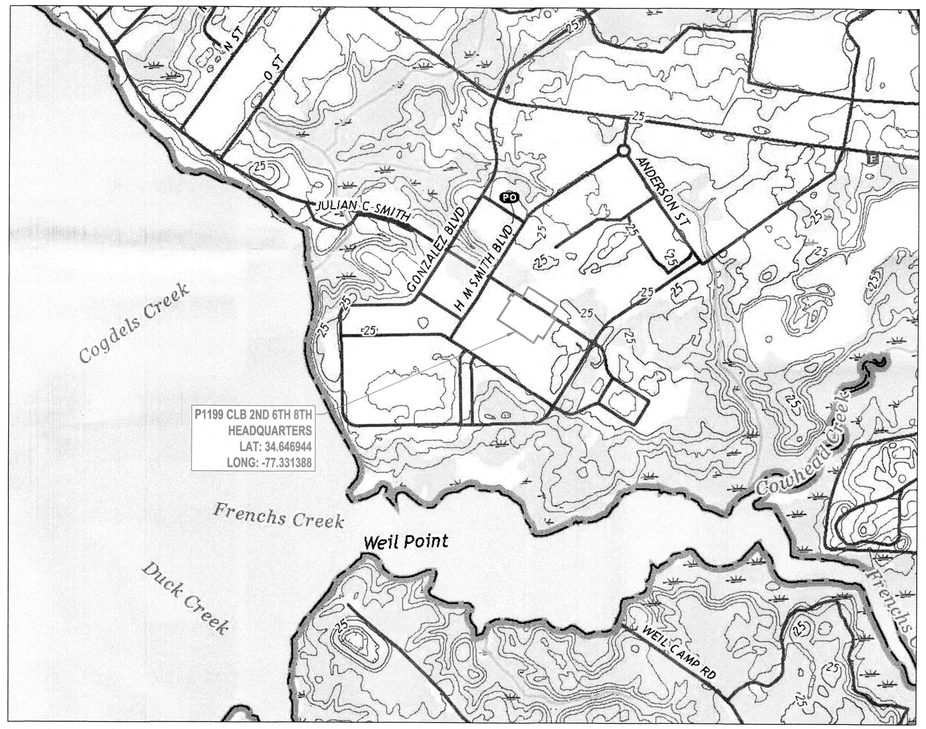
MCB CAMP LEJEUNE, JACKSONVILLE, NC
HURRICANE FLORENCE RECOVERY FACILITIES
PACKAGE #2

P1199 CLB 2ND 6TH 8TH HEADQUARTERS

STORMWATER MANAGEMENT PLAN



VICINITY MAP

0' 500' 1000' 2000'

SCALE: 1"= 1000'

SHEET INDEX

SHEET NUMBER	DRAWING TITLE
G-001	COVER SHEET
C-001	CIVIL GENERAL NOTES
C-004	CIVIL LEGEND & ABBREVIATIONS
V-101	EXISTING CONDITIONS PLAN
VD101	DEMOLITION PLAN
CS101	SITE PLAN
CH101	HORIZONTAL CONTROL PLAN
CU101	UTILITY PLAN
CG101	GRADING AND DRAINAGE PLAN
CG201	STORM SEWER PROFILES

RECEIVING WATERS

NAME	DWR SURFACE WATER CLASSIFICATION	RIVER BASIN
NEW RIVER	SC, NSW	WHITE OAK

THERE ARE NO SURFACE WATERS, WETLANDS, REGULATED FLOOD ZONES, PROTECTED VEGETATED SETBACKS, OR PROTECTED RIPARIAN BUFFERS WITHIN OR IMMEDIATELY ADJACENT TO THE PROJECT LIMITS OF DISTURBANCE.

REV #	REVISED PER DEC COMMENTS ON 04/08/21	04/19/21	VDN
STM	DESCRIPTION	DATE	APPR

NAVFAC

NORTH CAROLINA PROFESSIONAL SEAL 045778 ENGINEER LAUREN E GREENFIELD

RQ DPR CONSTRUCTION

Michael Baker INTERNATIONAL
100 AIRSIDE DRIVE
MOON TOWNSHIP, PA 15108
A/E INFO

APPROVED
FOR COMMANDER NAVFAC

ACTIVITY
MARINE CORPS BASE CAMP LEJEUNE

SATISFACTORY TO DATE

DES KJK	DRW STM	CHK WDN
PM	XXX	
BRANCH MANAGER	XXX	
CHIEF ENG/ARCH	XXX	
FIRE PROTECTION	XXX	

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND
ATLANTIC DESIGN AND CONSTRUCTION
MCB CAMP LEJEUNE

NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC
NORFOLK, VA
JACKSONVILLE, NC
HURRICANE FLORENCE PKG 2
P1199 CLB 2ND 6TH 8TH HEADQUARTERS
COVER SHEET

SCALE: AS NOTED
EPROJECT NO.: 1639566
CONSTR. CONTR. NO. N40085-20-C-0044
NAVFAC DRAWING NO.
SHEET OF

G-001

DRAWFORM REVISION: 12 APRIL 2018

CRITICAL PATH FINAL SUBMITTAL – 10/19/2021

FILE NAME: \\mcorpa1d1.bkr.mbakercorp.com\CL2\Projects\180304 Hurricane Florence Package 2\02_Deliverables\Drawings\05_CivilSHEET FILES\P1199\180304_P1199 - G-001.dwg
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GENERAL NOTES:

1. ALL DIMENSIONS, ELEVATIONS, AND STATIONS ARE IN FEET UNLESS INDICATED.
2. ALL PIPE SIZES ARE IN INCHES UNLESS INDICATED OTHERWISE.
3. CALLOUTS, COORDINATES, ELEVATIONS, AND DIMENSIONS ARE POINTED TO OR MEASURED TO STRUCTURE CENTER, EDGE OF PAVEMENT, BACK OF CURB, OR OUTSIDE FACE OF FOUNDATION WALL, UNLESS INDICATED OTHERWISE.
4. COORDINATES SHOWN LOCATING SITE FEATURES ARE EXPRESSED IN MODIFIED GROUND COORDINATES. SEE EXISTING CONDITIONS PLAN FOR SURVEY CONTROL POINTS.
5. ALL WORK WILL BE SUBJECT TO INSPECTION BY AUTHORIZED PERSONNEL OF LOCAL AND GOVERNMENT REGULATORY AGENCIES AND THE CONTRACTING OFFICER'S REPRESENTATIVE (COR).
6. ALL WORK WILL BE CONDUCTED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS AND LOCAL AND GOVERNMENT CODES, ORDINANCES, AND REGULATIONS. IN CASE OF CONTRADICTION OR DISCREPANCY BETWEEN REQUIREMENTS, CONTRACTOR WILL INCORPORATE WHICHEVER IS MOST STRINGENT. WHERE A QUESTION REMAINS ON WHICH REQUIREMENT IS MOST STRINGENT, CONTRACTOR WILL SUBMIT ISSUE TO THE COR IN WRITING. THE DECISION OF THE COR WILL BE CONSIDERED FINAL.
7. ALL WORK WILL BE CONDUCTED IN A PROFESSIONAL WORKMANSHIP MANNER USING QUALITY MATERIALS.

RECORD DRAWING NOTES:

1. CONTRACTOR WILL MAINTAIN UPDATED REDLINE RECORD DRAWINGS AT ALL TIMES THROUGH THE DURATION OF THE PROJECT. CONSTRUCTION RECORD DRAWINGS WILL BE SUBMITTED TO THE COR.
2. DURING CONSTRUCTION OF THE PROJECT, CONTRACTOR WILL BE RESPONSIBLE FOR KEEPING TRACK OF ANY COR-APPROVED FIELD CONSTRUCTION REVISIONS TO THE DESIGN DEPICTED ON APPROVED CONSTRUCTION DRAWINGS. CONTRACTOR WILL USE THESE REVISIONS TO PREPARE RECORD DRAWINGS OF COMPLETED CONSTRUCTION.
3. ALL VARIATIONS IN PROJECT CONDITIONS, LOCATIONS, AND CONFIGURATIONS, AND ANY OTHER CHANGES OR DEVIATIONS FROM THE INFORMATION PRESENTED ON THE ORIGINAL, APPROVED CONSTRUCTION DRAWINGS WILL BE NOTED. THIS INCLUDES BURIED OR CONCEALED CONSTRUCTION AND UTILITY FEATURES THAT WERE REVEALED DURING CONSTRUCTION.
4. THE COR WILL REVIEW COMPLETENESS, ACCURACY, AND FORMAT OF SUBMITTED RECORD DRAWINGS. IF THE RECORD DRAWINGS ARE CONSIDERED UNACCEPTABLE, THEY WILL BE RETURNED TO THE CONTRACTOR FOR CORRECTION AND RESUBMISSION.

EXISTING CONDITION NOTES:

1. ALL STRUCTURES AND UNDERGROUND UTILITIES ARE SHOWN AT APPROXIMATE ELEVATIONS AND LOCATIONS BASED ON FIELD OBSERVATIONS, SURVEY DATA, AND HISTORICAL MAPS AND INFORMATION. EXACT LOCATION AND SIZES OF EXISTING UTILITIES IN THE AREA OF CONSTRUCTION WILL BE VERIFIED IN THE FIELD BY THE CONTRACTOR WITH A REPRESENTATIVE OF THE APPROPRIATE UTILITY COMPANY. UNDERGROUND STRUCTURES AND UTILITIES MAY BE PRESENT WHICH ARE NOT DOCUMENTED OR LOCATED.
2. THE CONTRACTOR WILL FIELD-CHECK ALL EXISTING CONDITIONS AND BE THOROUGHLY FAMILIAR WITH THE SITE BEFORE ANY WORK COMMENCES. ANY DISCREPANCIES IN THE DRAWINGS WILL BE IMMEDIATELY REPORTED TO THE COR BEFORE ANY FURTHER WORK COMMENCES.
3. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD-VERIFY EXISTING STRUCTURES, UTILITIES, AND SURVEY INFORMATION, AND TO TAKE NECESSARY PRECAUTIONS DURING DEMOLITION AND CONSTRUCTION. CONTRACTOR WILL VERIFY EXISTENCE AND MARK LOCATIONS OF ALL UTILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES PRIOR TO BEGINNING WORK. CONTRACTOR WILL CONTACT THE COR AND ALL ASSOCIATED UTILITY COMPANIES AND AGENCIES TO IDENTIFY THE LOCATION OF UTILITIES. THERE IS NO GUARANTEE, EITHER EXPRESSED OR IMPLIED, THAT THE LOCATIONS, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED DURING CONSTRUCTION.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR WILL NOTIFY THE COR OF OPERATIONAL PLANS. IN THE EVENT AN UNEXPECTED UTILITY OR STRUCTURE INTERFERENCE OR CONFLICT IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR WILL IMMEDIATELY NOTIFY THE COR. ANY UTILITY SERVICES OR STRUCTURES DISTURBED BY THE CONTRACTOR'S OPERATIONS WILL BE RESTORED IMMEDIATELY AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE COR.
5. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ITEMS NOT TO BE DAMAGED DURING DEMOLITION AND CONSTRUCTION. THE CONTRACTOR WILL REPAIR OR REPLACE DAMAGED OR DISTURBED ITEMS TO THE SATISFACTION OF THE COR.
6. SPECIAL HANDLING AND CONSIDERATION WILL BE REQUIRED FOR EXCAVATED SOILS THOUGHT TO CONTAIN CONTAMINATED SUBSTANCES. CONTRACTOR WILL MONITOR EXCAVATED SOILS FOR POTENTIALLY CONTAMINATED SUBSTANCES IN ACCORDANCE WITH THE SPECIFICATIONS AND THE CONTRACTOR'S APPROVED HEALTH & SAFETY PLAN. EXCAVATED SOILS TO REMAIN ON MCB CAMP LEJEUNE WILL BE HANDLED, STOCKPILED, & DISPOSED IN ACCORDANCE WITH SPEC. SECTION 31 23 00.00 20 EXCAVATION AND FILL, AND AS DIRECTED BY THE COR. EXCAVATED SOILS TO BE REMOVED FROM MCB CAMP LEJEUNE WILL BE HANDLED, STOCKPILED, TESTED, AND DISPOSED IN ACCORDANCE WITH SPEC. SECTION 01 57 19 CONTRACTOR WILL COORDINATE HANDLING OF CONTAMINATED MATERIALS WITH THE COR.

SURVEY NOTES:

1. THE SURVEY WAS PERFORMED BY ECLS GLOBAL, INC. SURVEYORS ON MARCH, APRIL & JULY 2021. THE PROJECT DESIGN IS BASED ON THE SURVEYS. SURVEY CONTROL POINTS WILL RESET BY THE CONTRACTOR IF DISTURBED DURING CONSTRUCTION.
2. CONTROL POINTS SHOWN ON HERE WERE ESTABLISHED USING A GPS UNIT REFERENCING VRS NETWORK. VERTICAL DATUM USED WAS NAVD 88 AND HORIZONTAL DATUM USED WAS NC GRID NAD 83.
3. CONTRACTOR WILL RETAIN A LICENSED SURVEYOR, IN THE STATE OF NORTH CAROLINA, TO SURVEY PROJECT IMPROVEMENTS. IF BENCHMARKS SHOWN ARE IN AREAS THAT REQUIRE DEMOLITION, OTHER BENCHMARKS WILL BE ESTABLISHED BEFORE DEMOLITION AND CONSTRUCTION WORK BEGINS. CONTRACTOR WILL SUPPLY CERTIFIED, CONTROL POINT DATA TO COR AFTER COMPLETION OF CONSTRUCTION.

GENERAL DEMOLITION NOTES:

1. ALL DEMOLITION, WASTE, DEBRIS, AND UNSATISFACTORY MATERIALS WILL BE DISPOSED OF OFF BASE.
2. LOCATIONS NOTED FOR DEBRIS REMOVAL MAY CONTAIN ANY OF THE FOLLOWING MATERIALS: AGGREGATE, CONCRETE, ASPHALT, MASONRY, FOUNDATIONS, REBAR, FENCE MATERIAL, PIPING, AND MISCELLANEOUS STRUCTURES. LARGE PIECES OF MATERIAL MAY NEED TO BE CRUSHED AND/OR BROKEN UP FURTHER IN ORDER TO BE HAULED AWAY TO THE WASTE DISPOSAL SITE.
3. CONTRACTOR WILL COORDINATE LIMITS OF SAWCUT AND PAVEMENT REMOVAL WITH PAVEMENT LAYOUT AND JOINTING PLAN.
4. PAVEMENT DESIGNATED FOR SAWCUT WILL BE SAWCUT FULL DEPTH.
5. EXISTING PAVEMENT EDGES WILL BE SAWCUT IN LOCATIONS SHOWN TO PROVIDE CLEAN EDGE FOR CONSTRUCTION OF PAVEMENT.
6. PAVEMENT REMOVAL LIMITS WILL BE TO THE NEAREST EXISTING PAVEMENT JOINT TO THE GREATEST EXTENT POSSIBLE TO PREVENT PARTIAL PANEL REMOVAL. WHERE JOINT IS A CONTROL JOINT OR JOINT IS IN POOR CONDITION, SAWCUT 2 FEET BEYOND JOINT LINE. PAVEMENT REMOVAL WILL INCLUDE REMOVAL OF PAVEMENT AND ANY SUBBASE MATERIAL PRESENT.
7. ANY DAMAGE TO PAVEMENT AREAS DESIGNATED TO REMAIN WILL BE REPAIRED OR REMOVED AND REPLACED AT NO ADDITIONAL COST TO OWNER.
8. THE WEIGHT (IN TONS) OF ALL MATERIALS TAKEN OFF BASE FOR RECYCLING WILL BE REPORTED TO COR.

UTILITY DEMOLITION NOTES:

1. CONTRACTOR WILL CONTACT BASE TELEPHONE G6 POC (STEVE DAIGLE AT 910-451-9439) 30 DAYS PRIOR TO ANY DEMOLITION OR RELOCATION ACTIVITY RELATED TO BASE TELECOMMUNICATIONS TO PROTECT AND PRESERVE SERVICE AND COORDINATE REMOVAL OF EXISTING TELECOMMUNICATIONS COMPONENTS.
2. CONTRACTOR WILL COORDINATE WITH THE COR PRIOR TO REMOVAL OF EXISTING UTILITIES IN SERVICE. RELOCATED UTILITIES WILL BE CONSTRUCTED BEFORE REMOVAL OF EXISTING UTILITIES TO ENSURE UNINTERRUPTED SERVICE TO THE FACILITIES SERVED BY THE UTILITY. ALL RELOCATIONS WILL BE COORDINATED WITH THE COR.
3. CONTRACTOR WILL COORDINATE ALL REQUIRED UTILITY DISRUPTIONS AND TERMINATIONS WITH CONTRACTING OFFICER 15 DAYS PRIOR TO ANTICIPATED OUTAGE OR UTILITY DISRUPTION IAW DOCUMENTS.
4. CONTRACTOR WILL REVIEW AND FOLLOW ANY RECOMMENDATIONS OF THE BUILDING HAZMAT REPORT(S) PRIOR TO STARTING ANY DEMOLITION OF BUILDINGS.
5. SITE WAS PREVIOUSLY DEVELOPED AS A PARKING LOT. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF POTENTIAL SITE RESIDUALS WITHIN LIMITS OF CONSTRUCTION AS REQUIRED TO ACCOMMODATE NEW CONSTRUCTION, UTILITIES AND ALL SITE IMPROVEMENTS. ABANDONED IN PLACE FEATURES, FOUNDATIONS AND UTILITIES WILL BE REMOVED TO DISTANCE OF 10 FEET OUTSIDE REQUIRED CONSTRUCTION LIMITS. ALL UTILITIES WILL BE PERMANENTLY CAPPED OR SEALED AT LIMIT OF REMOVAL.
6. UTILITY CAPPING METHODS WILL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR SPECIFIC PIPE MATERIAL IN SERVICE. ALL CAPPING WILL BE INSPECTED AND APPROVED BY THE COR.
7. ALL STRUCTURES, VALVES, ETC. TO REMAIN WILL BE PROTECTED AND ADJUSTED TO FINISH GRADE.
8. EXISTING UTILITIES SCHEDULED FOR DEMOLITION/REMOVAL WILL BE DISCONNECTED AND REMOVED TO THE POINT OF CONNECTION TO THE PRIMARY SYSTEM, OR TO THE PROJECT LIMITS OF CONSTRUCTION. IF THE UTILITY TO BE REMOVED CONTINUES BEYOND THE PROJECT LIMITS OF CONSTRUCTION, CONTRACTOR WILL COORDINATE REMOVAL/ABANDONMENT WITH THE COR.
9. UTILITIES SCHEDULED FOR DEMOLITION/REMOVAL WILL NOT BE PERMITTED TO BE ABANDONED IN PLACE.
10. IN AREAS OF UTILITY REMOVAL OF ABANDONED LINES, THE PORTION OF EXISTING ABANDONED LINES APPROVED TO REMAIN WILL BE CAPPED OR PLUGGED AT REMOVAL INTERFACE.
11. CONCRETE END SECTIONS WILL BE NCDOT CLASS B, AIR-ENTRAINED CONCRETE HAVING A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI AT 28 DAYS.
12. IF AN OIL/WATER SEPARATOR OR IWTP LINE IS DEMOLISHED, A RCRA WORKPLAN WILL BE IMPLEMENTED WITH PRIOR APPROVAL FROM NCDEQ. THIS PROCESS TAKES APPROXIMATELY 30-45 DAYS.

GENERAL SITE NOTES:

1. BUILDING COORDINATES ARE INDICATED TO OR MEASURED AT THE CENTER OF BUILDING COLUMNS OR OUTSIDE BUILDING FACE AS INDICATED. CONTRACTOR WILL COORDINATE BEARINGS OF BUILDING GRID LINES WITH STRUCTURAL DRAWINGS.
2. CONTRACTOR WILL COORDINATE BUILDING ENTRANCES, EGRESSES, WALKWAYS, AND DOORWAY LOCATIONS WITH ARCHITECTURAL AND STRUCTURAL SHEETS. STOOPS AND SIDEWALKS MUST BE CENTERED ON DOORS.
3. SEE MECHANICAL AND ELECTRICAL SHEETS FOR MISCELLANEOUS SITE EQUIPMENT DETAILS. SEE CIVIL DETAIL SHEETS FOR EQUIPMENT PAD DETAILS.

PAVEMENT JOINTING NOTES:

1. ALL CONCRETE PANELS THAT SUPPORT UTILITY STRUCTURES OR ARE IRREGULAR IN SHAPE WILL BE REINFORCED. SEE DETAIL SHEETS FOR CONCRETE REINFORCEMENT DETAILS.
2. CONTRACTOR WILL PROVIDE THICKENED EDGE EXPANSION JOINT AROUND UTILITY STRUCTURES. SEE SHEET DETAIL SHEETS.
3. ALL JOINT CHANGES WILL BE APPROVED BY THE ENGINEER OF RECORD AND COR.
4. MANHOLE COVER AND FRAME WILL BE RAISED TO FINISH GRADE BY INSTALLING PRECAST MANHOLE ADJUSTMENT RINGS AND LEVELING MORTAR.
5. GRADE ADJUSTMENT AREA WILL BE BACKFILLED WITH EARLY STRENGTH PCC.

GENERAL GRADING NOTES:

1. PRIOR TO GRADING; AREAS WILL BE CLEARED AND GRUBBED, THEN TOPSOIL REMOVED AND STOCKPILED FOR REUSE. TOPSOIL IS ANTICIPATED TO BE ABOUT 6.00 TO 10.00 INCHES IN THICKNESS.
2. ELEVATIONS INDICATED ARE FOR TOP OF FINAL GRADE, PAVEMENT, OR STRUCTURE UNLESS INDICATED OTHERWISE.
3. ELEVATION DENOTED AS "MATCH" ARE INTENDED TO MEET EXISTING GRADE ELEVATIONS. CONTRACTOR WILL VERIFY ELEVATIONS AT TIE-INS AND MATCH POINTS PRIOR TO BEGINNING CONSTRUCTION.
4. EXTERIOR FINISH GRADES AT BUILDING ENTRANCES AND DOORWAY THRESHOLDS WILL BE MAXIMUM 0.25 INCHES BELOW BUILDING FINISH FLOOR IF A VERTICAL THRESHOLD IS PROVIDED, AND WILL BE MAXIMUM 0.5 INCHES BELOW BUILDING FINISH FLOOR IF A BEVELED THRESHOLD IS PROVIDED, UNLESS INDICATED OTHERWISE.
5. EXTERIOR FINISH GRADES ADJACENT TO BUILDING WILL BE 6.00 INCHES BELOW BUILDING FINISH FLOOR UNLESS INDICATED OTHERWISE.
6. ADEQUATE DRAINAGE WILL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. ANY DRAINAGE FEATURE OR STRUCTURE DISTURBED DURING CONSTRUCTION WILL BE RESTORED TO EXISTING CONDITIONS OR BETTER SUBJECT TO THE APPROVAL OF THE COR.
7. SURFACES AROUND FACILITY WILL BE GRADED TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND PAVEMENTS.
8. THE CONTRACTOR WILL REMOVE STANDING WATER FROM THE PROJECT WORK LIMITS AS NECESSARY TO PROTECT SUBGRADE, SUBBASE, AND/OR BASE COURSE OF NEW PAVEMENT, SURROUNDING PAVEMENT-TO-REMAIN, OR OTHER COMPLETED WORKS.
9. SEE EROSION AND SEDIMENT CONTROL PLAN SHEETS AND DETAIL SHEETS FOR RECOMMENDED BEST PRACTICES FOR SEDIMENT AND EROSION CONTROL.
10. TOP ELEVATION OF ALL UTILITY STRUCTURES TO REMAIN WILL BE ADJUSTED ACCORDINGLY TO FINISH GRADE ELEVATION.
11. ALL AREAS DISTURBED BY CONSTRUCTION WILL BE RE-VEGETATED IN ACCORDANCE WITH THE SPECIFICATIONS.
12. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SERVING THEM MUST COMPLY WITH THE ARCHITECTURAL BARRIERS ACT (ABA). THE MAXIMUM SLOPE IN ANY DIRECTION MUST BE 2%. ACCESS AISLES MUST BE AT THE SAME LEVEL AS THE PARKING SPACES THEY SERVE.

FINAL GRADING AND CLEAN UP NOTES:

1. AFTER COMPLETION OF FINAL GRADING, THE DISTURBED AREAS WILL BE REVEGETATED IN ACCORDANCE WITH THE SPECIFICATIONS. ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES WILL BE REMOVED UPON PROJECT COMPLETION. TRAPPED SEDIMENT AND OTHER DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY CONTROL MEASURES WILL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
2. PER G205002 EROSION CONTROL MEASURES - EROSION CONTROL SEEDING MUST NOT BE CONSIDERED AS A PERMANENT TURF SOLUTION. PROVIDE CENTIPEDE SOD FOR PERMANENT TURF.

SYM	DESCRIPTION	DATE	APPR

NAVFAC

NORTH CAROLINA PROFESSIONAL SEAL 045776 ENGINEER LAURA E GREENFIELD 6 JAN 2022

RQ DPR CONSTRUCTION

Michael Baker INTERNATIONAL
100 AIRSIDE DRIVE
MOON TOWNSHIP, PA 15108
A/E INFO

APPROVED
FOR COMMANDER NAVFAC

ACTIVITY
MARINE CORPS BASE CAMP LEJEUNE

SATISFACTORY TO DATE

DES KJK	DRW STM	CHK WDN
PM	XXX	
BRANCH MANAGER	XXX	
CHIEF ENG/ARCH	XXX	
FIRE PROTECTION	XXX	

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND
ATLANTIC DESIGN AND CONSTRUCTION
MCB CAMP LEJEUNE

NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC
NORFOLK, VA.
JACKSONVILLE, NC
HURRICANE FLORENCE PKG 2
P1199 CLB 2ND 6TH 8TH HEADQUARTERS

CIVIL GENERAL NOTES

SCALE: AS NOTED
EPROJECT NO.: 1639566
CONSTR. CONTR. NO. N40085-20-C-0044
NAVFAC DRAWING NO.
SHEET OF

C-001

DRAWFORM REVISION: 12 APRIL 2018

FILE NAME: \\nconpa1d1.bkr.mbakercorp.com\VOL2\Projects\160304 Hurricane Florence Package 2\05_Deliverables\Drawings\05 C_Civil\SHEET FILES\P1199\160304_P1199 - C-001.dwg
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EXISTING LEGEND

SYMBOL	DESCRIPTION
20	EXISTING MAJOR CONTOUR
19	EXISTING MINOR CONTOUR
SDx	EXISTING STORM SEWER
SDx	EXISTING ABANDONED STORM SEWER
	EXISTING STORM SEWER CATCH BASIN
	EXISTING STORM SEWER MANHOLE
Gx	EXISTING GAS LINE
Gx	EXISTING ABANDONED GAS LINE
GV	EXISTING GAS VALVE
Ex Ex Ex	EXISTING OVERHEAD ELECTRIC LINE
Eux	EXISTING UNDERGROUND ELECTRIC LINE
GEN	EXISTING ELECTRICAL GENERATOR
E	EXISTING ELECTRIC MANHOLE
JCT	EXISTING ELECTRICAL JUNCTION BOX
	EXISTING LIGHT POLE
	EXISTING UTILITY POLE
Cux	EXISTING UNDERGROUND TELECOM LINE
Gx Gx Gx	EXISTING GAS LINE
Wx Wx Wx	EXISTING WATERLINE
WV	EXISTING WATER VALVE
	EXISTING HYDRANT
W	EXISTING WATER METER
SSx	EXISTING SANITARY SEWER
	EXISTING SANITARY SEWER MANHOLE
	EXISTING SANITARY SEWER CLEANOUT
	EXISTING DITCH CENTERLINE
X X X	EXISTING FENCE
	EXISTING EDGE OF PAVEMENT
	EXISTING BUILDING LINE
	EXISTING SIGN
	EXISTING CONCRETE SIDEWALK/ PAVEMENT
	EXISTING BOLLARD/ POST
STux STux	EXISTING STEAM LINE
ST	EXISTING STEAM STRUCTURE
	EXISTING WETLAND
	FLOW DIRECTION
	SURVEY CONTROL NAIL
	EXISTING TREE

LEGEND

SYMBOL	DESCRIPTION
20	MAJOR CONTOUR
19	MINOR CONTOUR
SD	STORM SEWER
	STORM SEWER CATCH BASIN
G	GAS LINE
	GAS VALVE
Eu	UNDERGROUND ELECTRICAL LINE
E	OVERHEAD ELECTRICAL LINE
	UTILITY POLE
Cu	UNDERGROUND TELECOM LINE
T	TRANSFORMER
W	WATERLINE
	POST INDICATOR VALVE
	FIRE HYDRANT WITH BOLLARDS
	FREE STANDING FIRE DEPARTMENT CONNECTION WITH BOLARDS
SS	SANITARY SEWER
S	SANITARY MANHOLE
CO	SANITARY CLEANOUT
	EDGE OF PAVEMENT
	DETECTABLE WARNING SURFACE
	BUILDING LINE
	SIGN
LOD	LIMIT OF DISTURBANCE
	CONCRETE PAVEMENT
	CONCRETE SIDEWALK
	NO PARKING STRIPING
	ASPHALT PAVEMENT
	GRASS ISLAND
C	COMMUNICATIONS HANDHOLE
C	COMMUNICATIONS MANHOLE
15" CB1	STORM SEWER W/CATCH BASIN
6"	ROOF DRAIN COLLECTION W/CLEANOUT
22.00	SPOT ELEVATION
TC 22.50 BC 22.00	TOP & BOTTOM OF CURB SPOT ELEVATIONS
-2.45%	FINISH GRADE SLOPE
	FLOW DIRECTION
D	STORM MANHOLE

E&S LEGEND

SYMBOL	DESCRIPTION
SF	SILT FENCE
FS	COMPOST FILTER SOCK
	ROCK CONSTRUCTION ENTRANCE
	ROCK CONSTRUCTION ENTRANCE STOCKPILE
	INLET FILTER BAG
	EROSION CONTROL BLANKET
	INFILTRATION TEST PIT
	RIP-RAP OUTLET PROTECTION
	RIP-RAP SPILLWAY

PAVEMENT LEGEND

SYMBOL	DESCRIPTION
	LIGHT DUTY RIGID PORTLAND CEMENT CONCRETE PAVEMENT
	HEAVY DUTY FLEXIBLE ASPHALT PAVEMENT
	PARKING AREAS ASPHALT PAVEMENT
	EXISTING PARKING LOT REPLACEMENT PAVEMENT
	GRASS PAVER
	CONCRETE SIDEWALK PAVEMENT
	CONCRETE EQUIPMENT PAD
	GRASS ISLAND
	REPLACED IN KIND

DEMOLITION LEGEND

SYMBOL	DESCRIPTION
	BUILDING / STRUCTURE TO BE REMOVED
	PAVEMENT REMOVAL AREA
	SIDEWALK / CONCRETE REMOVAL AREA
	UTILITY / SITE FEATURE TO BE REMOVED
	UTILITY / SITE FEATURE TO BE REMOVED
	TREE PROTECTION FENCING
	UTILITY TO BE RELOCATED
	SAW CUT PAVEMENT

ABBREVIATION LEGEND

ABBREVIATION	DESCRIPTION
@	AT
ABA	ARCHITECTURAL BARRIERS ACT
ABC	AGGREGATE BASE COURSE
AC	ACRE
ADA	AMERICANS WITH DISABILITIES ACT
AGGR	AGGREGATE
ARS	AIR RESERVE STATION
ATFP	ANTI-TERRORISM/FORCE PROTECTION
B/C	BACK OF CURB
BCE	BASE CIVIL ENGINEERING
B/L	BUILDING LINE
BH	BOREHOLE
BLDG	BUILDING
BM	BENCHMARK
BOT	BOTTOM
BRL	BUILDING RESTRICTION LINE
CB	CATCH BASIN
C.C.	CENTER-TO-CENTER
C-C	CENTER-TO-CENTER
CMU	CONCRETE MASONRY UNIT
COE	CORPS OF ENGINEERS
CONC	CONCRETE
CONT	CONTINUOUS
CGI	CURB/GUTTER INLET
CO	CLEAN OUT
COM	COMMUNICATION
COR	CONTRACTING OFFICER'S REPRESENTATIVE
CL	CENTERLINE
DEPT	DEPARTMENT
DI	DUCTILE IRON
	DROP INLET
Ø	DIAMETER
DIA	DIAMETER
DOT	DEPARTMENT OF TRANSPORTATION
DS	DOWNSPOUT
E	EASTING
ECP	ENTRY CONTROL POINT
ELEC	ELECTRICAL
EL/ELEV	ELEVATION
EU	ELECTRIC UTILITY
FDC	FIRE DEPARTMENT CONNECTION
FES	FLARED END SECTION
FFE	FINISH FLOOR ELEVATION
FH	FIRE HYDRANT
FL	FLOW LINE
FT	FOOT
FW	FIREWATER
GI	GRATED INLET
HDPE	HIGH DENSITY POLYETHYLENE
HQ	HEADQUARTERS
HW	HEADWALL
MAX	MAXIMUM
MCAS	MARINE CORPS AIR STATION
MH	MANHOLE
MIN	MINIMUM
MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
MW	MONITORING WELL
N	NORTHING
NC	NORTH CAROLINA
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NO	NUMBER
NPW	NON-POTABLE WATER
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OSHA	OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION
PCC	PORTLAND CEMENT CONCRETE
PE	POLYETHYLENE
PI	POINT OF INTERSECTION
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
REQ'D	REQUIRED
RFDC	REMOTE FIRE DEPARTMENT CONNECTION
SCH	SCHEDULE
SS	SANITARY SEWER
SDI	STORM DRAIN INLET
SDMH	STORM DRAIN MANHOLE
ST, SD	STORM SEWER, STORM DRAIN, STREET
SWPPP	STORM WATER POLLUTION PREVENTION PLAN
T/C	TOP OF CURB
T/G	TOP OF GRADE
T/S	TOP OF SLAB
TELE	TELEPHONE
TYP	TYPICAL
USAF	UNITED STATES AIR FORCE
VOL	VOLUME
WM	WATER METER
WV	WATER VALVE
WWF	WELDED WIRE FABRIC

STM	DESCRIPTION	DATE	APPR

NAVFAC

NORTH CAROLINA PROFESSIONAL SEAL 045776 ENGINEER LAUREN E GREENFIELD 6 JAN 2022

RQ DPR CONSTRUCTION

Michael Baker INTERNATIONAL
100 AIRSIDE DRIVE
MOON TOWNSHIP, PA 15108
A/E INFO

APPROVED
FOR COMMANDER NAVFAC

ACTIVITY:
MARINE CORPS BASE CAMP LEJEUNE

SATISFACTORY TO DATE

DES KJK	DRW STM	CHK WDN	
PM	XXX		
BRANCH MANAGER	XXX		
CHIEF ENG/ARCH	XXX		
FIRE PROTECTION	XXX		

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC
NORFOLK, VA.
ATLANTIC DESIGN AND CONSTRUCTION
MCB CAMP LEJEUNE
JACKSONVILLE, NC

HURRICANE FLORENCE PKG 2
P1199 CLB 2ND 6TH 8TH HEADQUARTERS

CIVIL LEGEND & ABBREVIATIONS

SCALE: AS NOTED
EPROJECT NO.: 1639566
CONSTR. CONTR. NO. N40085-20-C-0044
NAVFAC DRAWING NO.
SHEET OF

C-004

DRAWFORM REVISION 12 APRIL 2018

FILE NAME: \\mcorpsc1d1.bkr.mbakercorp.com\JOB\Projects\160304-Hurricane Florence Prodrage 2\05_Deliverables\Drawings\05 C_Civil\SHEET FILES\P1199\160304_P1199 - C-004.dwg
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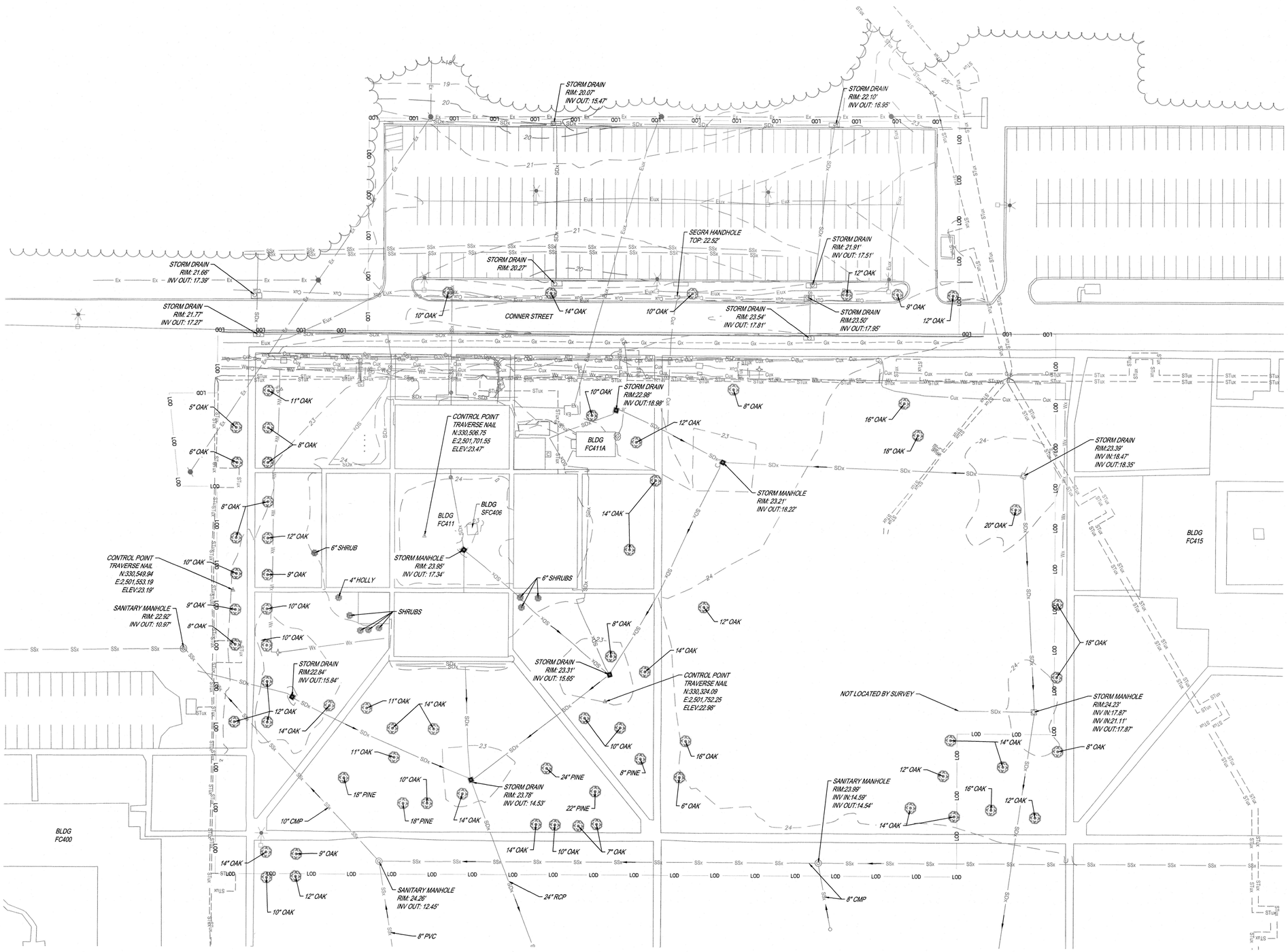
CRITICAL PATH FINAL SUBMITTAL – 10/19/2021



P1199 - CIVIL - EXISTING CONDITIONS PLAN

SCALE: 1" = 40'

GENERAL NOTES

1. SEE SHEET C-001 FOR CIVIL GENERAL NOTES.
2. SEE SHEET C-004 FOR CIVIL LEGEND AND ABBREVIATIONS.
3. UNLESS OTHERWISE INDICATED ON THE PLANS, ALL NON-PAVED AREAS WILL BE GRASS OR TURF.

0' 20' 40' 80'

SCALE: 1" = 40'

SYM	DESCRIPTION	DATE	APPR

NAVFAC

NORTH CAROLINA PROFESSIONAL SEAL 045776 ENGINEER LAURENCE E GREENFIELD 6 JAN 2022

RQ DPR CONSTRUCTION

Michael Baker INTERNATIONAL
100 AIRSIDE DRIVE
MOON TOWNSHIP, PA 15108
A/E INFO

APPROVED
FOR COMMANDER NAVFAC

ACTIVITY
MARINE CORPS BASE CAMP LEJEUNE

SATISFACTORY TO DATE

DES KJK	DRW STM	CHK WDN	
PM			XXX
BRANCH MANAGER			XXX
CHIEF ENG/ARCH			XXX
FIRE PROTECTION			XXX

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND
ATLANTIC DESIGN AND CONSTRUCTION
MCB CAMP LEJEUNE

NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC
NORFOLK, VA

JACKSONVILLE, NC

HURRICANE FLORENCE PKG 2
P1199 CLB 2ND 6TH 8TH HEADQUARTERS

EXISTING CONDITIONS PLAN

SCALE:	AS NOTED
EPROJECT NO.:	1639566
CONSTR. CONTR. NO.	N40085-20-C-0044
NAVFAC DRAWING NO.	
SHEET	OF

V-101

DRAWFORM REVISION: 12 APRIL 2018

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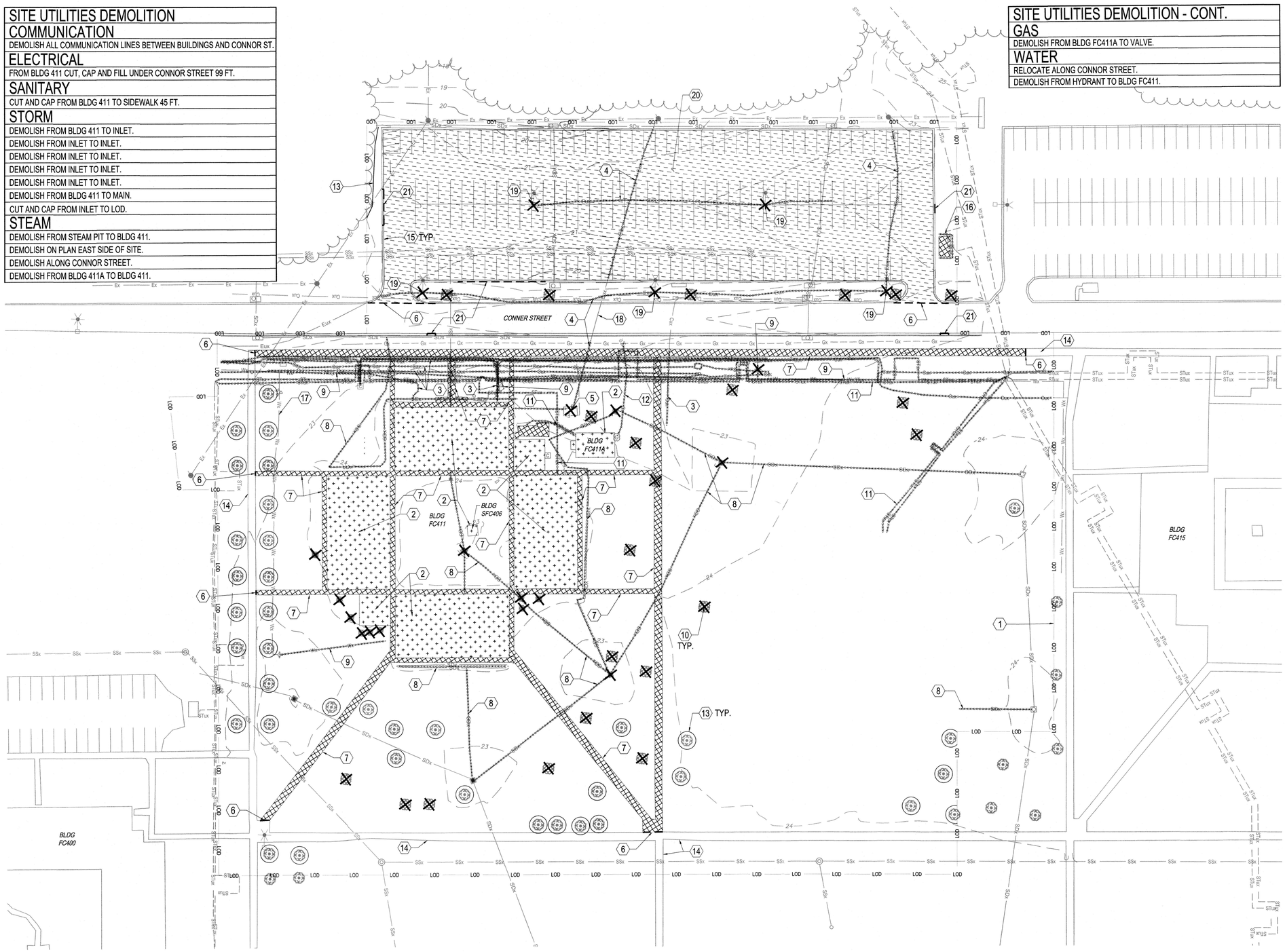
SITE UTILITIES DEMOLITION
COMMUNICATION
DEMOLISH ALL COMMUNICATION LINES BETWEEN BUILDINGS AND CONNOR ST.
ELECTRICAL
FROM BLDG 411 CUT, CAP AND FILL UNDER CONNOR STREET 99 FT.
SANITARY
CUT AND CAP FROM BLDG 411 TO SIDEWALK 45 FT.
STORM
DEMOLISH FROM BLDG 411 TO INLET.
DEMOLISH FROM INLET TO INLET.
DEMOLISH FROM INLET TO INLET.
DEMOLISH FROM INLET TO INLET.
DEMOLISH FROM INLET TO INLET.
DEMOLISH FROM BLDG 411 TO MAIN.
CUT AND CAP FROM INLET TO LOD.
STEAM
DEMOLISH FROM STEAM PIT TO BLDG 411.
DEMOLISH ON PLAN EAST SIDE OF SITE.
DEMOLISH ALONG CONNOR STREET.
DEMOLISH FROM BLDG 411A TO BLDG 411.

SITE UTILITIES DEMOLITION - CONT.
GAS
DEMOLISH FROM BLDG FC411A TO VALVE.
WATER
RELOCATE ALONG CONNOR STREET.
DEMOLISH FROM HYDRANT TO BLDG FC411.



P1199 - CIVIL - DEMOLITION PLAN

SCALE: 1" = 40'

KEYED NOTES

1. LIMIT OF DISTURBANCE
2. DEMOLISH EXISTING BUILDING
3. REMOVE EXISTING COMMUNICATION LINES
4. REMOVE EXISTING ELECTRIC LINE
5. REMOVE EXISTING ELECTRIC TRANSFORMERS
6. SAW CUT EXISTING PAVEMENT
7. REMOVE EXISTING SIDEWALK
8. REMOVE EXISTING STORM LINE AND INLETS
9. REMOVE EXISTING WATERLINE AND HYDRANT
10. REMOVE EXISTING VEGETATION
11. REMOVE EXISTING STEAM LINE
12. REMOVE EXISTING GAS LINE
13. TREE PROTECTION FENCING TO BE PROVIDED AROUND EXISTING TREES TO REMAIN
14. EXISTING SIDEWALK TO REMAIN
15. EXISTING CURB AND GUTTER TO REMAIN
16. DEMOLISH EXISTING DUMPSTER PAD AND FENCE
17. EXISTING WATERLINE AND HYDRANT TO REMAIN
18. ABANDON EXISTING ELECTRICAL LINE IN PLACE
19. REMOVE EXISTING LIGHTING FIXTURE
20. REMOVE EXISTING PAVEMENT AND BASE
21. SAW CUT AND REMOVE EXISTING CURB

GENERAL NOTES

1. SEE SHEET C-001 FOR CIVIL GENERAL NOTES.
2. SEE SHEET C-004 FOR CIVIL LEGEND AND ABBREVIATIONS.
3. PLACEMENT OF BACKFILL FOR DEMOLISHED BUILDINGS AS PER UFC-3-220-04F.

0' 20' 40' 80'

SCALE: 1" = 40'

STM	DESCRIPTION	DATE	APPR

NAVFAC

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 045776 LAUREN E GREENFIELD

RQ DPR CONSTRUCTION

Michael Baker INTERNATIONAL
100 AIRSIDE DRIVE
MOON TOWNSHIP, PA 15108
A/E INFO

APPROVED
FOR COMMANDER NAVFAC

ACTIVITY
MARINE CORPS BASE CAMP LEJEUNE

SATISFACTORY TO DATE

DES KJK	DRW STM	CHK WDN
PM	XXX	
BRANCH MANAGER	XXX	
CHIEF ENG/ARCH	XXX	
FIRE PROTECTION	XXX	

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND
ATLANTIC DESIGN AND CONSTRUCTION

NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC
NORFOLK, VA.

MCB CAMP LEJEUNE
JACKSONVILLE, NC

HURRICANE FLORENCE PKG 2

P1199 CLB 2ND 6TH 8TH HEADQUARTERS

DEMOLITION PLAN

SCALE:	AS NOTED
EPROJECT NO.:	1639566
CONSTR. CONTR. NO.	N40085-20-C-0044
NAVFAC DRAWING NO:	
SHEET	OF

VD101

DRAWFORM REVISION: 12 APRIL 2019

FILE NAME: \\mnoprd1d1.bkr.mbakercorp.com\VOL2\Projects\180304 Hurricane Florence Package 2\05_Deliverables\Drawings\05 C_Civil\SHEET FILES\P1199\180304_P1199 - VD101.dwg

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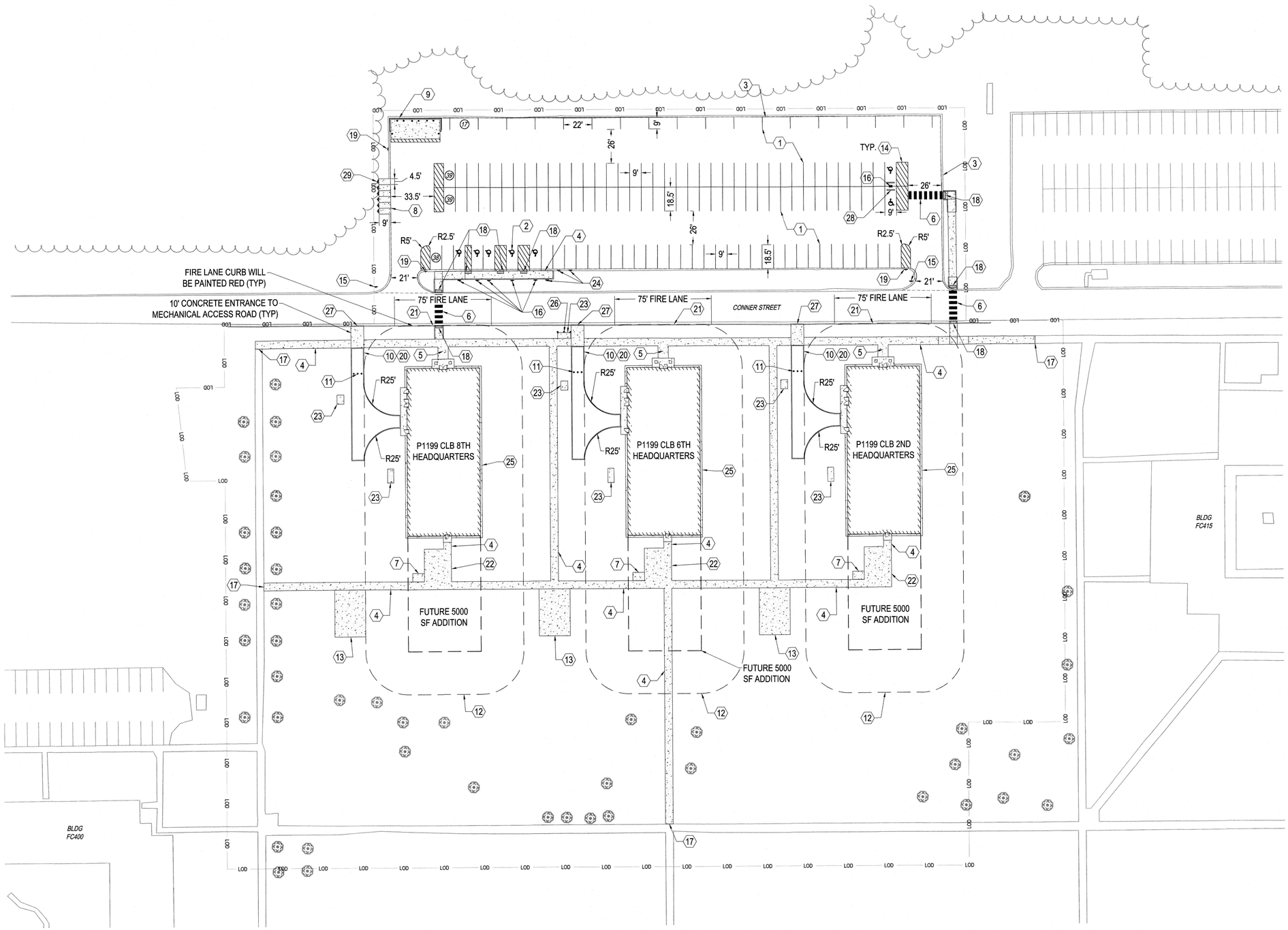

P1199 - CIVIL - SITE PLAN

SCALE: 1" = 40'

KEYED NOTES

1. PARKING LOT STRIPING (D1/CS503)
2. ADA PARKING STRIPING (C1/CS503)
3. LIMITS OF PAVEMENT REPLACEMENT/RESTRIPING
4. 6' CONCRETE SIDEWALK (A1/A2/CP502)
5. 8' CONCRETE SIDEWALK (A1/A2/CP502)
6. 10' WIDE PEDESTRIAN CROSSWALK (A1/CS502)
7. BICYCLE RACK PAD (4" PCC SLAB). SEE LANDSCAPE DRAWINGS.
8. CONCRETE MOTORCYCLE PARKING AREA (C1/CP501)
9. 9'x38' CONCRETE TRIPLE DUMPSTER PAD AND ENCLOSURE. SEE SITE ARCHITECTURAL DRAWINGS
10. 10' WIDE GRASS PAVER PATH TO MECHANICAL ROOM (A1/CP503)
11. DECORATIVE REMOVABLE/LOCKABLE BOLLARDS. SEE LANDSCAPE PLAN FOR DETAILS.
12. 33' AT/FP UNOBSTRUCTED SPACE SETBACK
13. 24' x 36' CONCRETE HITT PAD (C2/CP504)
14. NO PARKING ZONE PAVEMENT STRIPING
15. STOP SIGN (C3/CS503)
16. ACCESSIBLE PARKING SIGN (A1/CS503)
17. MATCH EXISTING SIDEWALK (C4/CP501)
18. CURB RAMP (C1/CS502)
19. NO PARKING SIGN
20. FLUSH CONCRETE CURB (A3/CS501)
21. PAINT EXISTING CURB RED FOR INDICATION OF FIRE LANE FOR FACILITY
22. 12' x 32' PLAZA AREA
23. EQUIPMENT PAD (A3/CP502)
24. VIP PARKING SIGNAGE
25. MOW STRIP (A3/CS502)
26. BOLLARDS (A3/CS503)
27. REDUCE CURB HEIGHT TO 6" FOR MOUNTABLE CURB AT ACCESS TO MECHANICAL ROOM PATH
28. WHEEL STOP (A4/CS503)
29. MOTORCYCLE PARKING SIGN (A1/CS503)

PARKING STALL COUNT	
POV	123
VIP	3
ABA	7
MOTORCYCLE	6
TOTAL	139

GENERAL NOTES

1. SEE SHEET C-001 FOR CIVIL GENERAL NOTES.
2. SEE SHEET C-004 FOR CIVIL LEGEND AND ABBREVIATIONS.
3. UNLESS OTHERWISE INDICATED ON THE PLANS, ALL NON-PAVED AREAS WILL BE GRASS OR TURF.

0' 20' 40' 80'

SCALE: 1" = 40'

SYM	DESCRIPTION	DATE	APPR

NAVFAC

NORTH CAROLINA PROFESSIONAL SEAL 045776 ENGINEER LAUREN E GREENFIELD

RQ DPR CONSTRUCTION

Michael Baker INTERNATIONAL
100 AIRSIDE DRIVE MOON TOWNSHIP, PA 15108 A/E INFO.

APPROVED
FOR COMMANDER NAVFAC

ACTIVITY: MARINE CORPS BASE CAMP LEJEUNE

SATISFACTORY TO DATE

DES KJK DRW STM CHK WDN
PM XXX
BRANCH MANAGER XXX
CHIEF ENG/ARCH XXX
FIRE PROTECTION XXX

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND
ATLANTIC DESIGN AND CONSTRUCTION
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC
NORFOLK, VA.
MCB CAMP LEJEUNE
JACKSONVILLE, NC
HURRICANE FLORENCE PKG 2
P1199 CLB 2ND 6TH 8TH HEADQUARTERS
SITE PLAN

SCALE: AS NOTED
EPROJECT NO.: 1639566
CONSTR. CONTR. NO. N40085-20-C-0044
NAVFAC DRAWING NO.
SHEET OF
CS101

DRAWFORM REVISION: 12 APRIL 2018

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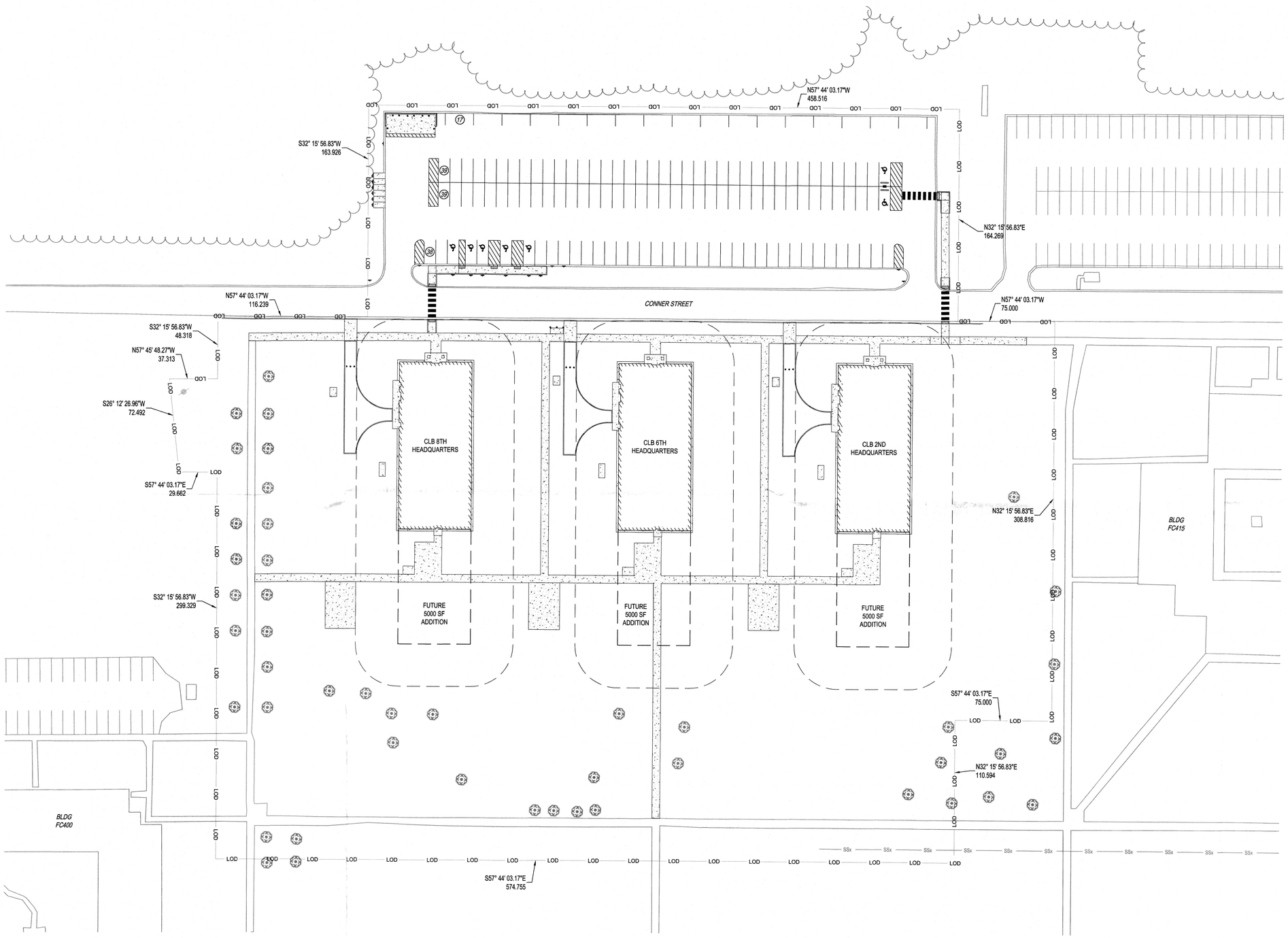

P1199 - CIVIL - HORIZONTAL CONTROL PLAN

SCALE: 1" = 40'

GENERAL NOTES

1. SEE SHEET CH500 FOR POINT TABLE

0' 20' 40' 80'

SCALE: 1" = 40'

STM	DESCRIPTION	DATE	APPR

NAVFAC

NORTH CAROLINA PROFESSIONAL SEAL 045778 ENGINEER LAWRENCE E GREENFIELD JR. 6 JAN 2022

RQ DPR CONSTRUCTION

Michael Baker INTERNATIONAL
100 AIRSIDE DRIVE
MOON TOWNSHIP, PA 15108
A/E INFO

APPROVED
FOR COMMANDER NAVFAC

ACTIVITY
MARINE CORPS BASE CAMP LEJEUNE

SATISFACTORY TO DATE

DES KJK	DRW STM	CHK WDN
PM	XXX	
BRANCH MANAGER	XXX	
CHIEF ENG/ARCH	XXX	
FIRE PROTECTION	XXX	

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND
ATLANTIC DESIGN AND CONSTRUCTION
MCB CAMP LEJEUNE

NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC
NORFOLK, VA

JACKSONVILLE, NC
HURRICANE FLORENCE PKG 2
P1199 CLB 2ND 6TH 8TH HEADQUARTERS

HORIZONTAL CONTROL PLAN

SCALE:	AS NOTED
EPROJECT NO.:	1639566
CONSTR. CONTR. NO.	N40085-20-C-0044
NAVFAC DRAWING NO.	
SHEET	OF

CH101

DRAWFORM REVISION: 12 APRIL 2013

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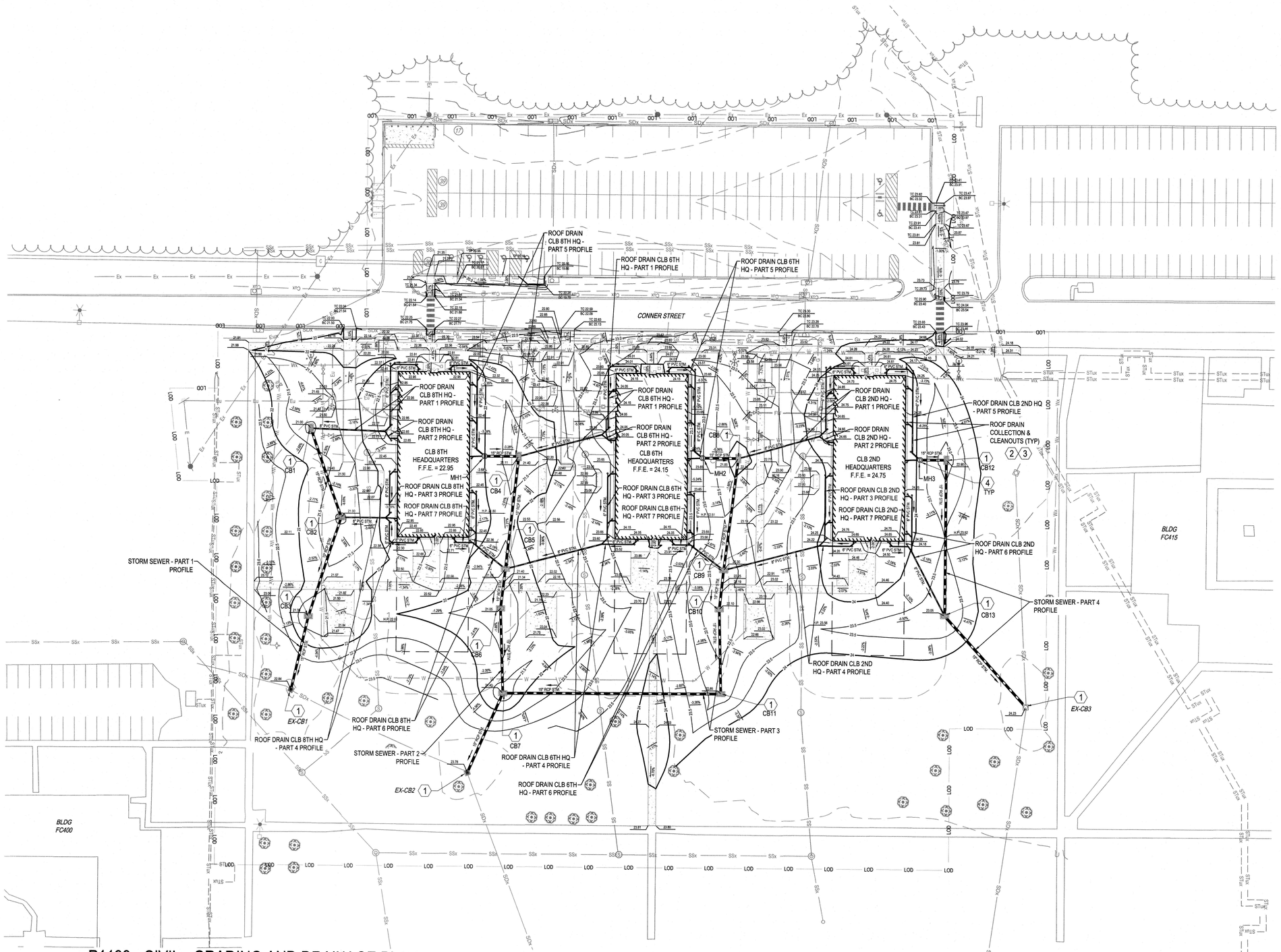

P1199 - CIVIL - GRADING AND DRAINAGE PLAN

SCALE: 1" = 40'

KEYED NOTES

1. CONCRETE CATCH BASIN (C1/CG502)
2. ROOF DRAIN COLLECTOR (A3/CG501)
3. CLEAN OUT (A1/CG501)
4. STORM MANHOLE (A1/CU502)

0' 20' 40' 80'

SCALE: 1" = 40'

N

APPR	DATE	SYM	DESCRIPTION

NAVFAC

NORTH CAROLINA PROFESSIONAL SEAL 045776 ENGINEER JAMES E. GREENFIELD 6 JAN 2022

RQ DPR CONSTRUCTION

Michael Baker INTERNATIONAL
100 AIRSIDE DRIVE
MOON TOWNSHIP, PA 15108
A/E INFO

APPROVED
FOR COMMANDER NAVFAC

ACTIVITY
MARINE CORPS BASE CAMP LEJEUNE

SATISFACTORY TO DATE

DES KJK	DRW STM	CHK WDN
PM	XXX	
BRANCH MANAGER	XXX	
CHIEF ENG/ARCH	XXX	
FIRE PROTECTION	XXX	

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND
ATLANTIC DESIGN AND CONSTRUCTION
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC
NORFOLK, VA
MCB CAMP LEJEUNE
JACKSONVILLE, NC

HURRICANE FLORENCE PKG 2
P1199 CLB 2ND 6TH 8TH HEADQUARTERS

GRADING AND DRAINAGE PLAN

SCALE:	AS NOTED
EPROJECT NO.:	1639566
CONSTR. CONTR. NO.	N40085-20-C-0044
NAVFAC DRAWING NO.	
SHEET	OF

CG101

DRAWFORM REVISION: 12 APRIL 2018

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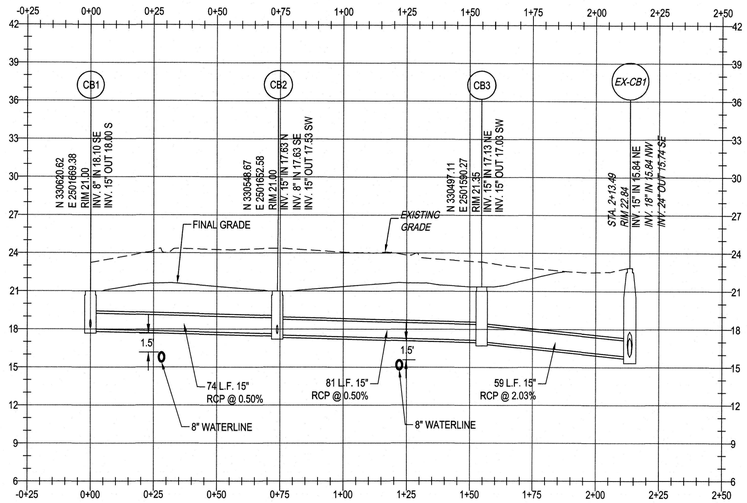
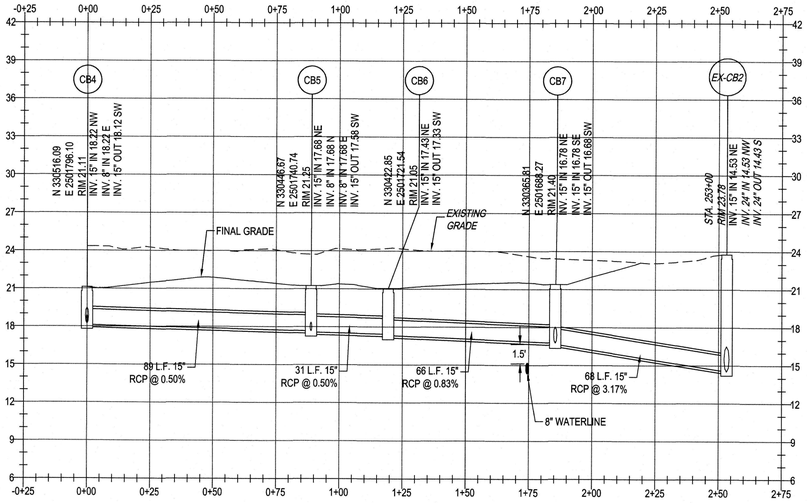
CRITICAL PATH FINAL SUBMITTAL – 10/19/2021



STORM SEWER - PART 1 PROFILE
SCALE: 1"=30 H, 1"=6V

STORM SEWER STATION TABLE	
NETWORK STRUCTURE	STA
CB1	0+00
8" WATERLINE	0+28
CB2	0+74
8" WATERLINE	1+22
CB3	1+55
EX-CB1	2+13

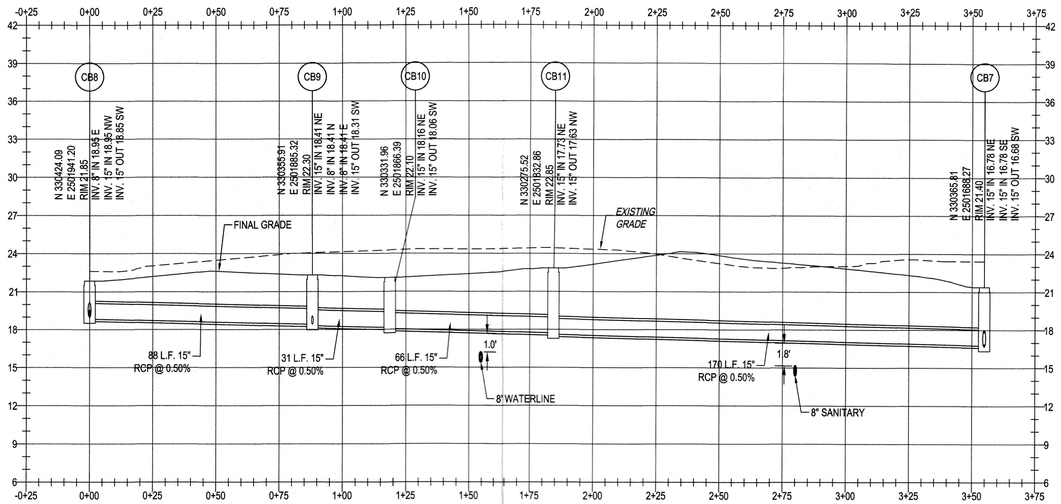


STORM SEWER - PART 2 PROFILE
SCALE: 1"=30 H, 1"=6V

STORM SEWER STATION TABLE	
NETWORK STRUCTURE	STA
CB4	0+00
CB5	0+89
CB6	1+19
8" WATERLINE	1+74
CB7	1+85
EX-CB2	2+53

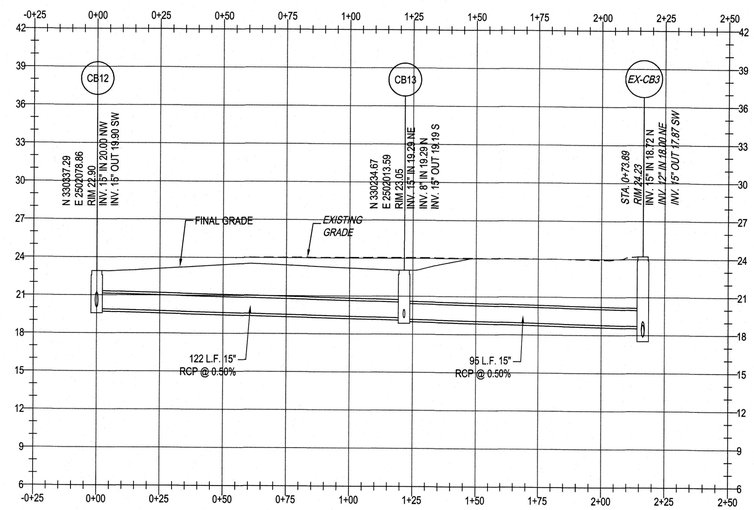
C1 P-1199 CLB 2ND 6TH 8TH HQ STORM SEWER PROFILE

SCALE: AS SHOWN



STORM SEWER - PART 3 PROFILE
SCALE: 1"=30 H, 1"=6V

STORM SEWER STATION TABLE	
NETWORK STRUCTURE	STA
CB8	0+00
CB9	0+88
CB10	1+19
8" WATERLINE	1+55
CB11	1+84
8" SANITARY	2+80
CB7	3+55



STORM SEWER - PART 4 PROFILE
SCALE: 1"=30 H, 1"=6V

STORM SEWER STATION TABLE	
NETWORK STRUCTURE	STA
CB12	0+00
CB13	1+22
EX-CB3	2+16

A1 P-1199 CLB 2ND 6TH 8TH HQ STORM SEWER PROFILE

SCALE: AS SHOWN

STM	DESCRIPTION	DATE	APPR

NAVFAC

NORTH CAROLINA PROFESSIONAL SEAL 045778 ENGINEER LAWRENCE E GREENFIELD 6 APR 2022

RQ DPR CONSTRUCTION

Michael Baker INTERNATIONAL
100 AIRSIDE DRIVE
MOON TOWNSHIP, PA 15108
A/E INFO

APPROVED
FOR COMMANDER NAVFAC

ACTIVITY
MARINE CORPS BASE CAMP LEJEUNE

SATISFACTORY TO DATE

DES KJK	DRW STM	CHK WDN
PM	XXX	
BRANCH MANAGER	XXX	
CHIEF ENG/ARCH	XXX	
FIRE PROTECTION	XXX	

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND
ATLANTIC DESIGN AND CONSTRUCTION
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC
NORFOLK, VA.
MCB CAMP LEJEUNE
JACKSONVILLE, NC

HURRICANE FLORENCE PKG 2
P1199 CLB 2ND 6TH 8TH HEADQUARTERS
STORM SEWER PROFILES

SCALE:	AS NOTED
EPROJECT NO.:	1639566
CONSTR. CONTR. NO.	N40085-20-C-0044
NAVFAC DRAWING NO.	
SHEET	OF

CG201

DRAWFORM REVISION: 12 APRIL 2018

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ROY COOPER
Governor
ELIZABETH S. BISER
Secretary
BRIAN WRENN
Director

NORTH CAROLINA
Environmental Quality

February 2nd, 2022

MCB Camp Lejeune
Attn: Commanding Officer
c/o Neal Paul, Deputy Public Works Officer
1005 Michael Road
Camp Lejeune, NC, 28547

Subject: **Stormwater Permit Exemption – Redevelopment Project**
P1199 SW Connor Street
Project Number SW8 211111
Onslow County

Dear Mr. Paul:

On January 18th, 2021, the Wilmington Regional Office of the Division of Energy, Mineral and Land Resources (DEMLR) received a complete request to exempt the subject proposed redevelopment project from Stormwater Management Permit requirements. Staff review of the plans and supporting documentation has determined that the project proposes activities that are exempted from State Stormwater permitting requirements as set forth in the stormwater rules under Title 15A NCAC 2H.1000, as amended.

Therefore, the director of the DEMLR is hereby providing confirmation that the subject project is exempted from State Stormwater permitting requirements under the following conditions:

1) The project must be constructed as shown on the plans submitted to this Office.
2) The total proposed built-upon area (BUA) of 678,660 square feet does not exceed the existing BUA of 678,660 square feet within this 2,012,472 square foot project area. The 678,660 square feet of allocated BUA includes 34,200 square feet of proposed BUA, 597,920 of existing BUA that will remain, and 46,540 square feet of BUA allocated for future improvements.
3) The proposed stormwater control (roof drains, piping, and catch basins), provides equal protection of surface waters as the existing stormwater control, which is roof drains, piping, and catch basins.

Under Section .1019(2) of the stormwater rules, the entire common plan of development must be permitted. Therefore, any future development or changes to the proposed development, including, but not limited to, the relocation of BUA and the construction of additional BUA, will require approval or a Stormwater Management permit application and permit issuance from the DEMLR prior to any construction. Construction of additional development or changes to the proposed development prior to receipt of the required approval or failure to maintain compliance with the exemption conditions, are violations of Title 15A NCAC 2H.1000, and may result in the initiation of appropriate enforcement action.

Please keep in mind that this determination does not affect your legal obligation to obtain other permits and approvals, which may be required by Federal, State, or local government agencies, rule or law. If you have any question, or need additional information concerning this matter, please contact Kellie Beth Norris at 910-796-7215.

Sincerely,

Christine Hill

For Brian Wrenn, Director
Division of Energy, Mineral and Land Resources

DES/kbn: \\\Stormwater\Permits & Projects\2021\211111 Exemption\2022 02 permit 211111

cc: Lauren Greenfield, PE, Michael Baker International
Wilmington Regional Office Stormwater File

Michael Baker
INTERNATIONAL

We Make a Difference

November 23, 2021

North Carolina Department of Environmental Quality (NCDEQ)
Division of Energy, Mineral, and Land Resources
127 Cardinal Drive Extension
Wilmington, NC 28405

Re: P1199 Regiment HQ
Express Stormwater Management Redevelopment Application
Marine Corp Base Camp Lejeune, Onslow County

Dear Sir or Madam:

On behalf of Marine Corp Base (MCB) Camp Lejeune, Michael Baker International (MBI) is pleased to submit an Express Stormwater Management Redevelopment Application for the P1199 Regiment HQ Demolition Project, located on Connor Street at MCB Camp Lejeune, Onslow County. The stormwater permit boundary is 46.2 acres.

The proposed project will include the demolition of existing Buildings FC411, FC411A, FC413, and FC414, and demolition of the associated paved walkways and roads, and the installation of the CLB 2nd, 6th, and 8th Headquarters. The Built Upon Area (BUA) will be reduced by 46,540 square feet (1.07 acres) from the pre- to post-development conditions and will be captured as future credit. A summary table of the BUA Reduction is shown below:

BUA Reduction – P1199 Regiment HQ Demolition	
Pre-Development BUA (SF)	678,660
Post-Development BUA (SF)	632,120
Δ (SF)	-46,540

Existing drainage patterns on the site will remain the same. Given the reduction in BUA and that no new impervious area will be constructed for the redevelopment, stormwater management on-site after the demolition will be greater than the existing stormwater management currently provided and will utilize the same methods of transport and treatment.

RECEIVED
NOV 23 2021
BY:

100 Airside Drive | Moon Township, PA 15108
Office: 412.269.6300 | Fax: 412.375-3996

If you have any questions or require additional information, please contact me via e-mail at lauren.greenfield@mbakerintl.com or via phone at 412-269-2939.

Respectfully submitted,

MICHAEL BAKER INTERNATIONAL, INC.

Lauren Greenfield

Lauren Greenfield, PE
Project Manager

Attachments:
Express SW Redevelopment Permit Application and Supporting Documents

RECEIVED
NOV 23 2021
BY:

Norris, Kellie E

From: Neider, William <WNeider@mbakerintl.com>
Sent: Wednesday, February 2, 2022 10:43 AM
To: Norris, Kellie E
Subject: [External] RE: EXTERNAL: FW: SW8 211111 P1199 Conner Street Redevelopment Additional Information Request

CAUTION: External email. Do not click links or open attachments unless you verify. Send all suspicious email as an attachment to Report Spam.

Kellie,

Here are the numbers:

The total proposed built-upon area (BUA) of 678,660 square feet does not exceed the existing BUA of 678,660 square feet within this 2,012,472 square foot project area. The 678,660 square feet of allocated BUA includes **34,200** proposed BUA sf square feet of proposed BUA, **597,920** existing BUA sf of existing BUA that will remain, and 46,540 square feet of BUA allocated for future improvements.

If you need anything else, just let me know.

Bill Neider
724-495-4225

From: Norris, Kellie E <kellie.norris@ncdenr.gov>
Sent: Wednesday, February 02, 2022 9:27 AM
To: Neider, William <WNeider@mbakerintl.com>
Subject: EXTERNAL: FW: SW8 211111 P1199 Conner Street Redevelopment Additional Information Request

Bill-

Hope you are doing well. I am forwarding this to you per automatic email response from Lauren. Any help is appreciated.
Thank you-

Kellie Beth Norris, EIT
Environmental Engineer

NC Division of Energy, Mineral and Land Resources
Stormwater Permitting
127 Cardinal Drive Extension
Wilmington, NC 28405-3845
Phone: 910.796.7345

Nothing Compares

E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties.

From: Norris, Kellie E
Sent: Wednesday, February 2, 2022 9:25 AM
To: Greenfield, Lauren <Lauren.Greenfield@mbakerintl.com>
Subject: SW8 211111 P1199 Conner Street Redevelopment Additional Information Request

Lauren-

I am currently writing the permit for the subject project. In the permit the information highlighted is needed:

The total proposed built-upon area (BUA) of 678,660 square feet does not exceed the existing BUA of 678,660 square feet within this 2,012,472 square foot project area. The 678,660 square feet of allocated BUA includes proposed BUA sf square feet of proposed BUA, existing BUA sf of existing BUA that will remain, and 46,540 square feet of BUA allocated for future improvements.

Can you provide these numbers for me? Right now I have proposed BUA, but I assume it includes some existing.

Thank you for your help.

Kellie Beth Norris, EIT
Environmental Engineer

NC Division of Energy, Mineral and Land Resources
Stormwater Permitting
127 Cardinal Drive Extension
Wilmington, NC 28405-3845
Phone: 910.796.7345

Nothing Compares

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From: Greenfield, Lauren <Lauren.Greenfield@mbakerintl.com>
Sent: Thursday, January 6, 2022 3:15 PM
To: Norris, Kellie E <kellie.norris@ncdenr.gov>
Cc: Prendergast CIV Talia M <talia.barraco@usmc.mil>; Hall, Christine <Christine.Hall@ncdenr.gov>
Subject: RE: [External] RE: EXTERNAL: SW8 211111 P1199 Conner Street Redevelopment Additional Information Request

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Thanks for the clarification, Kellie!
Lauren

Lauren Greenfield, P.E., M.B.A. | Project Manager - Civil & Environmental
100 Airside Drive, Airside Business Park | Moon Township, PA 15108 | [O] 412-269-2939
lauren.greenfield@mbakerintl.com | www.mbakerintl.com

From: Norris, Kellie E <kellie.norris@ncdenr.gov>
Sent: Thursday, January 6, 2022 14:55
To: Greenfield, Lauren <Lauren.Greenfield@mbakerintl.com>
Cc: Prendergast CIV Talia M <talia.barraco@usmc.mil>; Hall, Christine <Christine.Hall@ncdenr.gov>
Subject: RE: [External] RE: EXTERNAL: SW8 211111 P1199 Conner Street Redevelopment Additional Information Request

Lauren-

Comment #2 is sufficient. To address Comment #3, we do not need the pre/post BUA maps, what was previously submitted is acceptable.

Thank you-

Kellie Beth Norris, EIT
Environmental Engineer

NC Division of Energy, Mineral and Land Resources
Stormwater Permitting
127 Cardinal Drive Extension
Wilmington, NC 28405-3845
Phone: 910.796.7345

E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties.

From: Greenfield, Lauren <Lauren.Greenfield@mbakerintl.com>
Sent: Thursday, January 6, 2022 2:17 PM
To: Norris, Kellie E <kellie.norris@ncdenr.gov>
Cc: Prendergast CIV Talia M <talia.barraco@usmc.mil>; Hall, Christine <Christine.Hall@ncdenr.gov>
Subject: [External] RE: EXTERNAL: SW8 211111 P1199 Conner Street Redevelopment Additional Information Request

CAUTION: External email. Do not click links or open attachments unless you verify. Send all suspicious email as an attachment to Report Spam.

Hi Kellie,
I had a few follow-up questions regarding Comments 2 and 3 in your Request for Additional Information for P1199:

Comment 2
Is our proposed response to this comment sufficient to what is required?
The BUA reduction of 46,540SF will be a future allotment for MCB-CL. The existing stormwater system will be partially demolished and reconfigured for the proposed site layout. The existing roof drains currently discharge into the existing stormwater system and the proposed roof drains will discharge into the reconfigured stormwater system, thus the proposed conditions provide equal treatment to the existing conditions. This information has been added to the revised stormwater narrative.

Comment 3
We will provide NC-PE sealed drawings, but I wanted to see if you also needed the Pre- and Post-BUA Maps (Attachment A – Calculations) sealed as well? The BUA maps are not part of the construction drawing set (Attachment B – Plan Drawings), but are on the same title block as the construction plans. I had some confusion with another reviewer on another application with the BUA maps, so I wanted to double check with you before I send the full size hard copies.

Thanks for your help!
Lauren

Lauren Greenfield, P.E., M.B.A. | Project Manager - Civil & Environmental
100 Airside Drive, Airside Business Park | Moon Township, PA 15108 | [O] 412-269-2939
lauren.greenfield@mbakerintl.com | www.mbakerintl.com

From: Greenfield, Lauren
Sent: Thursday, January 6, 2022 09:32

To: Norris, Kellie E <kellie.norris@ncdenr.gov>; Barraco CIV Talia M <talia.barraco@usmc.mil>
Cc: Hall, Christine <Christine.Hall@ncdenr.gov>
Subject: RE: EXTERNAL: SW8 211111 P1199 Conner Street Redevelopment Additional Information Request

Good morning Kellie,
Thanks for the additional information request. I'll work on addressing the comments and resubmit to you.
Lauren

Lauren Greenfield, P.E., M.B.A. | Project Manager - Civil & Environmental
100 Airside Drive, Airside Business Park | Moon Township, PA 15108 | [O] 412-269-2939
lauren.greenfield@mbakerintl.com | www.mbakerintl.com

From: Norris, Kellie E <kellie.norris@ncdenr.gov>
Sent: Thursday, January 6, 2022 08:19
To: Barraco CIV Talia M <talia.barraco@usmc.mil>; Greenfield, Lauren <Lauren.Greenfield@mbakerintl.com>
Cc: Hall, Christine <Christine.Hall@ncdenr.gov>
Subject: EXTERNAL: SW8 211111 P1199 Conner Street Redevelopment Additional Information Request

All-

Attached is the Additional Information Request Letter for SW8 211111, P1199 Conner Street Redevelopment Project. Please let me know if you have any questions or concerns.

Thank you-

Kellie Beth Norris, EIT
Environmental Engineer

NC Division of Energy, Mineral and Land Resources
Stormwater Permitting
127 Cardinal Drive Extension
Wilmington, NC 28405-3845
Phone: 910.796.7345

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Michael Baker
INTERNATIONAL

We Make a Difference

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JAN 18 2022
BY:

January 10, 2022

Ms. Kellie Norris
North Carolina Department of Environmental Quality (NCDEQ)
Division of Energy, Mineral, and Land Resources
127 Cardinal Drive Extension
Wilmington, NC 28405

Re: Request for Additional Information
Stormwater Project No. SW8 211111
P1199 SW Connor Street Redevelopment
Onslow County

Dear Ms. Norris:

On behalf of Marine Corp Base (MCB) Camp Lejeune, Michael Baker International (MBI) is pleased to submit additional requested information for Stormwater Project Number SW8 211111 for the P1199 Regimental HQ per your letter dated January 6, 2022. The following comments are also provided:

Request for Additional Information - NCDEQ
MBI Response dated 10 January 2022

Comment 1: *15A NCAC 02H.1042(2)(g)(iii): On sheet G-001 a note is provided stating that there are no wetlands. Please also provide the boundaries of all surface waters, regulatory flood zones, protected vegetated setbacks, and protected riparian buffers, or a note on the plans that none exist. If a note is already provided on the plans, please provide a citation of where it can be located.*

MBI Response: **A note has been added to Sheet G-001 to state that there are no surface waters, wetlands, regulated flood zones, protected vegetated setbacks, or protected riparian buffers within or immediately adjacent to the project limits of disturbance.**

Comment 2: *G.S. 143-214.7(a1)(2): It appears from the narrative that the reduction of BUA by 46,540 sf is the justification that equal or better stormwater treatment for this redevelopment project is being provided. Please confirm that the intention is not to use this BUA allotment in future or if it is intended to be held as a future*

100 Airside Drive | Moon Township, PA 15108
Office: 412.269.6300 | Fax: 412.375-3996

allotment, please clarify in the narrative how the proposed site condition provides equal or better treatment when compared to the existing condition.

MBI Response: **The BUA reduction of 46,540SF will be a future allotment for MCB Camp Lejeune. The existing stormwater system will be partially demolished and reconfigured for the proposed site layout. The existing roof drains currently discharge into the existing stormwater system and the proposed roof drains will discharge into the reconfigured stormwater system; thus, the proposed conditions provide equal treatment to the existing conditions. This information has been added to the revised stormwater narrative.**

Comment 3: 15A NCAC 02H.1042(2)(g), .1042(2)(h), .1042(2)(i), .1042(2)(m), and .1050(16): The plans must be signed, dated, and sealed by a professional licensed in North Carolina. Please provide 2 copies of the signed, dated and sealed plans by a professional licensed in North Carolina.

MBI Response: **Two copies of the signed, dated, and NC PE-sealed plans are provided for your use.**

RECEIVED
JAN 18 2022
BY:_____

A revised permit application package (two hard copies) dated 10-January-2022 is enclosed for your review and approval. If you have any questions or require additional information, please contact me via e-mail at lauren.greenfield@mbakerintl.com or via phone at 412-269-2939.

Respectfully submitted,

MICHAEL BAKER INTERNATIONAL, INC.

Lauren Greenfield

Lauren Greenfield, PE
Project Manager

Attachments:
Revised Permit Application dated 10 January 2022

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BY:

Project and Site Description

The P1199 Regiment HQ at MCB Camp Lejeune is located at the intersection of HM Smith Boulevard and Connor Street. The proposed project has a stormwater permit boundary of 46.2 acres and a limits of disturbance (LOD) boundary of 7.8 acres. The site work for this project will include the building/utility demolition of Buildings FC411 and FC411A, as well as the new construction of the CLB 2nd, 6th, and 8th buildings, and utility reconnection. Building FC413 was recently demolished as part of another contract. Building FC414 is located outside of the P1199 LOD but within the stormwater permit boundary and will have recently been, or will soon be, demolished under another contract. The Building FC413 and Building FC414 demolition project work has been included within this permit application as requested by the Base. Other impervious surfaces (buildings, sidewalks, parking) outside of the P1199 LOD but within the stormwater permit boundary along with the parking lot that serves the site will remain in place and not be disturbed. Please refer to the plan drawings for a demolition and proposed grading plan for the proposed project.

The P1199 Area site has a high point centered around building FC411 and generally drains radially downhill towards the perimeter. The existing stormwater system will be modified to capture water from the new site layout and surrounding areas. The volume runoff and rate will be decreased by a reduction of the built upon area.

Post Construction Stormwater Management Notes

The existing stormwater system will be partially demolished and reconfigured for the proposed site layout. The existing roof drains currently discharge into the existing stormwater system and the proposed roof drains will discharge into the reconfigured stormwater system; thus, the proposed conditions provide equal or better treatment to the existing conditions. Four buildings will also be demolished, along with associated paved walkways, reducing the built upon coverage from a pre-construction area of 678,660 square feet to a post-construction area of 632,120 square feet (reduction of 46,540 square feet of BUA). The BUA reduction of 46,540 square feet will be a future allotment. Surface runoff will flow over vegetated areas prior to entering the existing and proposed storm system, where possible. Supporting calculations are shown in Attachment A.

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Appendices

Figure 1 – Location Map

Figure 2 – Pre 1988 Aerial Imagery (1986)

Figure 3 – Current Aerial Imagery (2021)

Attachment A – Supporting Calculations

- Pre-Development Built-Upon Area
- Post-Development Built-Upon Area
- Storm-EZ Pre-Development Land Use
- Storm-EZ Post-Development Land Use

Attachment B – Plan Drawings

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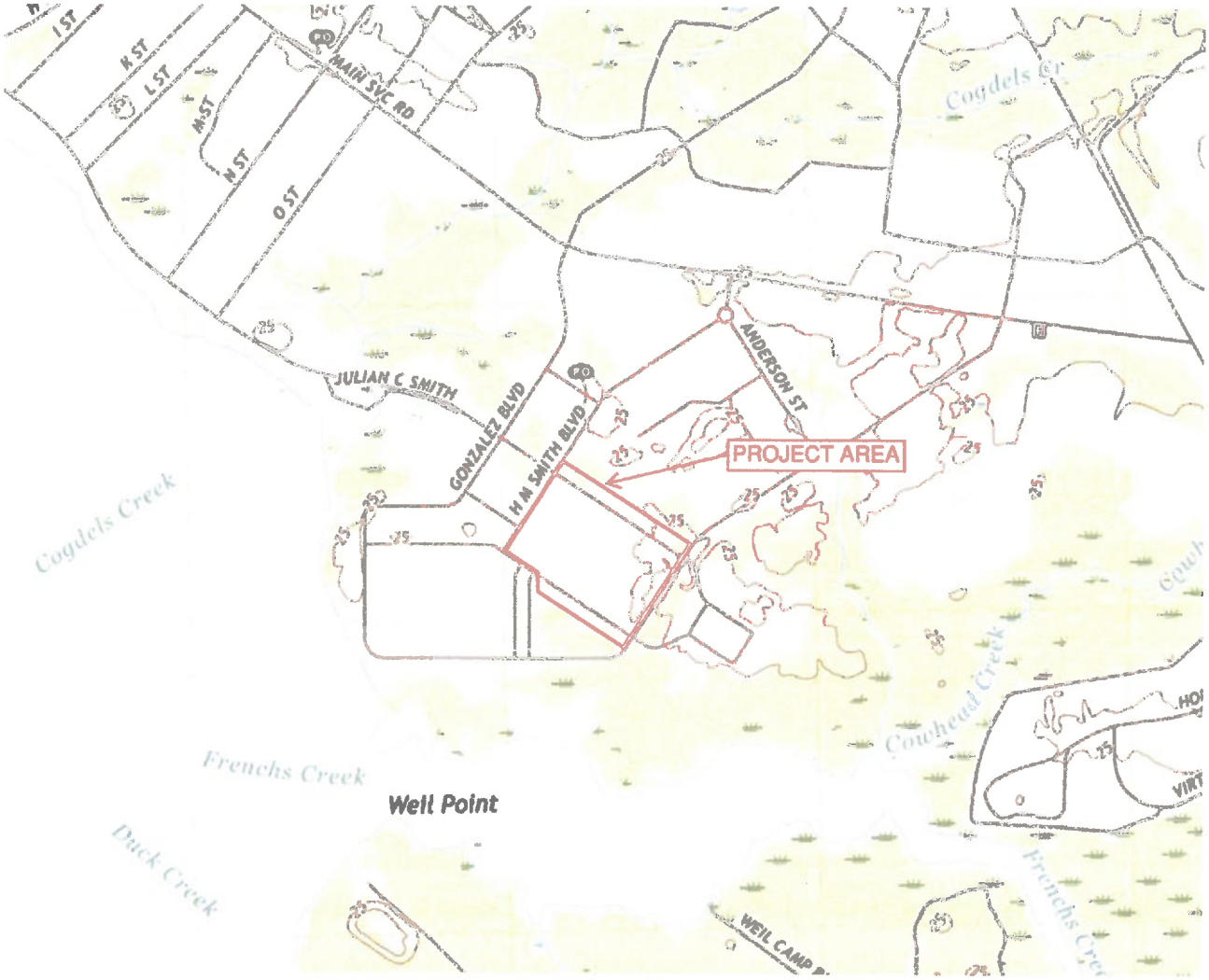
Figure 1 -- Location Map



APPROXIMATE SCALE: NTS

SOURCE: USGS Camp Lejeune Quadrangle

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Figure 2 – Pre-1988 Aerial Imagery (1986)

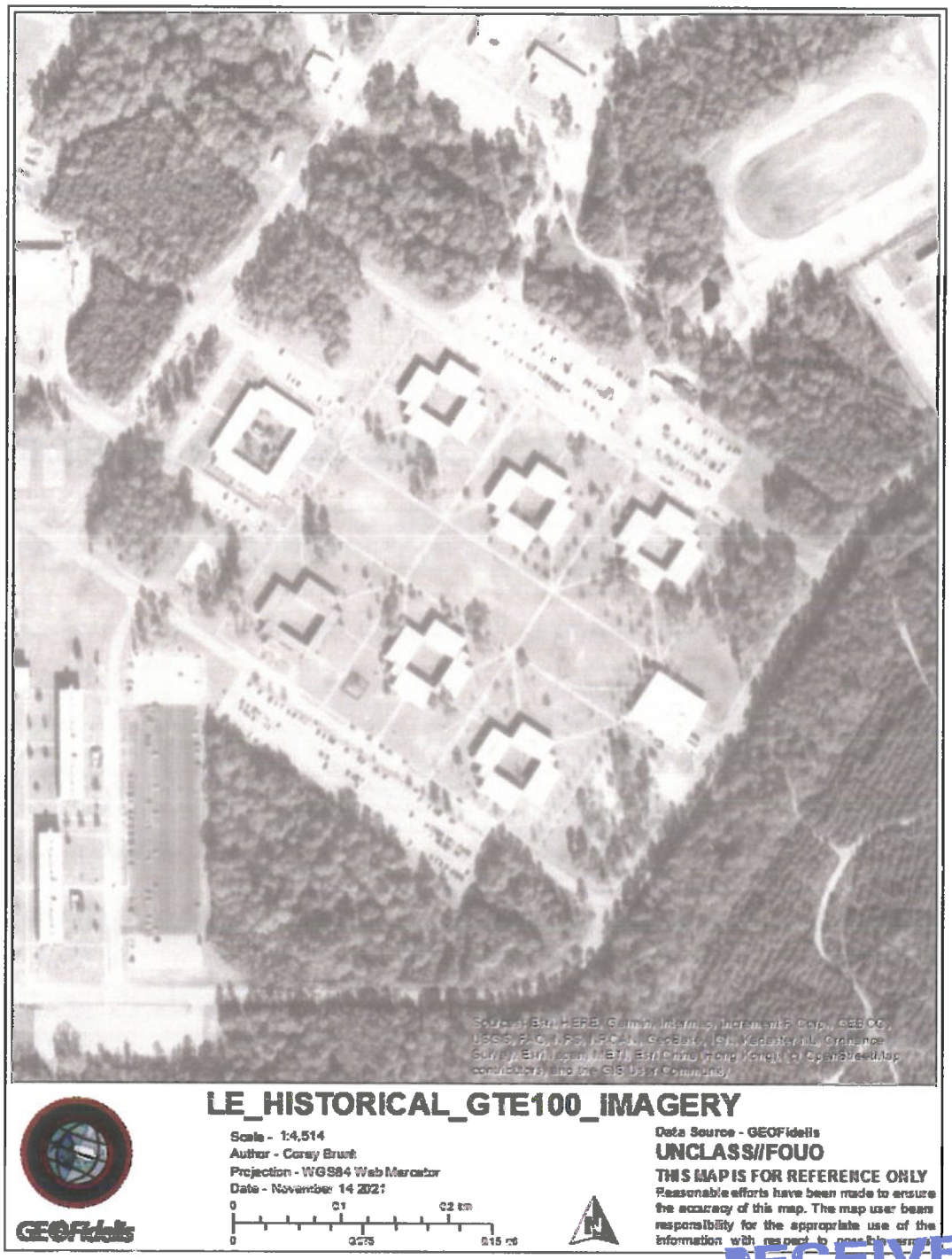

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Figure 3– Current Aerial Imagery (2021)

MCB CAMP LEJEUNE
JACKSONVILLE, NC

0 500 1000 Feet

P1199 AREA DEMOLITION
CURRENT AERIAL IMAGE

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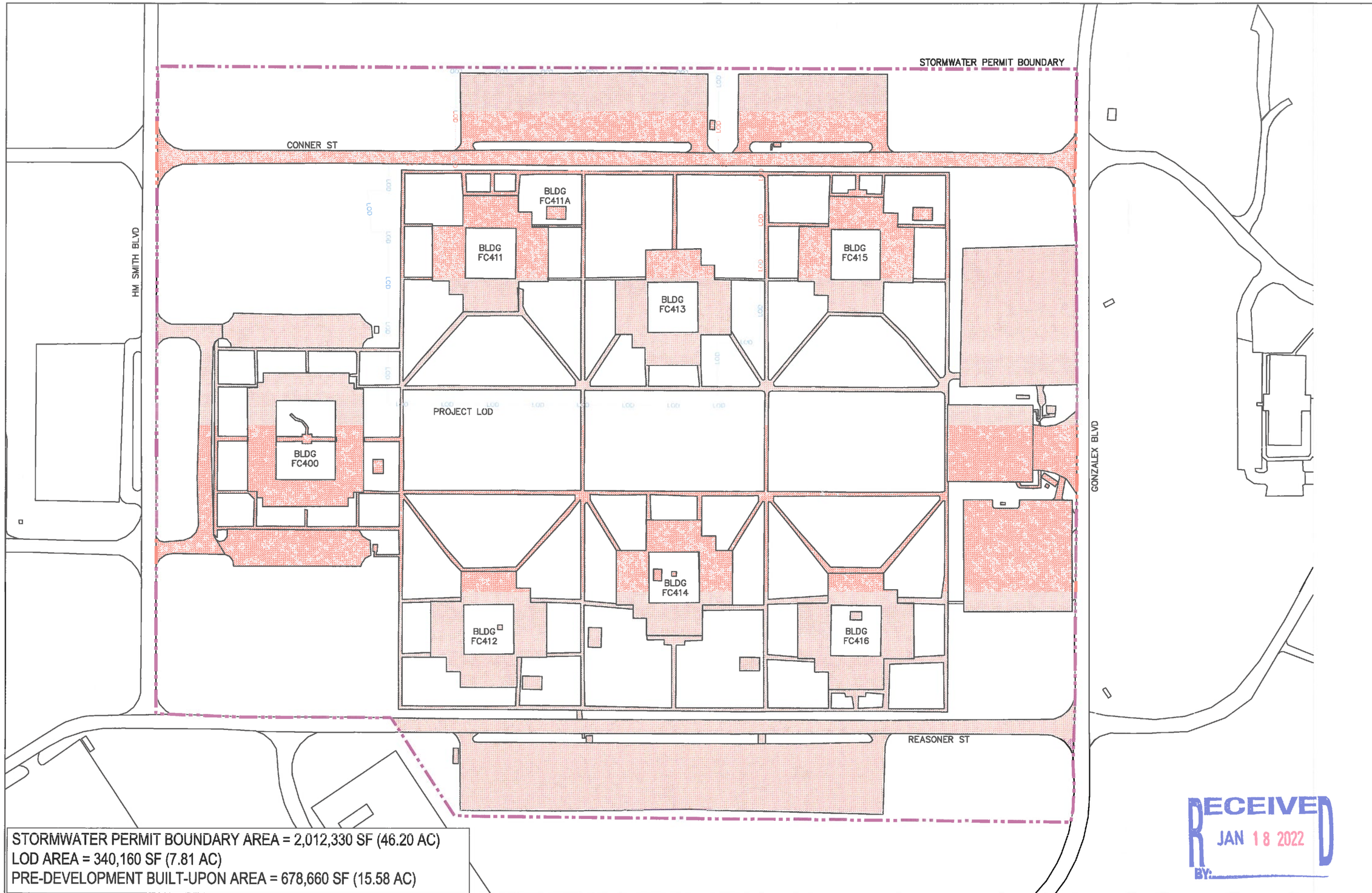
BY:



STORMWATER PERMIT BOUNDARY AREA = 2,012,330 SF (46.20 AC)
LOD AREA = 340,160 SF (7.81 AC)
PRE-DEVELOPMENT BUILT-UPON AREA = 678,660 SF (15.58 AC)

P1199 - PRE-DEVELOPMENT BUILT-UPON AREA

0' 40' 80' 160'
SCALE: 1" = 80'

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SYM	DESCRIPTION	DATE	APPR

NAVFAC

RQ DPR CONSTRUCTION

Michael Baker INTERNATIONAL
100 AIRSIDE DRIVE
MOON TOWNSHIP, PA 15108
A/E INFO APPROVED

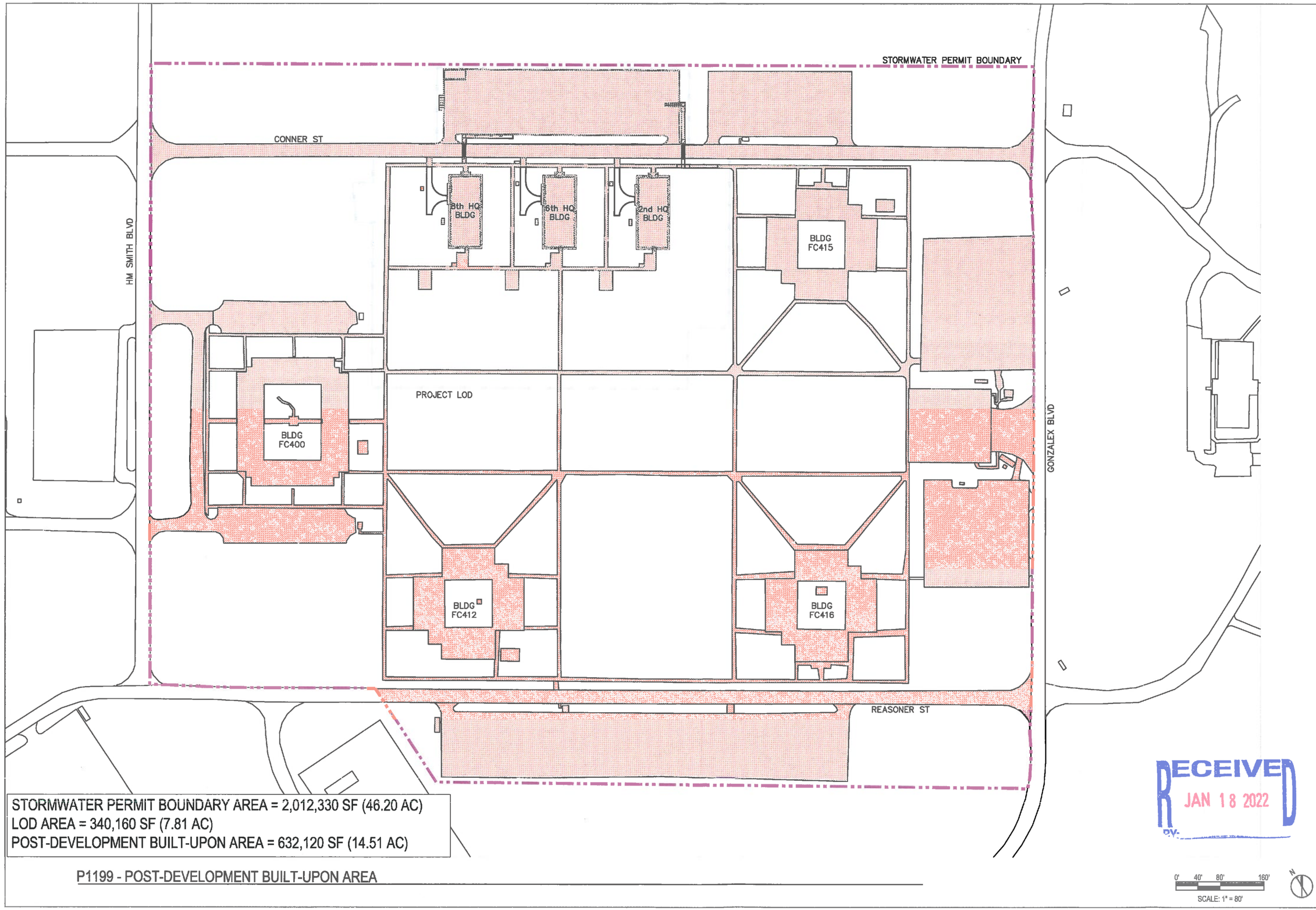
FOR COMMANDER NAVFAC
ACTIVITY
MARINE CORPS BASE CAMP LEJEUNE
SATISFACTORY TO DATE

DES KJK	DRW STM	CHK WDN
PM	XXX	
BRANCH MANAGER	XXX	
CHIEF ENGIARCH	XXX	
FIRE PROTECTION	XXX	

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND
ATLANTIC DESIGN AND CONSTRUCTION
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC
NORFOLK, VA
MCB CAMP LEJEUNE
JACKSONVILLE, NC
HURRICANE FLORENCE PKG 2
P1199 CLB 2ND 6TH 8TH HEADQUARTERS
PRE-DEVELOPMENT BUA MAP

SCALE: AS NOTED
EPROJECT NO.: 1639586
CONSTR. CONTR. NO. N40085-20-C-0044
NAVFAC DRAWING NO
SHEET OF

PRE-BUA



STORMWATER PERMIT BOUNDARY AREA = 2,012,330 SF (46.20 AC)
LOD AREA = 340,160 SF (7.81 AC)
POST-DEVELOPMENT BUILT-UPON AREA = 632,120 SF (14.51 AC)

P1199 - POST-DEVELOPMENT BUILT-UPON AREA

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BY:

SYM	DESCRIPTION	DATE	APPR

NAVFAC

RQ / DPR CONSTRUCTION

Michael Baker INTERNATIONAL
100 AIRSIDE DRIVE
MOON TOWNSHIP, PA 15108
AIE INFO

APPROVED

FOR COMMANDER NAVFAC

ACTIVITY
MARINE CORP'S BASE CAMP LEJEUNE

SATISFACTORY TO DATE

DES KJK	DRW STM	CHK WDN
PM	XXX	
BRANCH MANAGER	XXX	
CHIEF ENG/ARCH	XXX	
FIRE PROTECTION	XXX	

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND
ATLANTIC DESIGN AND CONSTRUCTION

NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC
NORFOLK, VA

MCB CAMP LEJEUNE
JACKSONVILLE, NC

HURRICANE FLORENCE PKG 2
P1199 CLB 2ND 6TH 8TH HEADQUARTERS

POST-DEVELOPMENT BUA MAP

SCALE: AS NOTED
EPROJECT NO: 1639565
CONSTR. CONTR. NO.
N40085-20-C-0044
NAVFAC DRAWING NO
SHEET OF
POST-BUA

P1199 CLB HQ

Jacksonville, NC ONSLOW County

New River Basin

Drainage Area # 1 of 1

PRE-DEVELOPMENT LAND USE CALCULATIONS

Pre-Development Land Use:

HSG	Land-use	CN	Area (sf)	Area (acres)	%
A	Pasture or Open Space	39	1,333,670	30.62	66.27%
A	Impervious	98	678,660	15.58	33.73%
		Subtotal:	2,012,330	46.20	

Note: Enter BUA Draining to Permeable Pavement Below

User Defined Drainage Areas:

HSG	Description	Comp. CN	Area (sf.)	Area (ac.)	% Imp	
				0.00		0.00%
		Subtotal:	2,012,330	46.20	33.73%	

Existing Permeable Pavement (Infiltration):

SCM #	Description	HSG	Pavement Area (sf)	Additional BUA (sf)	Soil Infiltration Rate (in/hr)	Gravel Void Space (%)	Total Gravel Depth (in)	Orifice Dia. (in)	Orifice Height (in)	BUA %	Has Synthetic Liner?	D.S. BMP
100												

Existing Green Roofs:

SCM #	Description	DSD (in)	PAW (%)	D_{gr} (in)	Area (sf)	Area (acres)	DS SCM #	Notes
150		1.50				0.00		

Land Use Summary:	Area (sf.)		
From Land Use Tables:	2,012,330	46.20	acres
Permeable Pavement + Additional BUA:	0	0.00	acres
Green Roofs :	0	0.00	acres
Preserved Surface Waters & Non-Coastal Wetlands :		0.00	acres
Preserved Coastal Wetlands :		0.00	acres
Total Site Area:	**2,012,330**	**46.20**	**acres**

Pre-Development SCMs:

SCM #	SCM Type	WQ Volume Provided (cf)	HSG	Drainage Area Imp. (sf)	Drainage Area Open (sf)	Downstream SCM
200				678660	1333670	

Design Storm Runoff Fate Summary:

Rainfall Volume =	69.30	acre-inches	=	**251,541**	**cf**
Runoff Reduction Components:					
Natural Infiltration & ET =	*-49.35*	*acre-inches*	=	*-179,143*	*cf*
Disconnected Impervious Surfaces =	*0.00*	*acre-inches*	=	*0*	*cf*
SCM Infiltration =	*0.00*	*acre-inches*	=	*0*	*cf*
Permeable Pavement Infiltration =	*0.00*	*acre-inches*	=	*0*	*cf*
Green Roof ET =	*0.00*	*acre-inches*	=	*0*	*cf*
Post Filtration Discharge =	*0.00*	*acre-inches*	=	*0*	*cf*
Total Runoff Reduction =	**-49.35**	**acre-inches**	=	**-179,143**	**cf**
SCM Treatment:					
Treated SCM Outflow =	*0.00*	*acre-inches*	=	*0*	*cf*
Untreated Surface Runoff =	**19.94**	**acre-inches**	=	**72,398**	**cf**

The Pre-Development project area contains 678660 sf of built upon area, resulting in an overall density of 33.73%.

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P1199 CLB HQ

Jacksonville, NC ONSLOW County

New River Basin

Drainage Area # 1 of 1

POST-DEVELOPMENT LAND USE CALCULATIONS

Permeable Pavement:

SCM #	HSG	Pvmt Type	Pavement Area (sf)	Pavement Area (acres)	Additional BUA (sf)	Additional BUA (acres)	Infiltration Rate (in/hr)	Void Space (%)	Total Gravel Depth (in)	Has Synthetic Liner?	Orifice Dia. (in)	Orifice Height (in)	Down-stream SCM	Infiltration Check	Detention Check
500				0.00		0.00				No					

Green Roofs:

SCM #	DSD (in)	PAW (%)	D_{gr} (in)	Area (sf)	Area (acres)	Retrofit?	Downstream SCM #	Comments
600	1.50				0.00	No		

Residential Lot CN Calculator (Excluding R/W and dedicated open spaces):

Lot Area (sf.)	Lot Area (ac.)	# of Lots	Max Imp / Lot (sf)	% Imp.	Woods / Lot (sf)	Open Space / Lot (sf)	Avg Lot Size
	0.00						

Remaining Land Use:

HSG	Land-Use	CN	Area (sf)	Area (acres)	%
A	Open Space (Managed Open Space)	39.0	1,380,210	31.69	68.59%
A	Impervious	98.0	632,120	14.51	31.41%
	Permeable Pavement + BUA:	N/A	0	0.00	0.00%
	Green Roofs :	N/A	0	0.00	0.00%
	Sub-Total:		2,012,330	46.20	100.00%

Land Excluded, or Partially Excluded, from Volume Calculations:	(sf.)	(ac.)
Surface Waters & Non-Coastal Wetlands :	0	0.00
Coastal Wetlands :	0	0.00
Total Site Area:	2,012,330	46.20

Design Storm Runoff Fate Summary:

Rainfall Volume =	69.30	acre-inches =	**251,541**	**cf**
Runoff Reduction Components:				
Natural Infiltration & ET =	*-50.72*	*acre-inches =*	*-184,108*	*cf*
Disconnected Impervious Surfaces =	*0.00*	*acre-inches =*	*0*	*cf*
SCM Infiltration =	*0.00*	*acre-inches =*	*0*	*cf*
Permeable Pavement Infiltration =	*0.00*	*acre-inches =*	*0*	*cf*
Green Roof ET =	*0.00*	*acre-inches =*	*0*	*cf*
Post Filtration Discharge =	*0.00*	*acre-inches =*	*0*	*cf*
Total Runoff Reduction =	**-50.72**	**acre-inches =**	**-184,108**	**cf**

RECEIVED
JAN 18 2022
BY:

P1199 CLB HQ

Jacksonville, NC ONSLOW County

New River Basin

Drainage Area # 1 of 1

POST-DEVELOPMENT LAND USE CALCULATIONS

SCM Treatment:

Treated SCM Outflow =	*0.00 acre-inches =*	*0*	*cf*

Untreated Surface Runoff =	18.58 acre-inches =	67,434	cf
Pre-Development Runoff =	19.94 acre-inches =	72,398	cf
Difference =	*-1.37 acre-inches =*	*-4,965*	*cf*

The Post-Development project area contains 632120 sf of built upon area, resulting in an overall density of 31.41%.

RECEIVED
JAN 18 2022
BY:

Burd, Tina J

From: Burd, Tina J
Sent: Thursday, December 2, 2021 10:32 AM
To: Barraco CIV Talia M; lauren.greenfield@mbakerintl.com
Subject: SW8 211111 - P1199 SW Conner Street Redevelopment

The Wilmington Regional Office of the Division of Energy, Mineral and Land Resources (Stormwater Section) accepted the Stormwater Exemption and Redevelopment Request for the subject project on November 23, 2021. The project has been assigned to Kellie Beth Norris and you will be notified if additional information is needed.

Best Regards,

Tina Burd
Administrative Associate II
Wilmington Regional Office
Division of Environmental Assistance & Customer Service
Phone 910-796-7215

NCDEQ
Wilmington Regional Office
127 Cardinal Drive Ext.
Wilmington, NC 28405

Email correspondence to and from this address is subject to the North Carolina Public Records Law and may be disclosed to third parties.

Website: http://deq.nc.gov/about/divisions/energy-mineral-land-resources/stormwater

Based on the current guidance to minimize the spread of COVID-19, the Department of Environmental Quality has adjusted operations to protect the health and safety of the staff and public. Many employees are working remotely or are on staggered shifts. To accommodate these staffing changes, all DEQ office locations are limiting public access to appointments only. Please check with the appropriate staff before visiting our offices, as we may be able to handle your requests by phone or email. We appreciate your patience as we continue to serve the public during this challenging time.

Non-Transfer Application Completeness Review Checklist

Project Name: P1199 SW CONNOR STREET REDEVELOPMENT

Project County/Location: ONSLOW / MCB

Date Delivered to WIRO:	11/23/2021
BIMS Received/Accepted Date:	11/23/2021
Date Given to Admin: out sick 2 days	11/24/21
BIMS Acknowledged Date[1]:	12/2/21

Permit Action: New **New Permit #[2]:** SW8 211111

☐ Not located in the ETJ of the following delegated and functioning programs:

NHC: Carolina Beach / Kure Beach / Wilmington / Wrightsville Beach
Bruns: Leland / Navassa (?) / Oak Island
Cart: Emerald Isle **Onsl:** Jacksonville **Pend:** Surf City

Major Mod / Minor Mod / Renewal ☐ **Existing Permit #:**

☐ Applicant & Permittee are the same?[3] Expiration Date[4]:

Permit Type: HD / LD / LD Overall / HD &LD Combo
General Permit / Offsite / Exempt + Redevelopment ☐ **Offsite to SW8:**

Development Type: Commercial / Residential / Other MILITARY FAC. ☐ Is Offsite Lot approved in Master Permit?[5]

Subdivided?: Subdivision or Single Lot

Rule(s): ☐ 2017 Coastal ☐ 2008 Coastal ☐ 1995 Coastal
☐ Phase II ☐ Universal ☐ 1988 Coastal

Permittee Type & Documents Needed:

☐ Property Owner(s)	☐ Purchaser	☐ Lessee	☐ HOA	☐ Developer
☐ Viable?	☐ Viable?	☐ Viable?	☐ Viable?	☐ Viable?
☐ Deed	☐ Purchase Agmt	☐ Lease	☐ Election Minutes	

Paperwork

☒ Application
☐ Fee: ☐ $505 *(within 6mo) Check#(s):* ☒ No Fee
☐ Supplement[2] *(1 new form or for older forms: 1 original per SCM)*
☐ O&M[2]
☐ Soils Report *(Infil or PP)*
☐ Calculations *(signed/sealed)*
☐ Deed Restrictions, if subdivided[2]
☐ Project Narrative
☐ USGS Map *(or on file?)* Subject to SA?: Y / N Subject to ORW?: Y / N
☒ Plans (2 Sets)

NOTES:
[1]Enter BIMS Acknowledged Date on this Sheet
[2]For New Projects-Enter New Permit # on Supplements & Deed Restriction Templates.
[3] If permittee is different, STOP. Needs to be transferred first.
[4]If w/in 6 months and they are requesting a mod, STOP. Needs a renewal first.
[5]If Lot not approved in master permit, STOP. Master permit needs mod.

EMAILED ENGINEER DATE: _____ **Comments:** No apparent previous permit.

REVIEWER NAME: KELLIE BETH

Michael Baker
INTERNATIONAL

We Make a Difference

RECEIVED
NOV 23 2021
BY:

LETTER OF TRANSMITTAL

To:	Christine Hall NCDEQ 127 Cardinal Drive Ext. Wilmington, NC 28405
Date:	23 November 2021
Job No:	180304
Reference:	HF2 – P1199
Description:	Redev. Exlcusion

Attn:

Sent To You Via: ☐ Mail ☐ Blueprinter ☒ Overnight Delivery (Carrier) FedEx

☐ E-Mail ☐ Your Pick-Up ☐ Michael Baker Messenger ☐ Other Courier

No. of Copies	No. of Originals	Description
2		P1199 SW Permit - Redevelopment

Sent For Your: ☒ Approval ☒ Review ☐ Comments ☒ Per Your Request
☐ Files ☐ Signature ☐ Use ☐ Information ☐

Remarks:
Hi Christine – Hope you are doing well. Attached is the SW Permit Application for the P1199 Redevelopment Site at MCB Camp Lejeune. Please let me know if you need anything else for your review. Thank you!

By: Lauren Greenfield

Copies To:

100 Airside Drive | Moon Township, PA 15108
Office: 412.269.6300 | Fax: 412.375-3996