

N.C.B.E.L.S. License Number: F-0116 555 Fayetteville Street, Suite 900 Rateigh, NC 27601 919-232-8600 HDR Engineering, Inc. of the Carolinas

PROJECT MANAGER
PROJECT ENGINEER
DESIGNED BY
DRAWN BY

Harnett

HARNETT COUNTY HARNETT COUNTY
NORTHWEST CONVENIENCE CENTER

NORTH CAROLINA

FILENAME 10354679-00-S.rvt SCALE NOT TO SCALE

GENERAL AND MATERIAL NOTES

99S-01

CALCAMENT COMES.

CALCAMENT CONTROL NOTED, PROVIDE CONCRETE CONCRETE CONCRETE CONCRETE CERROL SHAPE.

CONCRETE CERROL SHAPE.

CONCRETE CERROL SHAPE.

ALL CONFER CERROL SHAPE.

SEE DRAWINGS FOR EXCEPTIONS.

62. APPLICABLE SEFCEIDATIONS AND CODES

1. NORTH CASACHAR BULINGS CODE, 2018 ESTITON, INCLUDING LOCAL, JURISDICTION AMBIOMENTS

2. ISCUTEN INTERNATIONAL BULINGS CODE WITH NORTH CAROCHA AMBIOMENTS

3. MOSE; TO INMINIM RESIDAT CODES

4. ACRES; TO INMINIM LESSAN CODES

5. ACRES; TO INMINIM LESSAN CODES

6. ACRES; TO INMINIM LANGUAL COMMINIMAL CONTROL AND COMMINIMAL COMINIMAL COMMINIMAL COMI

DESIGN CRITERIA

. MINIMUM VERTICAL LIVE LOADS: SEE NOT/IDIVAL PLANS.
A. UNFORM SINCH LOAD INCLIDES ALLOYMAGE FOR:
- UNFORM SINCH LOAD (ONLY FOR PIPES SMALLER THAN 12" DIA).
- UNFITING.

THE NOTES ON THIS SHEET AND ALL THE STANDARD STRUCTURAL DETAILS ARE GENERAL MAD APPLY TO THE ENTIRE PROJECT WHETHER SPECIFICALLY CALLED OUT OR NOT, UNLESS OTHERWISE SPECIFIED.

C3. SEE SPECIFICATIONS FOR REINFORCHING PLACEMENT REQUIREMENTS.
C4. PROVIDE 3/4" CHAMFERS AT ALL EXPOSED EDGES AND 1/2" CHAMFERS AT JOINTS AS SHOWN, NOT ALL CHAMFERS MAY BE SHOWN ON DRAWINGS.

C5. FIELD ADJUST REINFORCING AT OPENINGS AND EMBEDDED ITEMS AS SPECIFIED OR AS REQUIRED BY STANDARD DETAILS.

C6. ANOHOR BOLTS NOT SPECIFIED BY ENGINEER SHALL BE DESIGNED BY CONTRACTOR IN ACCORDANCE WITH APPLICABLE PROJECT CODE REQUIREMENTS. COORDINATE LOCATION, SIZE AND EMBEDMENT PRIOR TO CASTING CONCRETE.

CT. ASSOLUTELY NO WELDING OF REINFORCING BARS OR TORCHING TO BEND
CREINFORCING BARS SHALL BELLOWED WITHOUT WRITTEN SPECIFIC APPROVAL FROM
THE STRUCTURAL ENGINEER.

A BEING MESONER (DE TACTOR (E): 1.0

B. BEING IMPORTANCE FACTOR (E): 1.0

C. SPECTIVA RESPONSE ACCELERATIONS SSIGLITA, SINGUM
E. SPECTIVA RESPONSE CORFF 500-011M, SDINGUM
E. SPECTIVA RESPONSE CORFF 500

2. WIND LOADS:

A. BASIC WIND SPEED: 116 MPH

B. WIND EXPOSURE: C

C. OPEN STRUCTURES

D. RISK CATEGORY: II

THE EXILAMING IS A LIST OF INSPECTIONS SALL BE PERFORMED IN ACCORDANCE WITH CHAPTER 17 OF THE 2018 MORTH CARAINA BULLIONS COOKS HALL BE PERFORMED IN ACCORDANCE WITH CHAPTER 17 OF EXCANATION AND PROOF ROLLING.

STRUCTURE, IT ILL PACEMENT AND COMPACTION

SITEWORK/EXCAVATION

FUTURE UNLESS SPECIFICALLY NOTED, THERE ARE NO PROVISIONS MADE FOR FUTURE FLOOR, ROOF, OR OTHER LOADS.

4, SNOW LOAD:

A. FLAT ROOF SNOW (PF): 15 PSF

B. SNOW EXPOSURE FACTOR (CE): 1.0

C. SNOW IMPORTANCE FACTOR (S): 1.0

D. THERMAL FACTOR (CT): 1.0

E. GROUND SNOW (PG) = 15 PSF

REMORTHLING
REMORTHS STEEL FOR CONCRETE STRUCTURES
ANCHOR ROD BOLT PLACEMENT
CONCRETE CONSTRUCTION
WELDING
WELDING
DEPARKEN ANCHORS AND ADHESIVE BOLTS DOWELS RODS INSTALLATION
DEPARKEN ANCHORS AND ADHESIVE BOLTS DOWELS RODS INSTALLATION

SUBMITTALS

DROOT THE FOLLOWING IS ALTS OF DESIRED SIGNATIVAS BERIES SECTION 107 3.4.1 HAT ARE EXPECTED TO COMMAN STATUTIBAL CALCULATIONS OF SHEFTY THE SHEET SHEE DS01. DEFERRED SUBMITTAGE ARE THOSE POPTIONS OF THE DESIGN WHICH ARE NOT SUBMITTED AT THE DS01. WHICH ARE NOT SUBMITTED AT THE THE OFF PRIME TO BE SUBMITTED TO THE THE WORK ACCEPTANCE FRIOR TO INSTALLATION OF THAT PORTION OF THE WORK.

ANY OTHER EQUIPMENT OF COMPONENT IN WHICH A TECHNICAL SPECIFICATION REQUIRES SUBMITTAL OF EQUIPMENT OF ANCHORAGE SYSTEM CALCULATIONS DEFERRED SUBMITTALS LIST:
SPECIFICATION SECTIONS ITEM
MISC. METAL FABRICATIONS
05 50 00

ARETY
SAFETY AND STRUCTURE STABILITY DURING CONSTRUCTION ARE THE SOLE RESPONSIBILITY
OF THE CONTRACTOR, STRUCTURES HAVE BEEN DESIGNED TO RESIST THE DESIGN LIVE
LONGS ONLY AS A COMPLETED STRUCTURE. SETANDARD DETAILS

SETANDARD ETAILS DEPICT TYPICAL DETAILING TO BE USED ON THIS PROJECT. IF
CONDITIONS ARE NOT EXPLICITLY SHOWN ON THE DRAWINGS THEY SHALL BE MADE SMILLAR
TO THE STANDARD DETAILS, OBTAIN ENGINEER APPROVAL IN VIRTING FOR SMILLAR
CONDITIONS PRIOR TO CONSTRUCTION. CONFLICES

F THERE ARE CONFLICTS BETWEEN CONTROL.

STRINGENT INTERPRETATION SHALL CONTROL.

THE CONTRACTOR SHALL PROPERLY DEWAYER THE SITE AS MEDDED SO THAT ALL CONGRETE CAN BE PLACED IN DRY SOIL CONDITIONS. THE DEWATERING PROGRAM SHALL BE AS DICTATED BY THE GEOTECHNICAL REPORT AS MENTIONED HEREIN. DEWATERING WELL POINTS, SUMPS, WELLS, ETC. SHALL ONLY BE PLACED INSIDE THE EXCAVATION AREA.

FOUNDATIONS HAVE BEEN DESIGNED FOR A MAXIMUM ALLOWABLE BEARING PRESSURE OF 2,500 PSF BY HDR ENGINEERING INC. DATED JANUARY 19, 2022. FOR EXCAVATION REQUIREMENTS SEE SPECIFICATIONS 31 23 00 AND GEOTECHNICAL REPORT BY HIR ENGINEERING INC. FOR NORTHWEST CONVENIENCE CENTER PROJECT No. 1035/079. DATED_JANUARY 19, 2022. IF OPEN CUT EXCAVATIONS AND PERFORMED, THEY SMALL BE SLOPED NO STEEPER THAN W.ZH. IF DOING THE SIRVINGS THE TOP OF THE EXCAVATIONA SLOPE WITHIN SPEET OF AN ADJACENT STRUCTURE OF UTLITTY SUPPORTED ON SHALLOW SUNGATIONS, THEN AN EXCAVATIONE SUPPORT SYSTEM WILL BE RECURRED TO SAVEGUARD THE ADJACENT STRUCTURE.





























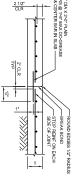












DOWELLED CONSTRUCTION JOINT

SLAB-ON-GRADE JOINT (SJ)





	2 1/2* CLR	-
SAWED CONTROL JOINT	W-21/2-1	3/16" WIDE JOINT
ONTROL	1 MIN	T _{1/4}
JOINT	2/3 OF REINF @ OF JT	-FILL JOINT W/JT SEALANT

**USE METAL CHANNEL STRAIGHTEDGE TYMIN GENERATE TO UNSERT FIBERBOARD STRIPS.

FORMED CONTROL JOINT

SAWED CONTROL JOINT	1. A. A.		• •	16" WIDE JOINT —
ŇTR	L 1- MIN	H	₩,	- FILL JOINT W/ JT SEALANT T/4 T (SEE PLAN)
5	È			OINT V
Ĭ	L SLAB 2/3 OF OF JT	٦,		// JT SEALAN T (SEE PLAN)
	— SLAB REINF TY 2/3 OF REINF @ OF JT			ALANT PLAN)
	Z 5	⊣	Ч	ارا

SEE SPECIFICATION FOR REQUIREMENT TO TIE WATERSTOPS IN PLACE TO PREVENT MOVEMENT OR FOLDING OVER.

CONSTRUCTION JOINT (CJ)

"INSERT 3/16" THICK CONT FIBERBOARD STRIP. RECESS STRIP 1/2" FROM SURFACE & ROUND CORNERS. AT EXPOSED FLOORS FILL 1/2" RECESS W/ SEALANT

T-SEE PLAN

ALL FORMED CJ MUST BE KCJ TYPE.

NOTES: T. FURNISH CONSTRUCTION JOINTS SHOWN HERE AT ALL WALL VERTICAL AND SLAB CONSTRUCTION JOINTS.

ROUGHEN CONSTRUCTION JOINT

KEYED CONSTRUCTION JOINT (KCJ)

ROUGHEN SURFACE

SUBGRADE WHERE APPLICABLE

REINFORCING HOOK SCHEDULE

COMPLYING WITH MINIMUM COVER REQUIREMENTS OF ACI 318, 12.5.3. OTHERWISE Ldh MUST BE RE-CALCULATED.

WALL VERTICAL REINFORCING
AT CONSTRUCTION JOINT

ONSTRUCTION JOINT HORIZONTAL AND VERTICAL)

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WALL DOWEL HOOK LOCATION

CONSTRUCTION JOINT (CJ)

REINFORCING SPLICE WHEN NOT AT CJ

APPLIES TO SLABS AND WALLS (BOTH HORIZONTAL AND VERTICAL)

NOTE

180° STD HOOK fc=4000 psi OR GREATER Ldh *

2 X LAP SPLICE LENGTH

MIN. COVER *

HOOK LENGTH 90° STD HOOK ¥

-POSITION HOOKS AT SAME ELEV AS LOWEST BAR OF BOTT MAT

0" TYP

(PER SCHEDULE)

0

CALLED OUT ON DRAWINGS

SAWED	braggar.	VIDE JOINT	
SAWED CONTROL JOINT	L SLAB REINF TYP UNO STO 23 OF REINF @ EACH SIDE OF JT	T/4 T (SEE PLAN)	FILL JOINT W/ JT SEALANT

			Œ.	ę						
#1	#10	18	88	#7	#6	#5	#4	#3	BAR	
1001	97"	76"	60"	46"	29"	24"	19"	14"	BARS SPACED GREATER THAN 4"	
101"	155"	122"	96"	74"	43*	30"	19"	14"	BARS SPACED LESS THAN OR EQUAL TO 4"	

LAP SPLICE AND EMDEDMENT LENGTHS Pc =4.0 ksi fy = 60 ksi

LAP SPLICE + 6"

NOTES: 1. PROVIDE	
MINIMUM LA	#11
OTES: PROVIDE MINIMUM LAP SPLICE LENGTHS AND E OTHERWISE EMBEDNENT I FUGTH FOLIAL'S THE	120"
IS AND EMBEDME!	191"
ES. PROVIDE MINIMUM LAP SPLICE LENGTHS AND EMBEDMENTS PER TABLE UN OTHERWISE EMBEDMENT PROVIDE MINIMUM LAP SPLICE LENGTH FOLIALS THE LAP SPLICE FRACTH INLE	

ω	2	
ALL SPLICES TO BE CONTACT SPLICES AND WIRED TOGETHER UNLESS OTHERWISE APPROVED BY	2. BAR SPACING AT LAP SPLICE IS THE MINIMUM CLEAR DISTANCE BETWEEN LAPPED BARS PLUS ONE BAR DIAMETER.	CONTRACTOR DESCRIPTION CONTRACTOR

4. REQUIREMENTS FOR SPACINGS 4 INCHES OR LESS SHALL NOT APPLY TO "ADD" BARS AROUND OPENINGS.

(OFENINGS.
NTS	REINFORCING LAP AND EMBEDMENT SCHEDULE	





















2. SEE DRAWINGS FOR ADDITIONAL HORIZONTAL BARS.
STAGGER BETWEEN TYPICAL REINF SPACING, EXTEND TO 1/5
OF DISTRACE TO NIEAREST ADJACENT WALL IN EACH
DIRECTION, UNO. NOTES:

1. ALL HOOKS SHALL BE STD 90 DEGREE HOOKS. TYPICAL WALL REINFORCEMENT AT

S CORNERS & INTERSECTIONS

NTS

4. BARS MAY BE ONE PIECE CONTINUOUS, THUS TWO PIECE REBAR NOT REQUIRED WITH LAP. OPTIONAL LAP LOCATION APPLIES TO BOTH DOUBLE AND SINGLE LAYER CONDITIONS TYP.

(TYP)









99S-02

STRUCTURAL STANDARD DETAILS 1

HDR Engineering, Inc. of the Carolinas N.C.B.E.L.S. License Number: F-0116 555 Fayetieville Street, Suite 900 Raleja, N.C. 27601 919.232.8600

 09/2025
 ISSUED FOR CONSTRUCTION

 06/2024
 ISSUED FOR BIDDING

 11/2022
 ISSUED FOR PERMITTING

 DATE
 DESCRIPTION

espectors • eCASE 2004

mm	Agency #	Scope
 Shallow Foundations 	dgracy 2 or 3	pre-ignales heavy synthegraf allegad sopy goverstory
	PEGE	(auport removal of manitude maximal and preparation of mbg-rate prior to phermon of controlled fill
2 Controlled Structural Fill	dgracy 2 av 3	Perform siew (eets (ASTM D122 & D1144) and wedfied Psactor sees (ASTM D152) of each source of fill meteral.
	PEGE	impect placement. Aft thecimes and enagraction of enarchled full.
		For the artest of each tip of fill placement. For the extent and chaps of fill placement.
3 Deep Foundations	t	EN
	2037	
	İ	
4. Laad Testing		
4 Other		

Schedule of Inspection and Testing Agencies

Quality Assurance for Seismic Resistance Quality Assurance Plan

Page

Description of seismic throe resisting system and design 1. Ordinary Reinforcal Concrete Shoot Halls

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Statement of Special Inspections

Sois and Foundations
Castie-Place Consrete
Precast Concrete
Majory
Structural Steel
Codd-Formic Steel Framing Spray Fire Resistant Material
Wood Construction
Early Impatition and First System
Mechanical & Exect cut Systems
Architectural Systems
Special Cutes

The Saldered of Septid Inspection is submitted as a continue for permit seasor in incontinuo telle in Septid Inspection in submitted as a continue to the Septid Inspection and Septim Inspection and

HARNETT COUNTY NORTHWEST

OAKRIDGE RIVER ROAD AND REVELS ROAD INTERSECTION, NO HARNETT COUNTY

 e Social Neglecia Contributo del livo nocali di il nocolo e eni dell'interi reportimi reportimi e le Sistemi (Officiali ed le Registera Cionglia) Professionali in Regiorabia Cionglia. Discovventi compranda in rico 2 x 3 x 5,0 della tra della regionali della reports shall be submitted to the Building Official and the Registered Design Profession Charge .

rterin Report Frequency. 14 Days

Frair Raport of Special haspactions documenting completion of all required Social Inspections, beting and revolution only succeptions rotated in the inspections shall be submitted from to Instance of a Certificate of the and designation.

6. Other Engineer of Record Same 1985 Chardistic NC 21292 Mishaed Typidhio@ddifns.com

Quality Assurance for Wind Requirements

find Speed (3 second gust) coosure Category Assurance Plan Required (Y/N)

116 mph C

Note: The impriction and stating agreement and the integrand by the Quasive or the Country Agreet, and not by the Country and continuous or the Country and the stating of the country and the stating of the stating of the Saldding Official, cried to communicing work.

of Specia Inspections • sCASE 2004

Signature

Date

repectors • #CASE 2004

Cast-in-Place Concrete	crete	Page of
medi	Agercy #	Scope
1. Nix Design	ACC-ROSA TOP-COS P COMMEN	Review construct batch suches and verify compliance with approved mix design. Ferly than name adulted at fee site does not exceed that allowed by the nat straight.
2. Natelial Certification	y Cwally	York matrix crisheshow orders to specification regularization
 Reinforcement ristalistion 	- 6	Agency 5 or 4. Inspect use, spacing, cover, positiveleg and goods of constraints and . Varify that reinjuscing hars are free of forward are when ACT-CCT additions materials found for any new development spices.

SN-500 g County ACC-ACC ACI-CHT ACI-CHT VO'SON

pectors - DCASE 2004

PROJECT MANAGER J. MJRRAY, PE
PROJECT ENGINEER M. TEPEDINO
DESIGNED BY N. FANOUS
DRAWN BY J. ARROYO



HARNETT COUNTY HARNETT COUNTY
NORTHWEST CONVENIENCE CENTER Harnett country NORTH CAROLINA strong roots - new growth NORTH CAROLINA





SCALE NOT TO SCALE

STRUCTURAL STANDARD DETAILS 2

99S-03

rapectors • CCASE 2004

Shuctural Missionry Spocial Inspector Smutarial Steel and Welding Special Inspector Spain-Applied Firegrooting Special Inspector Presidented Concrete Special Inspector Reinforced Concrete Special Inspector

National Institute to Certification in Engineering Technologies (INCET)

NEET CT Common Technologies (INCET)

NEET CT Common Technologies (INCET)

NEET CT SOURCE (Technologies (INCET)

NEET CT SOURCE (INCET)

NEET CT SOURCE (INCET)

NEET CT SOURCE (INCET)

NEET COMMON TECHNOLOGIES (INCET)

NEET COMMON TECHNOLOGIES (INCET)

DEST SOURCE (INCET)

COMM

AMS-DMI Cerified Westing Inspector
AMSA/SC-SIX Cerified Shouting Sole Inspector
AMSA/SC-SIX Cerified Shouting Sole Inspector
American Society of Non-Destructive Testing (ASMT) Cerification
ASMT Non-Destructive Testing Technolin - Lawel II or III. Concrete Feed Yesting Yearnican - Grade 1 Concrete Construction respector Laboratory Testing Technician - Grade 1&2 Strength Testing Technician

When the Registand Design Professional is Responsible Charge deam it appropries that the indictal performing a statistic and are for elements have a specific confliction or lineate as a indicated television and appear to elements there a specific confliction or lineate as a indicated television and appear to elements when the appearance of the Scheidels.

Key for Mirimum Qualifications of Inspection Agents:

The qualifications of all personnel performing Spocial inspection and testing activities are subject to the approval of the Building Official. The carefentate of all impectors and testing technicians shall be provided if requested. Qualifications of Inspectors and Testing Technicians

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