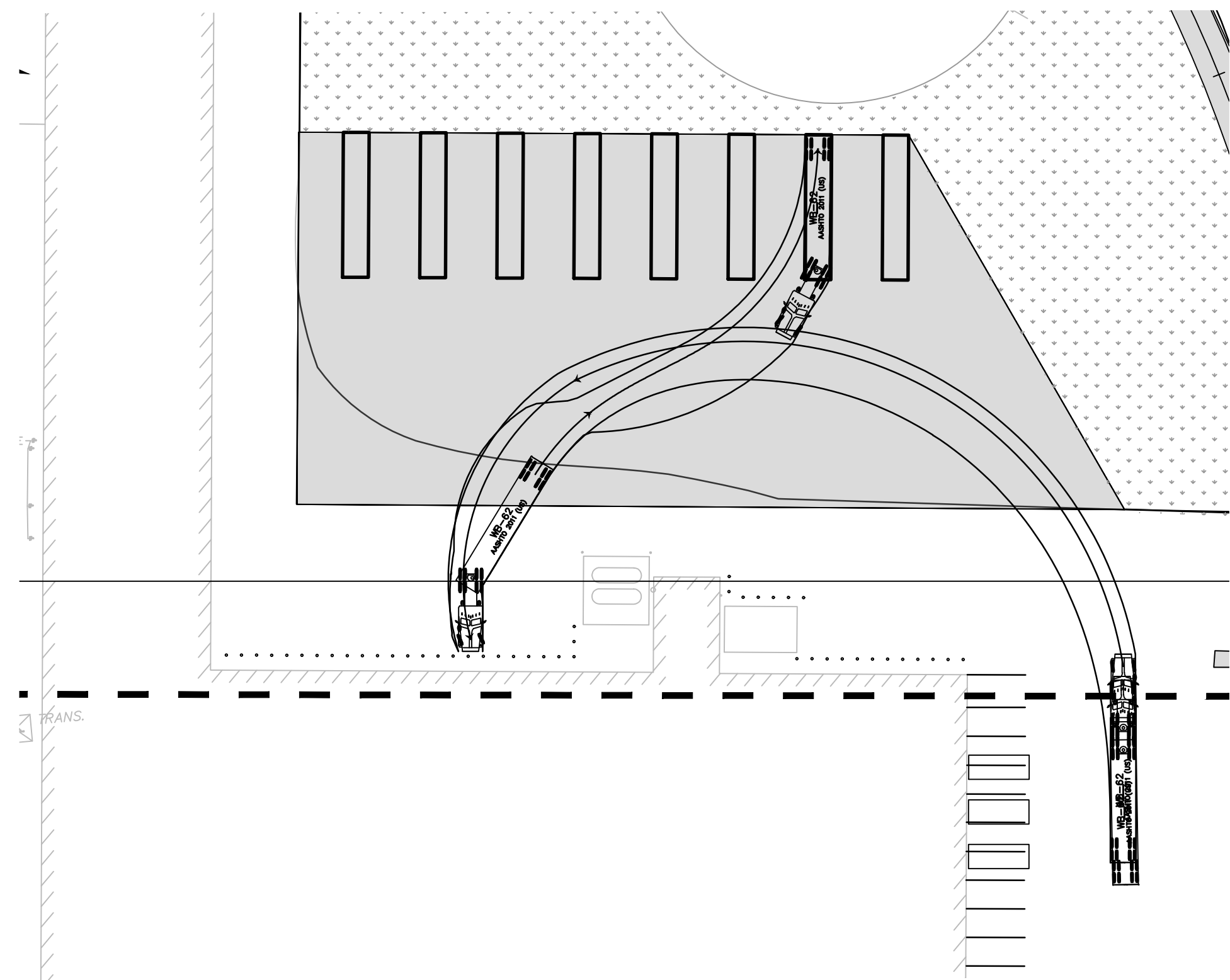
1	JAB	3/30/2020	RESPONSE TO 12/19 TRC COMMENTS
REV	BY	DATE	DESCRIPTION
LOCATION: 838 SUNNYVALE DR., WILMINGTON, NC			
TITLE: WILMINGTON WALLBOARD PLANT PROPOSED INDUSTRIAL SIDETRACK & STORMWATER MANAGEMENT IMPROVEMENTS WB-62 TRUCK TURNING MANEUVER PLAN			
DGN	JAB	DATE: 03/30/2020	DRAWING NUMBER: C-701
CHK	MJT	DATE: 03/30/2020	



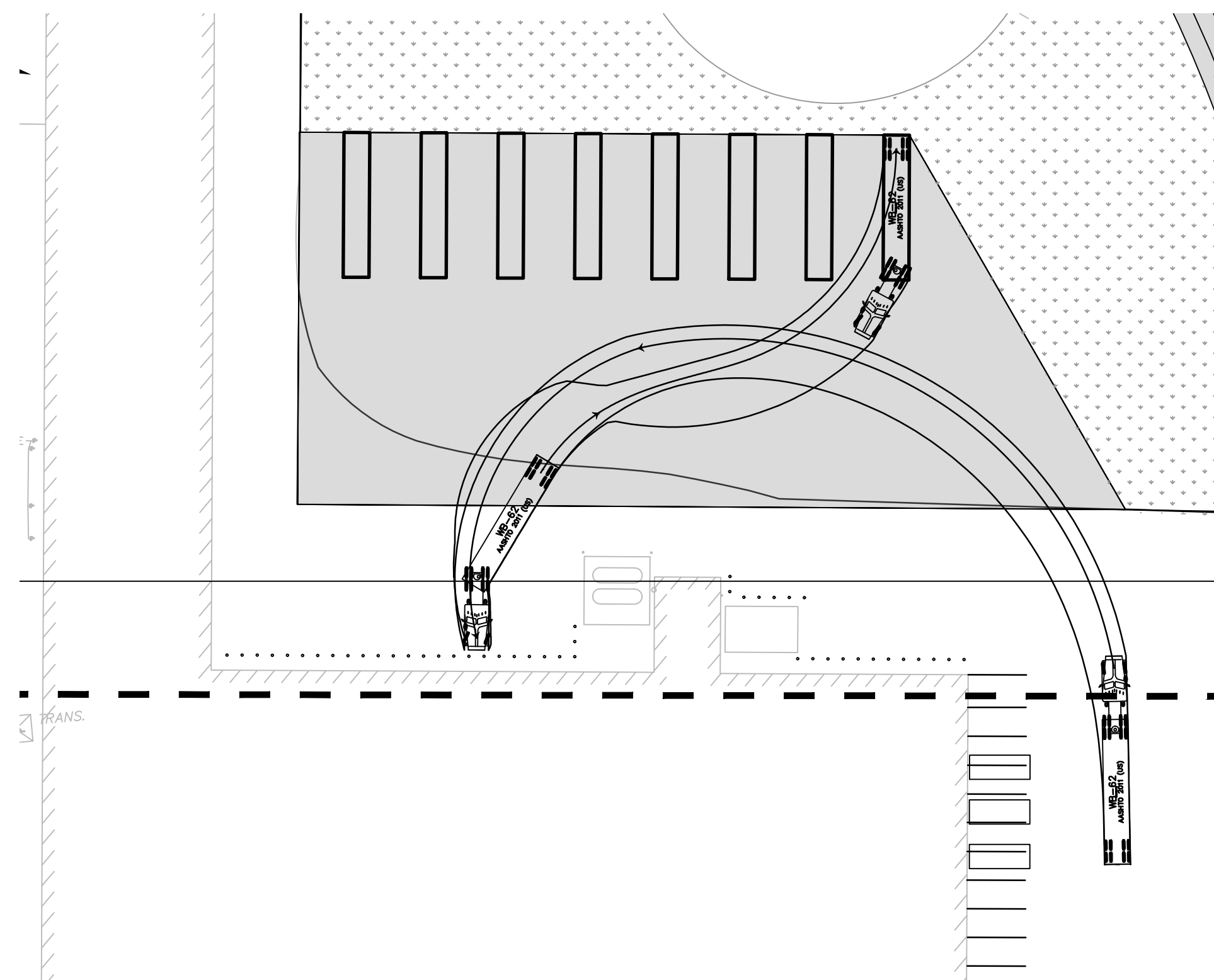
WB-62 TRUCK TURNING MANEUVER - SPOT 5
SCALE: 1" = 40'



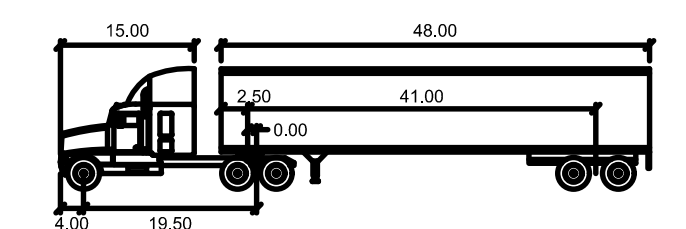
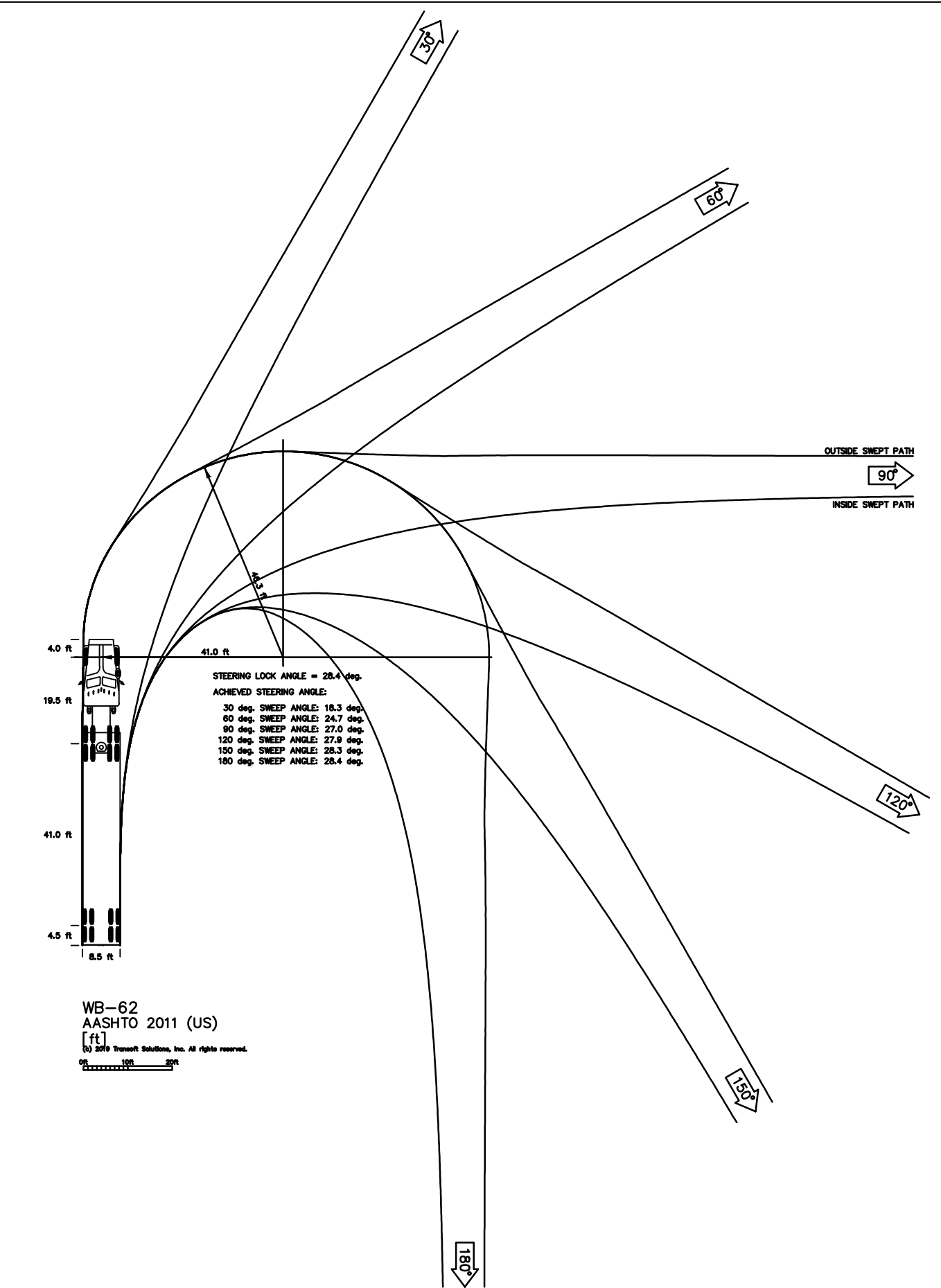
WB-62 TRUCK TURNING MANEUVER - SPOT 6
SCALE: 1" = 40'



WB-62 TRUCK TURNING MANEUVER - SPOT 7
SCALE: 1" = 40'



WB-62 TRUCK TURNING MANEUVER - SPOT 8
SCALE: 1" = 40'



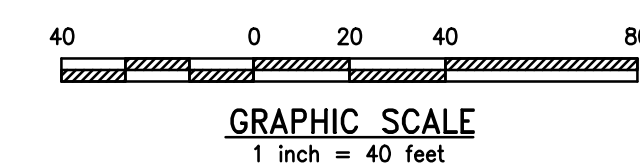
WB-62

Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.50		

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit # _____
Signed: _____

Approved Construction Plan
Name _____ Date _____
Planning _____
Traffic _____
Fire _____

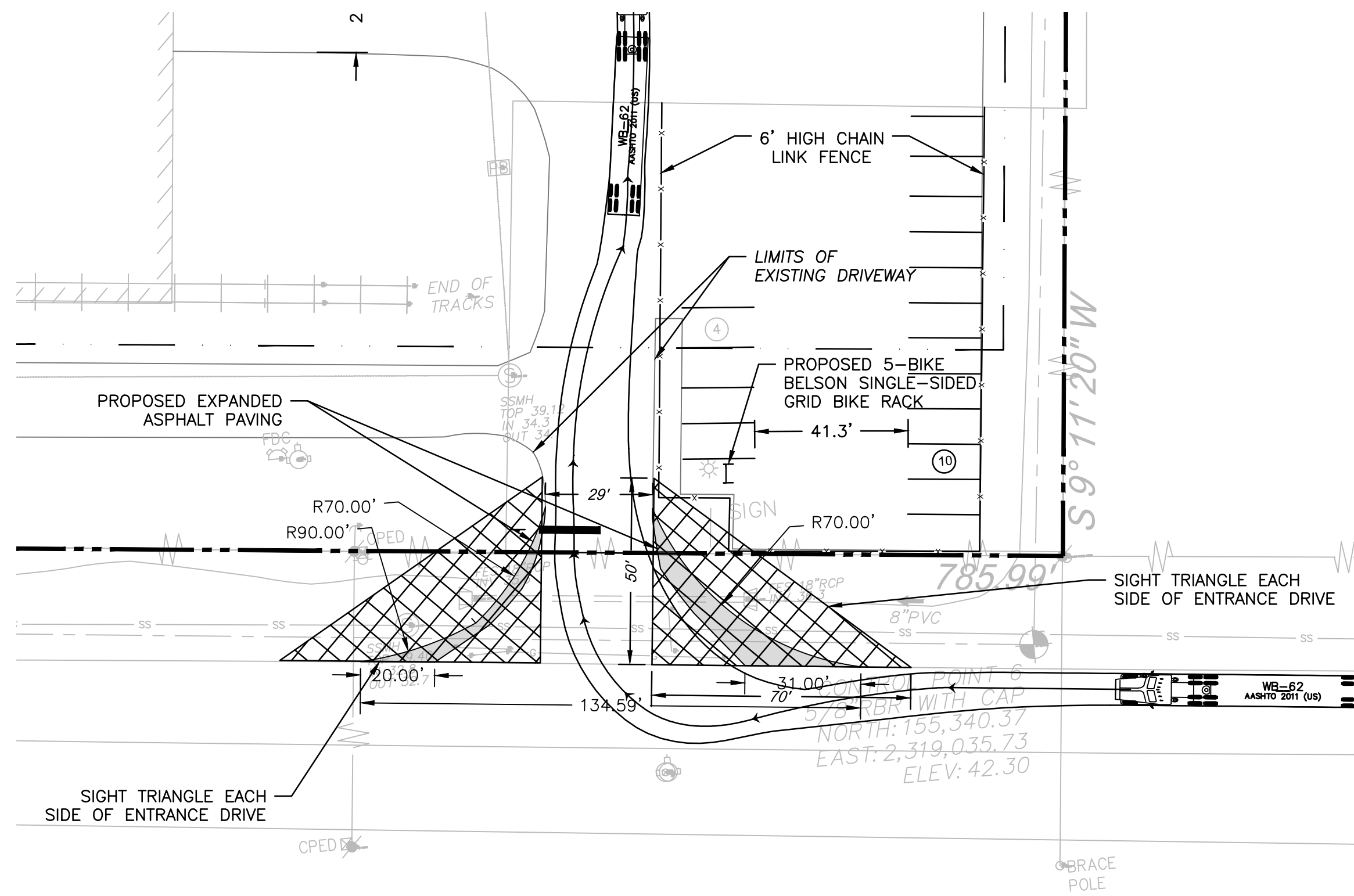
- NOTE:
1. PROTECTIVE BOLLARDS WILL BE INSTALLED AT 5-FOOT ON CENTER, IF NECESSARY TO PROTECT THE BUILDING.
 2. DESIGN SPEED FOR TURNING MANEUVERS - SPOTS 5-8: 6 MPH.



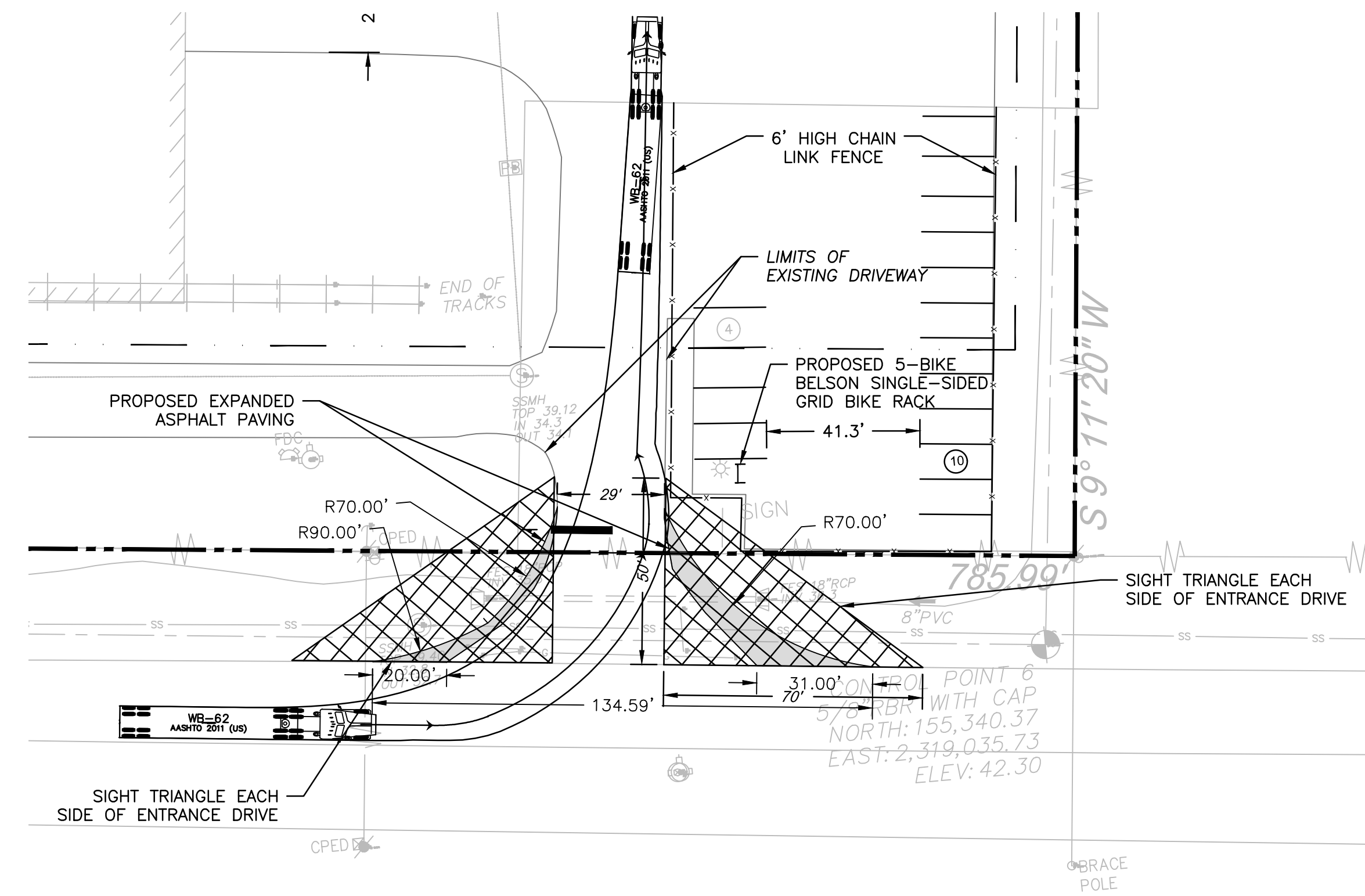
URBAN ENGINEERS
530 Walnut Street
Philadelphia, PA
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o. 215.922.8080

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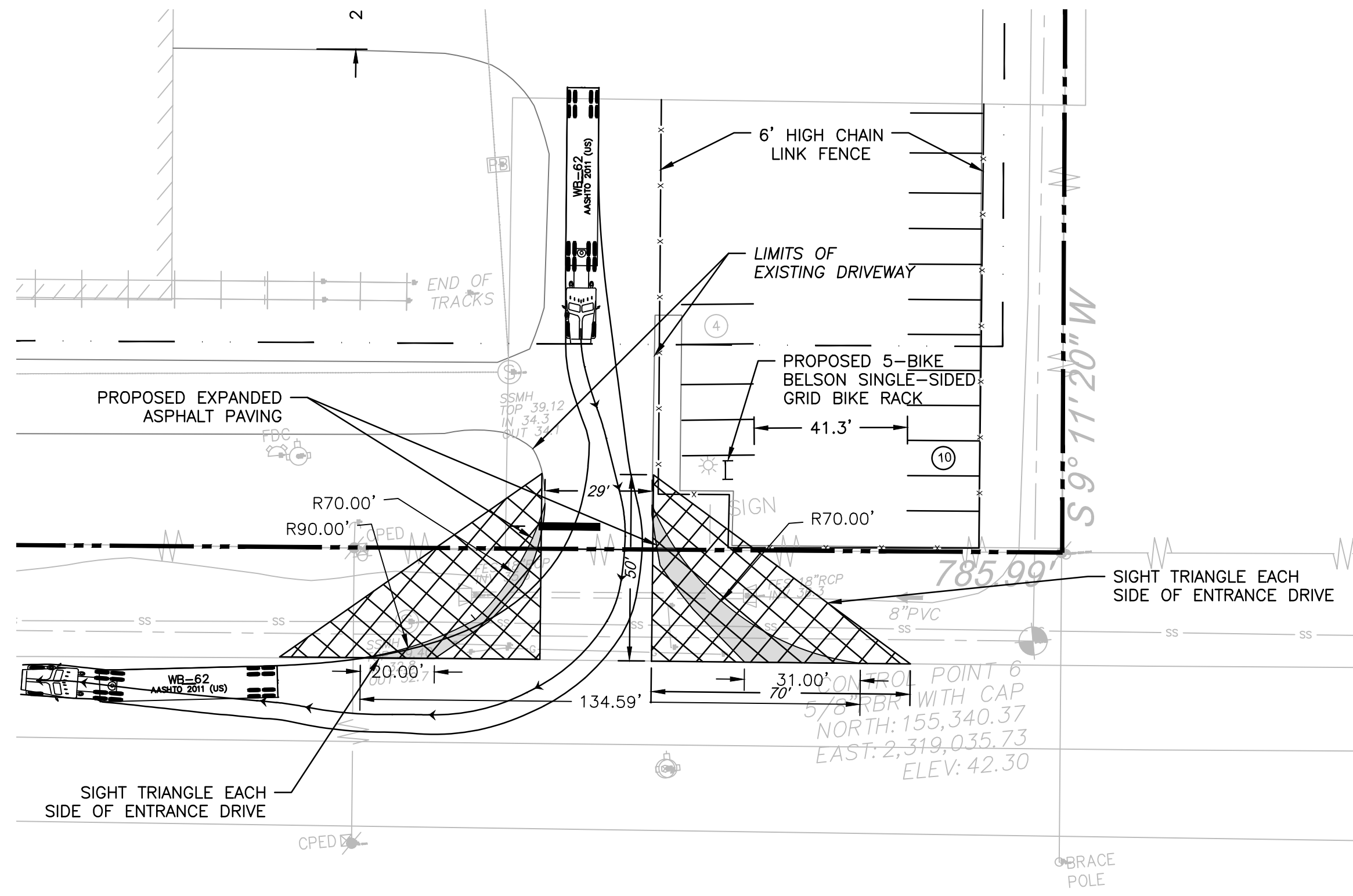
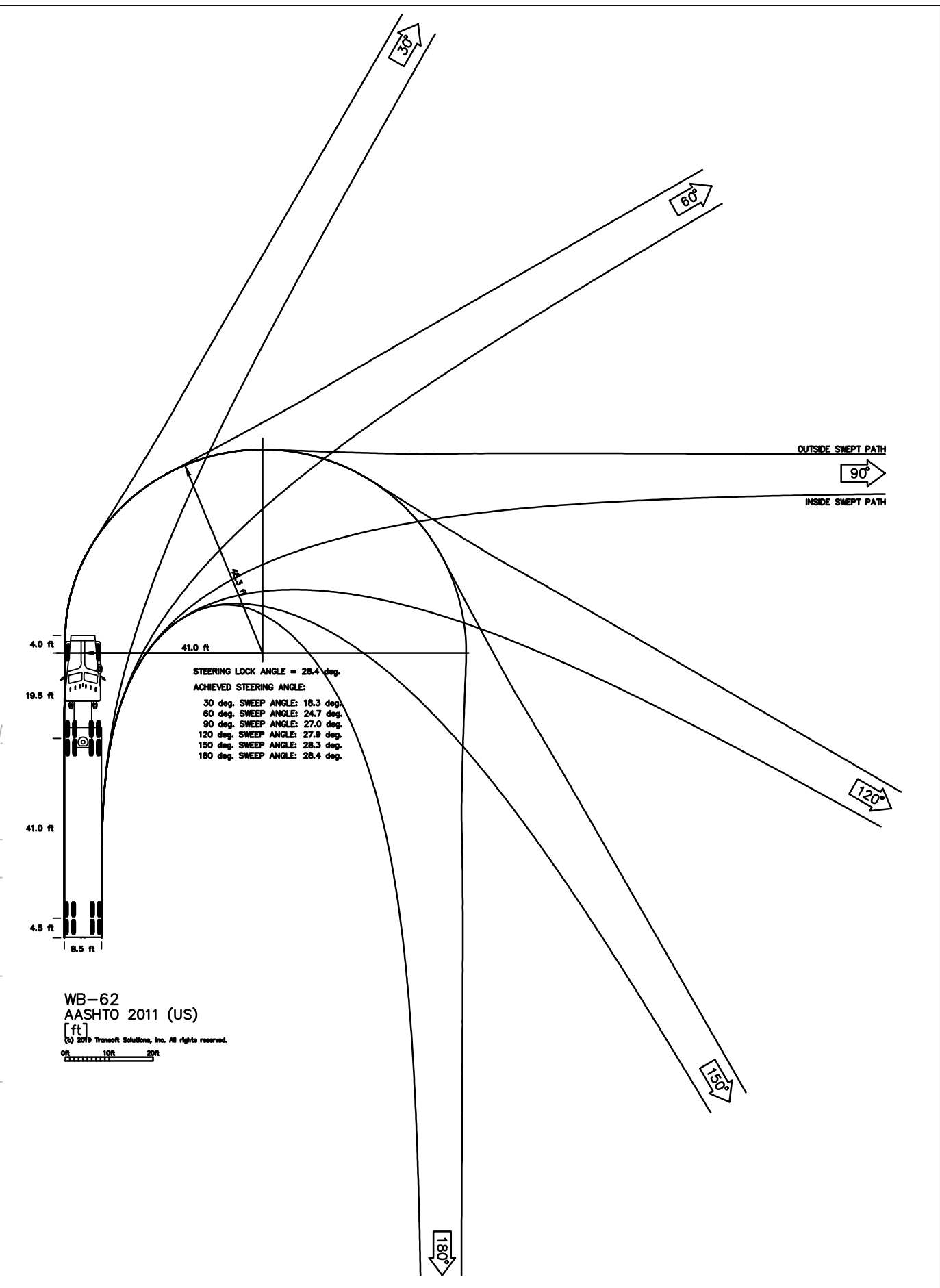
1	JAB	3/30/2020	RESPONSE TO 12/19 TRC COMMENTS
REV	BY	DATE	DESCRIPTION
LOCATION 838 SUNNYVALE DR., WILMINGTON, NC			
TITLE WILMINGTON WALLBOARD PLANT PROPOSED INDUSTRIAL SIDETRACK & STORMWATER MANAGEMENT IMPROVEMENTS WB-62 TRUCK TURNING MANEUVER PLAN			
DGN	JAB	DATE 03/30/2020	DRAWING NUMBER
CHK	MJT	DATE 03/30/2020	C-702



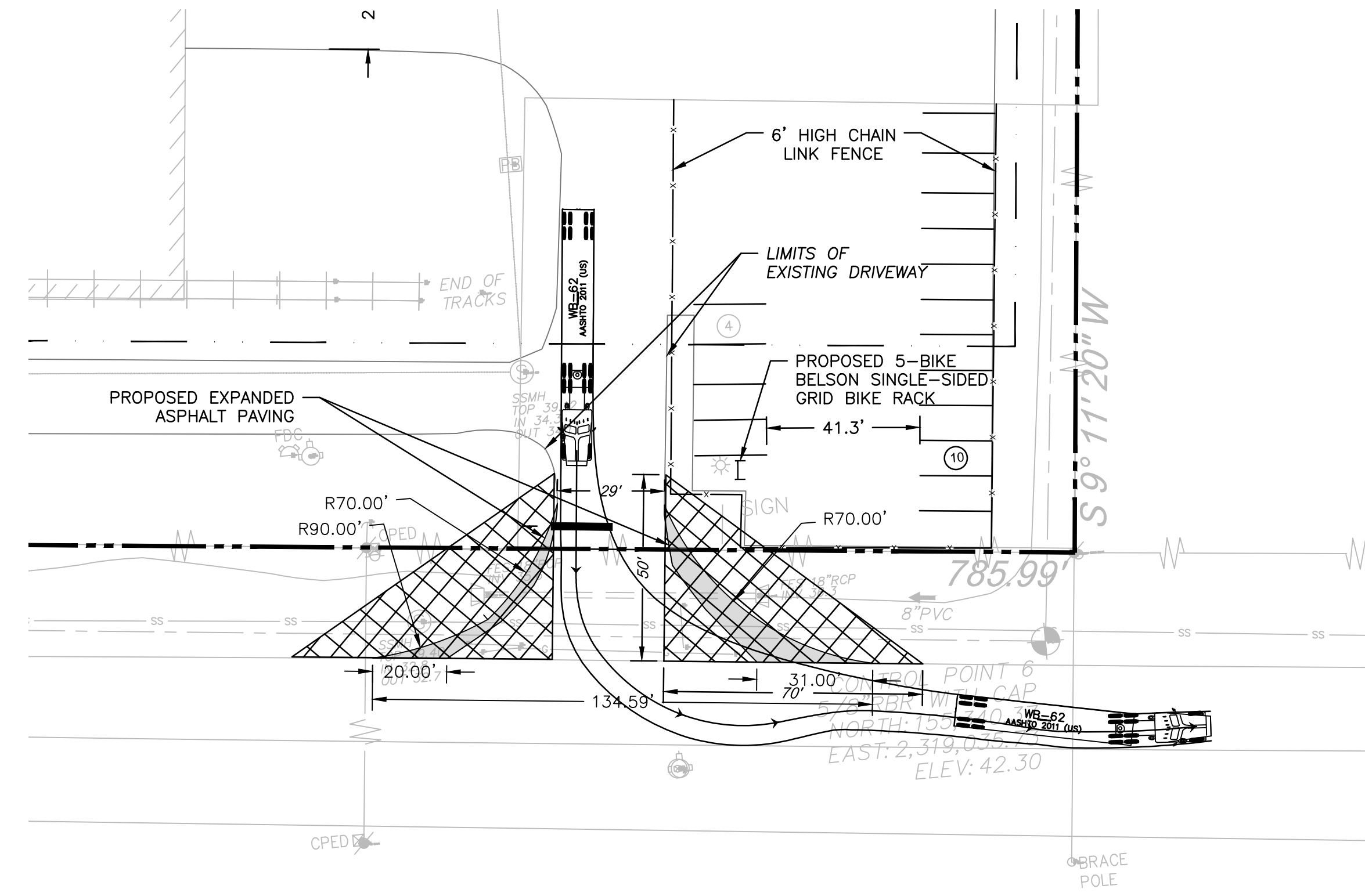
WB-62 TRUCK TURNING MANEUVER - INBOUND WEST
SCALE: 1" = 30'



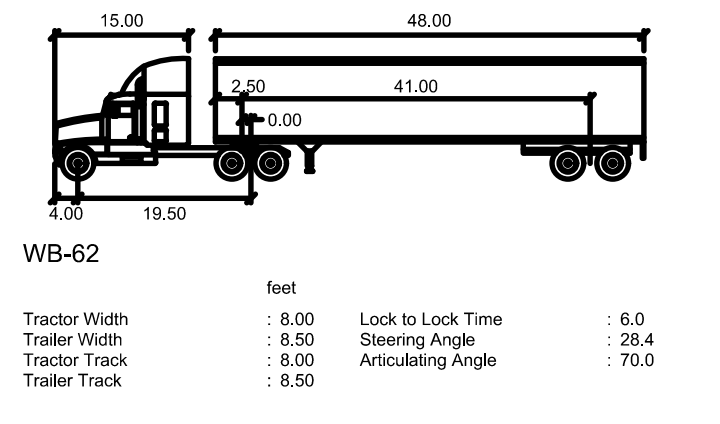
WB-62 TRUCK TURNING MANEUVER - INBOUND EAST
SCALE: 1" = 30'



WB-62 TRUCK TURNING MANEUVER - OUTBOUND WEST
SCALE: 1" = 30'

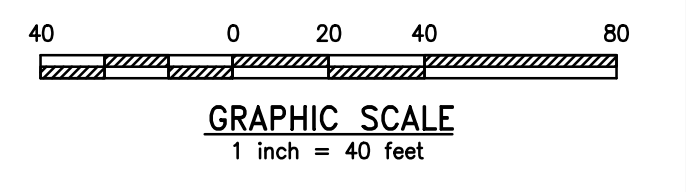


WB-62 TRUCK TURNING MANEUVER - OUTBOUND EAST
SCALE: 1" = 30'



CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit # _____
Signed: _____

Approved Construction Plan
Name: _____ Date: _____
Planning: _____
Traffic: _____
Fire: _____



NOTE:
1. DESIGN SPEED FOR TURNING MANEUVERS IN AND OUT OF DRIVEWAY: 6 MPH.

1	JAB	3/30/2020	RESPONSE TO 12/19 TRC COMMENTS
REV	BY	DATE	DESCRIPTION
LOCATION: 838 SUNNYVALE DR., WILMINGTON, NC			
TITLE: WILMINGTON WALLBOARD PLANT PROPOSED INDUSTRIAL SIDETRACK & STORMWATER MANAGEMENT IMPROVEMENTS WB-62 TRUCK TURNING MANEUVER PLAN			
DGN	JAB	DATE: 03/30/2020	DRAWING NUMBER: C-703
CHK	MJT	DATE: 03/30/2020	

URBAN ENGINEERS
530 Walnut Street
Philadelphia, PA
19106-3685
o. 215.922.8080

National Gypsum COMPANY

COVERAGE LEGEND

- IMPERVIOUS
- PERVIOUS
- EXISTING BUILDING
- DRAINAGE AREA #4 DRAINAGE AREA LABEL
- DRAINAGE AREA
- FLOW ARROW

EXISTING DRAINAGE NOTES:

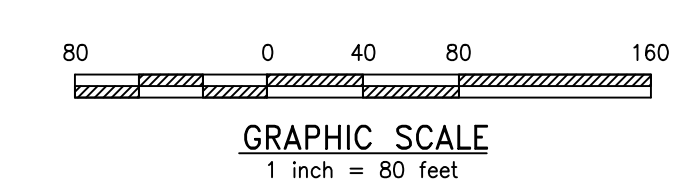
1. DRAINAGE AREA BASED OFF OF ARIEL TOPOGRAPHY AND PREVIOUSLY APPROVED CITY OF WILMINGTON NORTH CAROLINA DRAINAGE AREA PLAN.
2. FIELD OBSERVATIONS SHOW DIFFERENT DRAINAGE PATTERNS COMPARED TO THE PREVIOUSLY APPROVED DRAINAGE AREA PLAN.
3. TC CALCULATIONS CAN BE FOUND IN ATTACHED STORMWATER NARRATIVE BINDER.
4. TIME OF CONCENTRATION CALCULATION FOR DRAINAGE AREA #3 WAS NOT DETERMINED BECAUSE THIS DRAINAGE AREA'S FLOW IS CONCENTRATED WITHIN THE DRAINAGE AREA ITSELF. DRAINAGE AREA #3 IS NOT INCLUDED IN THE PRE/POST PEAK FLOW CALCULATIONS.

EXISTING LAND COVER CALCULATIONS

DRAINAGE AREA	IMPERVIOUS SURFACE (SF)	IMPERVIOUS SURFACE (AC)	PERVIOUS SURFACE (SF)	PERVIOUS SURFACE (AC)	OVERALL AREA (SF)
DRAINAGE AREA - 1	2,917	0.07	83,629	1.92	86,546
DRAINAGE AREA - 2	207,622	4.77	345,954	7.94	553,576
DRAINAGE AREA - 3	46,165	1.06	222,535	5.11	268,700
DRAINAGE AREA - 4	247,511	5.66	17,277	0.40	264,788
TOTAL	504,215	11.58	669,395	15.37	1,173,610
	42.96%		57.04%		

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit # _____
Signed: _____

Approved Construction Plan
Name: _____ Date: _____
Planning: _____
Traffic: _____
Fire: _____



1	JAB	3/30/2020	RESPONSE TO 12/19 TRC COMMENTS
REV	BY	DATE	DESCRIPTION
LOCATION 838 SUNNYVALE DR., WILMINGTON, NC			
TITLE WILMINGTON WALLBOARD PLANT PROPOSED INDUSTRIAL SIDETRACK & STORMWATER MANAGEMENT IMPROVEMENTS EXISTING DRAINAGE AREA PLAN			
DGN	JAB	DATE 03/30/2020	DRAWING NUMBER
CHK	MJT	DATE 03/30/2020	C-900

National Gypsum COMPANY

URBAN ENGINEERS
530 Walnut Street
Philadelphia, PA
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COVERAGE LEGEND

- IMPERVIOUS
- PERVIOUS
- EXISTING BUILDING
- DRAINAGE AREA #4 DRAINAGE AREA LABEL
- DRAINAGE AREA
- LIMIT-OF-DISTURBANCE
- FLOW ARROW

PROPOSED LAND COVER CALCULATIONS

RAINAGE AREA	IMPERVIOUS SURFACE (SF)	IMPERVIOUS SURFACE (AC)	PERVIOUS SURFACE (SF)	PERVIOUS SURFACE (AC)	OVERALL AREA (SF)
RAINAGE AREA - 1	6,067	0.14	80,479	1.85	86,546.32
RAINAGE AREA - 2	197,089	4.52	349,802	8.03	546,891.00
RAINAGE AREA - 3	113,883	2.61	161,502	3.71	275,385.00
RAINAGE AREA - 4	247,511	5.68	17,277	0.40	264,788.00
TOTAL	564,550	12.96	609,060	13.98	1,173,610
		48.10%		51.90%	

PROPOSED DRAINAGE NOTES:

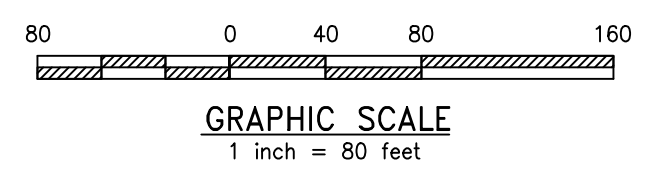
1. TIME OF CONCENTRATION CALCULATIONS CAN BE FOUND IN ATTACHED STORMWATER NARRATIVE BINDER. PROPOSED TIME OF CONCENTRATION TIMES ARE THE SAME AS EXISTING TC'S BECAUSE NO CHANGE IN DRAINAGE AREAS 1, 2 & 4 ARE PROPOSED.



WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit # _____
Signed: _____

Approved Construction Plan

Name	Date
Planning	
Traffic	
Fire	



National Gypsum COMPANY

REV#	DATE	DESCRIPTION
1	JAB 3/30/2020	RESPONSE TO 12/19 TRC COMMENTS

LOCATION: 838 SUNNYVALE DR., WILMINGTON, NC

TITLE: WILMINGTON WALLBOARD PLANT PROPOSED INDUSTRIAL SIDETRACK & STORMWATER MANAGEMENT IMPROVEMENTS PROPOSED GRADING & DRAINAGE AREA PLAN

DRN	JAB	DATE	03/30/2020	DRAWING NUMBER	
CHK	MJT	DATE	03/30/2020		C-901

URBAN ENGINEERS
530 Walnut Street
Philadelphia, PA
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BURNETTE ENTERPRISES OF WILM INC ETAL
PARCEL ID R06500-006-013-000
ZONING - INDUSTRIAL
CURRENT LAND USE: INDUSTRIAL

SKYWAY INVESTMENTS, LLC
PARCEL ID R06500-006-014-000
ZONING - INDUSTRIAL
CURRENT LAND USE: INDUSTRIAL

SEABOARD COASTLINE RAILROAD
ZONING - INDUSTRIAL
CURRENT LAND USE: VACANT

VOPAK TERMINAL WILMINGTON, INC.
PARCEL ID R06400-001-003-000
ZONING - INDUSTRIAL
CURRENT LAND USE: VACANT

SEABOARD COASTLINE RAILROAD
PARCEL ID R06400-022-006-000
ZONING - INDUSTRIAL
CURRENT LAND USE: INDUSTRIAL

(3) TYP. CITY OF WILMINGTON
FLARED END SECTION STRUCTURES
INV=36.00
(3) 90 LF OF 12" CLASS V CONCRETE
PIPES @ 0.50% SLOPE @
(3) TYP. CITY OF WILMINGTON
FLARED END SECTION STRUCTURES
INV=36.50

BMP #1 FOOTPRINT: 40,329 SF
STORAGE: 67,570 CF
TOP OF BASIN = 37.50'
BOTTOM OF BASIN = 36.00'

EXISTING BUILDING
238,165 SQ. FT.
HEIGHT OF BUILDING = 66.2'

CAMERON COMPANY, LTD
PARCEL ID R06500-007-001-000
ZONING - INDUSTRIAL
CURRENT LAND USE: VACANT