

# TOWN OF NAGS HEAD BID SET

# DOWDY PARK PHASE 1

## TOWN OF NAGS HEAD, NORTH CAROLINA

3005 SOUTH CROATAN HIGHWAY  
NAGS HEAD, NC 27959



TOWN OF NAGS HEAD  
DEPARTMENT OF PUBLIC WORKS  
P.O. BOX 99  
NAGS HEAD, NC 27959  
252.441.1122 • www.nagsheadnc.gov



**CLH  
DESIGN**

CLH Design, PA  
400 Regency Forest Dr.  
Suite 120  
Cary, NC 27518  
Phone: 919.319.6716  
Fax: 919.319.7516  
LA: C-106 PE: C-1595



6/27/2016

DOWDY PARK - PHASE 1  
SITE DEVELOPMENT PLAN  
TOWN OF NAGS HEAD, NC  
3005 S. CROATAN HWY.

### LEGEND

#### SURFACE FEATURES:

EXISTING	DESCRIPTION
	BUILDING LINE (EXISTING)
	DITCH CENTERLINE (EXIST.)
	CURB/PAVEMENT/SIDEWALK (EX)
	FENCE (EXISTING)
	VEGETATION/TREELINE
	RETAINING WALL (EXISTING)

#### SURVEY:

	CENTERLINE (EXISTING)
	CONTOUR (DEPRESSION)
	CONTOUR (INDEX) (EXIST.)
	EASEMENT
	PROPERTY LINE (EXISTING)
	RIGHT-OF-WAY (CURRENT)
	BOUNDARY LINE
	EDGE OF PAVEMENT (EXISTING)

#### UTILITIES (EXISTING):

	FO	FIBER OPTIC (BURIED)
	CTV	CABLE TELEVISION (BURIED)
	FM	FORCE MAIN
	GAS	GAS
	OHE	POWER (AERIAL)
	UGE	POWER (BURIED)
	SS	SANITARY SEWER
	12" CMP	STORM DRAINAGE
	T	TELEPHONE (BURIED)
	OHT	TELEPHONE (AERIAL)
	W	WATER

#### CONSTRUCT

CONSTRUCT	DESCRIPTION
	BUILDING LINE
	DITCH CENTERLINE
	CURB (PROP)
	CURB/PAVEMENT/SIDEWALK
	SILT FENCE
	CONTOUR (INDEX)
	TOP OF BANK (PROPOSED)
	CONSTRUCTION LIMITS
	GUARDRAIL

#### ROAD SURFACE MATERIAL

SYMBOL	DESCRIPTION
	EXISTING PAVEMENT SCHEDULED FOR REMOVAL
	EXISTING CONCRETE SURFACE

#### GAS/POWER/TELEPHONE

SYMBOL	DESCRIPTION
	EXIST. PAD MOUNTED TRANSFORMER
	CONSTRUCT. PAD MOUNTED TRANSFORMER
	EXIST. POWER VAULT
	CONSTRUCT. POWER VAULT
	EXIST. UTILITY POLE
	CONSTRUCT. UTILITY POLE
	EXIST. POWER POLE
	CONSTRUCT. POWER POLE
	EXIST. UTILITY POLE ANCHOR
	CONSTRUCT. UTILITY POLE ANCHOR
	EXIST. LIGHT POLE
	CONSTRUCT. LIGHT POLE
	EXIST. TELEPHONE PEDESTAL
	CONSTRUCT. TELEPHONE PEDESTAL
	EXIST. TELEPHONE VAULT
	CONSTRUCT. TELEPHONE VAULT

#### SURVEY

SYMBOL	DESCRIPTION
	EXIST. BENCH MARK
	CONSTRUCT. BENCH MARK
	EXIST. NAIL/DRILL HOLE
	CONSTRUCT. NAIL/DRILL HOLE
	EXIST. EX. IRON REBAR/IRON PIPE
	CONSTRUCT. EX. IRON REBAR/IRON PIPE
	EXIST. CONCRETE MONUMENT
	CONSTRUCT. CONCRETE MONUMENT
	EXIST. GEODETIC MONUMENT
	CONSTRUCT. GEODETIC MONUMENT
	EXIST. SPOT ELEVATION
	CONSTRUCT. SPOT ELEVATION

#### DRAINAGE

SYMBOL	DESCRIPTION
	EXIST. STORM DRAIN CATCH BASIN
	CONSTRUCT. STORM DRAIN CATCH BASIN
	EXIST. STORM DRAIN INLET
	CONSTRUCT. STORM DRAIN INLET
	EXIST. STORM DRAIN PIPE
	CONSTRUCT. STORM DRAIN PIPE
	EXIST. STORM DRAIN JUNCTION
	CONSTRUCT. STORM DRAIN JUNCTION
	EXIST. STORM PIPE (PROPOSED)
	CONSTRUCT. STORM PIPE (PROPOSED)

#### WATER

SYMBOL	DESCRIPTION
	EXIST. GUARD POST
	CONSTRUCT. GUARD POST
	EXIST. FH
	CONSTRUCT. FH
	EXIST. WATER VALVE
	CONSTRUCT. WATER VALVE
	EXIST. WATER METER
	CONSTRUCT. WATER METER

### UTILITY NOTE

ALL UTILITIES ON THESE PLANS ARE APPROXIMATE. INDIVIDUAL SERVICE LINES ARE NOT SHOWN. THE CONTRACTOR OR SUBCONTRACTOR SHALL NOTIFY THE UTILITY PROTECTION CENTER NORTH CAROLINA 811 (TOLL FREE PHONE NO. 1-800-623-4949) FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY CONSTRUCTION ON THIS PROJECT. THIS NUMBER WAS ESTABLISHED TO PROVIDE ACCURATE LOCATIONS OF EXISTING BELOW GROUND UTILITIES (I.E. CABLES, ELECTRIC WIRES, GAS & WATER LINES). WHEN CONTACTING THE NORTH CAROLINA 811 CALL CENTER, PLEASE STATE THE WORK TO BE DONE IS FOR A PROPOSED TOWN OF NAGS HEAD INFRASTRUCTURE IMPROVEMENT PLAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR BECOMING FAMILIAR WITH ALL UTILITY REQUIREMENTS SET FORTH ON THE PLANS AND IN THE TECHNICAL SPECIFICATIONS & SPECIAL PROVISIONS.

North Carolina  
One-Call Center Inc.



Know what's below  
Call before you dig.

### TOWN OF NAGS HEAD GENERAL NOTES

- DEVELOPER: TOWN OF NAGS HEAD  
P.O. BOX 99  
NAGS HEAD, NC 27959
- NO A.C.O.E. JURISDICTIONAL 404 WETLANDS ARE KNOWN TO EXIST WITHIN THE LIMITS OF THE SCHEDULED WORK.
- PRIOR TO ANY LAND DISTURBING ACTIVITIES COMMENCING, A SEDIMENT & EROSION CONTROL PERMIT MODIFICATION SHALL BE SECURED THROUGH THE NCDEQ DEMLR.
- EXISTING VEGETATION SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE.
- NO SCHEDULED IMPROVEMENTS ARE PLANNED TO OCCUR WITHIN THE NCDOT RIGHT-OF-WAY. IF ANY LAND DISTURBING ACTIVITIES ARE SCHEDULED, AN NCDOT RIGHT-OF-WAY ENCROACHMENT AGREEMENT SHALL BE SECURED PRIOR TO PERFORMING ANY CONSTRUCTION WITHIN THE STATE RIGHT-OF-WAY.
- PRIOR TO ANY LAND DISTURBING ACTIVITIES COMMENCING, STORMWATER APPROVAL SHALL BE SECURED THROUGH THE NCDEQ, DEMLR.

THE INFORMATION DESCRIBED HEREON IS BELIEVED TO BE ACCURATE, COMPLETE, AND CURRENT. THE TOWN OF NAGS HEAD MAKES NO WARRANTY AS TO THE ACCURACY, COMPLETENESS OR CURRENCY OF THE CONTENT. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY THIS INFORMATION PRIOR TO RELYING ON IT. THE CONTENT OF THESE DOCUMENTS MAY INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. IF SUCH CONDITIONS EXIST, THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER PRIOR TO PROCEEDING WITH THE SCHEDULED WORK UNTIL AUTHORIZATION TO PROCEED HAS BEEN GRANTED.

### BENCHMARK

NOTE: ALL ELEVATIONS ARE BASED ON NAVD 1988 DATUM

SOURCE BENCHMARK "T-166" NCGS MONUMENT

TBM#1 - NAIL AT INTERSECTION OF BONNETT ST./WRIGHTSVILLE AVE.. ELEV.: 8.83 (CTRL PT #1)

TBM#2 - CONCRETE MONUMENT AT SW PROPERTY CORNER ELEV.: 10.82 (CTRL PT #2)

### OWNER AND DESIGNER INFORMATION

OWNER:	TOWN OF NAGS HEAD
OWNER CONTACT:	ANDY GARMAN TOWN OF NAGS HEAD PLANNING DEPARTMENT P.O. BOX 99 NAGS HEAD, NC 27959 PHONE: 252.449.2006
CIVIL ENGINEER:	DAVID RYAN, P.E. TOWN OF NAGS HEAD DEPT. OF PUBLIC WORKS P.O. BOX 99 NAGS HEAD, NC 27959 PHONE: 252.441.6221
DESIGNER:	BILL HAMILTON CLH DESIGN, PA REGENCY PARK 400 REGENCY FOREST DR., SUITE 120 CARY, NC 27518 PHONE: 919.319.6716
ARCHITECT:	MARK KASTEN CARMON & KASTEN ARCHITECTS 118 W. WOODHILL DR. NAGS HEAD, NC 27948 PHONE: 252.441.0271
PME ENGINEER:	JIM BEDOIS, P.E. PKCE COLLABORATIVE 1277 PERIMETER PARKWAY VIRGINIA BEACH, VA 23454 PHONE: 757.499.7223

### SITE DATA TABLE

1. PROJECT NAME:	DOWDY PARK		
2. PROPERTY ADDRESS:	NAGS HEAD TOWNSHIP DARE COUNTY, NORTH CAROLINA 3005 S. CROATAN HWY. NAGS HEAD, NC 27959		
3. OWNER:	TOWN OF NAGS HEAD P.O. BOX 99 NAGS HEAD, NC 27959		
4. PARCEL NUMBER:	00570800		
5. RECORDED REFERENCE:	D.B. 1957 PG 170		
6. MINIMUM BUILDING SETBACKS:	FRONT YARD: (BONNETT)	15	
	SIDE YARD: (US 158/WRIGHTSVILLE)	15	
	REAR YARD: (COMMON PROP LINE W/ NHE)	25	
7. TOTAL PROJECT AREA:		219,579 S.F.	5.04 AC.
8. F.J.R.M. ZONE:	ZONE AE(10)/X, 37209892001/9/20/2006		
9. PROPERTY ZONING:	GENERAL COMMERCIAL (C-2)		
10. USE CLASSIFICATION:	MUNICIPALLY-OWNED RECREATION FACILITY		
ADJACENT USES:	INSTITUTIONAL/RESIDENTIAL/COMMERCIAL		
11. ALL SURVEY DATA IS REFERENCED TO NAVD 88.			
12. PHYSICAL AND BOUNDARY SURVEY PREPARED BY BARNETTE INTEGRATED LAND DEVELOPMENT, INC., TITLED TOWN OF NAGS HEAD, DOWDY PARK, DATED 2-19-15.			
13. EXISTING LOT DEVELOPMENT COVERAGE: VACANT			
12. PROPOSED LOT DEVELOPMENT COVERAGE:			
PHASE ONE	ASPHALT PARKING AND DRIVES	15,943 SF	
	EVENT PLAZA (CONC.)	12,024 SF	
	PERMEABLE PAVERS	2,154 SF	
	PAVILION	1,390 SF	
	MAIN CONC. SIDEWALK	13,896 SF	
	TRIBUTARY CONC. WALKS	2,369 SF	
	PLAYGROUND (POURED IN PLACE)	2,034 SF	
	PLAYGROUND EQUIPMENT	756 SF	
	WOOD WALKWAY	1,032 SF	
	TOTAL LOT COVERAGE	51,598 SF	
	% LOT COVERAGE	23.50%	
13. PARKING REQUIREMENTS: (CURRENT & FUTURE USE)	2 spaces per 1 acre of passive recreation area		
	30 spaces per multi-purpose recreation field (future)		
	# of ACRES OF PASSIVE RECREATION	3.24	
	# of MULTI-PURPOSE FIELDS (FUTURE PHASE)	1	
	TOTAL # OF PARKING SPACES REQUIRED	37	
	TOTAL # OF PARKING SPACES PROVIDED	40	
	TOTAL # OF H/C PARKING SPACES REQUIRED	2	
	TOTAL # OF H/C PARKING SPACES PROVIDED	4	
	PARKING SETBACKS	5 FT	
14. EROSION & SEDIMENT CONTROL: PHASE ONE DISTURBED ACREAGE		5.4 AC.	
	PHASE ONE CONSTRUCTION LIMITS AREA	3.24 AC.	
	NOTE: AN NCDENR DEMUR SEDIMENT & EROSION CONTROL PERMIT SHALL BE OBTAINED PRIOR TO LAND-DISTURBING ACTIVITIES.		
15. STORMWATER MANAGEMENT:	STATE:		
	AN NCDENR DEMUR REDEVELOPMENT EXCLUSION REQUEST HAS BEEN FILED AND SHALL BE OBTAINED IN ADVANCE OF LAND-DISTURBING ACTIVITIES		
	TOWN:		
	THE REQUIREMENTS OF SECTION 34-5 OF THE TOWN OF NAGS HEAD		
16. LIGHTING	THE REQUIREMENTS OF SECTION 48-326 LIGHTING REQUIRED OF THE TOWN OF NAGS HEAD CODE OF ORDINANCES SHALL BE MET		
17. BUILDING HEIGHT	THE MAXIMUM BUILDING HEIGHT SHALL BE 35'		

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### VICINITY MAP 1"=400'



NO.	DATE	DESCRIPTION
1	6-27-16	RELEASED FOR BID
2	6-27-16	ISSUED FOR AWARD
3	6-27-16	

DESIGNED BY: AMR/BH  
DRAWN BY: HBR  
DATE: APRIL-2016  
PROJECT NO: 16-115  
FILE:

COVER SHEET

C0.0



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DOWDY PARK - PHASE 1  
SITE DEVELOPMENT PLAN

TOWN OF NAGS HEAD, NC  
3005 S. CROATAN HIGHWAY

REVISIONS		DESCRIPTION	RELEASED FOR BID
NO.	DATE		
1	6-2-16		

DESIGNED BY: AMR/BH  
DRAWN BY: HBR  
DATE: APRIL - 2016  
PROJECT NO: 16-115  
FILE:

EXISTING CONDITIONS  
PLAN/  
EROSION AND  
SEDIMENT CONTROL  
PLAN

C2.0

**CONSTRUCTION SEQUENCE**

**CONSTRUCTION ACTIVITY**  
CONSTRUCTION ACCESS-  
CONSTRUCTION ENTRANCE,  
CONSTRUCTION ROUTES,  
EQUIPMENT PARKING AREAS

**SEDIMENT TRAPS & BARRIERS**  
BASIN TRAPS, SEDIMENT FENCES,  
& OUTLET PROTECTION

**RUNOFF CONTROL-**  
DIVERSIONS, PERIMETER DIKES,  
WATER BARS, AND OUTLET  
PROTECTION

**RUNOFF CONVEYANCE SYSTEM-**  
STABILIZE STREAMBANKS, STORM  
DRAINS, CHANNELS, INLET &  
OUTLET PROTECTION, SLOPE  
DRAINS

**LAND CLEARING & GRADING-**  
SITE PREPARATION- CUTTING,  
FILLING & GRADING, SEDIMENT  
TRAPS, BARRIERS, DIVERSIONS,  
DRAINS, SURFACE ROUGHENING

**SURFACE STABILIZATION-**  
TEMPORARY & PERMANENT  
SEEDING, MULCHING, SODDING,  
RIPRAP

**BUILDING CONSTRUCTION-**  
BUILDINGS, UTILITIES, PAVING.

**SCHEDULE CONSIDERATION**  
FIRST LAND-DISTURBING  
ACTIVITY-STABILIZE BARE AREAS  
IMMEDIATELY WITH GRAVEL &  
TEMPORARY VEGETATION AS  
CONSTRUCTION TAKES PLACE.

INSTALL PRINCIPAL BASINS AFTER  
CONSTRUCTION SITE IS ACCESSED.  
INSTALL ADDITIONAL TRAPS AND  
BARRIERS AS NEEDED DURING GRADING.

INSTALL KEY PRACTICES AFTER  
PRINCIPAL SEDIMENTS TRAPS AND  
BEFORE LAND GRADING. INSTALL  
ADDITIONAL RUNOFF-CONTROL  
CONVEYANCE MEASURES DURING  
GRADING.

WHERE NECESSARY, STABILIZE  
STREAMBANKS AS EARLY AS POSSIBLE.  
INSTALL PRINCIPAL RUNOFF  
CONVEYANCE SYSTEM WITH  
RUNOFF-CONTROL MEASURES. INSTALL  
REMAINDER OF SYSTEM AFTER  
GRADING.

BEGIN MAJOR CLEARING AND GRADING  
AFTER PRINCIPAL & KEY  
RUNOFF-CONTROL MEASURES ARE  
INSTALLED. CLEAR BORROW & DISPOSAL  
AREAS AS NEEDED. INSTALL ADDITIONAL  
CONTROL MEASURES AS GRADING  
PROGRESSES. MARK TREES & BUFFER  
AREAS FOR PRESERVATION.

APPLY TEMPORARY OR PERMANENT  
STABILIZATION MEASURES  
IMMEDIATELY ON ALL DISTURBED AREAS  
WHERE WORK IS DELAYED OR  
COMPLETE.

INSTALL NECESSARY EROSION &  
SEDIMENTATION CONTROL PRACTICES AS  
WORK TAKES PLACE.

STABILIZE ALL OPEN AREAS, INCLUDING  
BORROW & DISPOSAL AREAS. REMOVE &  
STABILIZE ALL TEMPORARY CONTROL  
MEASURES.

**TEMPORARY SEEDING TABLE**  
THE PURPOSE OF TEMPORARY SEEDING IS TO TEMPORARILY STABILIZE  
DENuded AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE FOR A  
PERIOD AS NOTED IN THE TABLE BELOW:

SITE GRADING ACTIVITY DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS
1. PERIMETER DIKES, SWALES, DITCHES & SLOPES	7 DAYS	NONE
2. HIGH QUALITY WATER ZONES	7 DAYS	NONE
3. SLOPES STEEPER THAN 3:1 HOR:VERT	7 DAYS	IF SLOPES ARE LESS THAN 10' IN LENGTH & ARE NOT STEEPER THAN 2:1 HOR:VERT 14 DAYS IS ALLOWED
4. SLOPES 3:1 HOR:VERT OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH
5. SLOPES 4:1 HOR:VERT OR FLATTER	14 DAYS	NONE (EXCEPT ACTIVITIES 1 & 2)

**TEMPORARY SEEDING SPECIFICATIONS**  
SEEDING RECOMMENDATIONS FOR LATE WINTER & EARLY SPRING  
SEEDING DATES- DECEMBER 1 TO APRIL 15  
SEEDING MIXTURE  
SPECIES RATE (LB/ACRE)  
WINTER RYE (GRAIN) 120 (ANNUAL RYEGRASS SHALL NOT BE USED)  
ANNUAL LESPEDEZA 50  
\*OMIT ANNUAL LESPEDEZA WHEN DURATION OF TEMPORARY COVER  
IS NOT TO EXTEND BEYOND JUNE

**SOIL AMENDMENTS-**  
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE  
GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.

**MULCH-**  
APPLY 4,000-LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT,  
NETTING, OR A MULCH-ANCHORING TOOL. A DISK WITH BLADES SET NEARLY  
STRAIGHT CAN BE USED AS A MULCH-ANCHORING TOOL.

**MAINTENANCE-**  
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, FERTILIZE AND  
MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

**SEEDING RECOMMENDATIONS FOR SUMMER**  
SEEDING DATES- APRIL 15 TO AUGUST 15  
SEEDING MIXTURE  
SPECIES RATE (LB/ACRE)  
GERMAN MILLET 40

**SOIL AMENDMENTS-**  
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE  
GROUND  
AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.

**MULCH-**  
APPLY 4,000-LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT,  
NETTING, OR A MULCH-ANCHORING TOOL. A DISK WITH BLADES SET NEARLY  
STRAIGHT CAN BE USED AS A MULCH-ANCHORING TOOL.

**MAINTENANCE-**  
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, FERTILIZE AND  
MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

**SEEDING RECOMMENDATIONS FOR FALL**  
SEEDING DATES- AUGUST 15 TO DECEMBER 30  
SEEDING MIXTURE  
SPECIES RATE (LB/ACRE)  
WINTER RYE (GRAIN) 120

**SOIL AMENDMENTS-**  
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE  
GROUND  
AGRICULTURAL LIMESTONE AND 1,000 LB/ACRE 10-10-10 FERTILIZER.

**MULCH-**  
APPLY 4,000-LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT,  
NETTING, OR A MULCH-ANCHORING TOOL. A DISK WITH BLADES SET NEARLY  
STRAIGHT CAN BE USED AS A MULCH-ANCHORING TOOL.

**MAINTENANCE-**  
REPAIR AND REFERTILIZE DAMAGED AREAS IMMEDIATELY. TOPDRESS WITH  
50 LB/ACRE OF NITROGEN IN MARCH. IF IT IS NECESSARY TO EXTEND  
TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 LB/ACRE KOBE  
LESPEDEZA IN LATE FEBRUARY OR EARLY MARCH.

**PERMANENT SEEDING**  
THE PURPOSE OF PERMANENT SEEDING IS TO REDUCE EROSION  
AND DECREASE SEDIMENT YIELD FROM DISTURBED AREAS, AND TO  
PERMANENTLY STABILIZE SUCH AREAS IN A MANNER THAT IS  
ECONOMICAL, ADAPTS TO SITE CONDITIONS, AND ALLOWS  
SELECTION OF THE MOST APPROPRIATE PLANT MATERIALS. THESE  
AREAS MUST BE SEED OR PLANTED WITHIN 15 WORKING DAYS  
OR 90 CALENDAR DAYS AFTER FINAL GRADE IS REACHED, UNLESS  
TEMPORARY STABILIZATION IS APPLIED.

**PERMANENT SEEDING SPECIFICATIONS**  
SEEDING RECOMMENDATIONS FOR SUMMER  
SEEDING DATES- APRIL TO JULY  
SEEDING MIXTURE  
SPECIES RATE  
COMMON BERMUDAGRASS 10/1,000 SF (SPRIGS)  
1-2 LB/1,000 SF (SEED)

**SEEDING NOTES-**  
1. SPRIG OR SOD. MOISTURE IS ESSENTIAL DURING INITIAL  
ESTABLISHMENT. SOD MUST BE KEPT WATERED FOR 2-3 WEEKS, BUT  
CAN BE PLANTED EARLIER OR LATER THAN SPRIGS.

**SOIL AMENDMENTS-**  
APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS OR APPLY  
3,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 500  
LB/ACRE 10-10-10 FERTILIZER, OR 50 LB/ACRE NITROGEN FROM  
TURF-TYPE  
SLOW-RELEASE FERTILIZER. ADD 25-50 LB/ACRE NITROGEN AT 2-3  
WEEK INTERVALS THROUGH MIDSUMMER.

**SPRIGGING-**  
PLANT SPRIGS IN FURROWS WITH A TRACTOR-DRAWN  
TRANSPLANTER, OR BROADCAST BY HAND.

FURROWS SHOULD BE 4-6 INCHES DEEP AND 2 FEET APART. PLACE  
SPRIGS ABOUT 2 FT. APART IN A ROW WITH ONE END AT OR ABOVE  
GROUND LEVEL.

BROADCAST AT RATES SHOWN ABOVE, AND PRESS SPRIGS INTO THE  
TOP 1/2-2 INCHES OF SOIL WITH A DISK SET STRAIGHT SO THAT  
SPRIGS ARE NOT BROUGHT BACK TOWARD THE SURFACE.

MULCH- DO NOT MULCH.

**MAINTENANCE-**  
WATER AS NEEDED AND MOW TO 3/4 TO 1-INCH HEIGHT.  
TOPDRESS WITH 40 LB/ACRE NITROGEN IN APRIL, 50 LB IN MAY, 50  
LB IN JUNE, 50 LB IN JULY, AND 25 LB IN AUGUST.

**SODDING**  
THE PURPOSE OF PERMANENT SEEDING IS TO PREVENT EROSION  
AND DAMAGE FROM SEDIMENT AND RUNOFF BY STABILIZING THE  
SOIL SURFACE WITH PERMANENT VEGETATION FOR THE PURPOSE OF:  
-THE PROVISION OF IMMEDIATE VEGETATIVE COVER IN CRITICAL  
AREAS  
-TO STABILIZE DISTURBED AREAS WITH A SUITABLE PLANT  
MATERIAL THAT CANNOT BE ESTABLISHED BY SEED.  
-TO STABILIZE DRAINAGEWAYS & CHANNELS AND OTHER AREAS OF  
CONCENTRATED FLOW WHERE FLOW VELOCITIES WILL NOT EXCEED  
THAT SPECIFIED GRASS LINING.

**SODDING SPECIFICATIONS**  
SOD QUALITY  
-SOD SHOULD BE MACHINE CUT AT A UNIFORM DEPTH OF 1 1/2-2  
INCHES  
-SOD SHOULD NOT HAVE BEEN CUT IN EXCESSIVELY WET OR DRY  
WEATHER.  
-SECTIONS OF SOD SHOULD BE STANDARD SIZE AS DETERMINED BY  
THE SUPPLIER. UNIFORM, AND UNIFORM  
-SECTIONS OF SOD SHOULD BE STRONG ENOUGH TO SUPPORT  
THEIR OWN WEIGHT, AND RETAIN THEIR SIZE AND SHAPE WHEN  
LIFTED BY ONE END.  
-HARVEST, DELIVERY, AND INSTALLATION OF SOD SHOULD TAKE  
PLACE WITHIN  
A PERIOD OF 36 HOURS.

**SOIL AMENDMENTS-**  
APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS OR APPLY 2  
TONS/ACRE OF PULVERIZED AGRICULTURAL LIMESTONE AND 1,000  
LB/ACRE 10-10-10 FERTILIZER IN THE FALL, OR 5-10-10 IN SPRING.

PRIOR TO LAYING SOD, CLEAR THE SOIL SURFACE OF TRASH, DEBRIS,  
ROOTS, BRANCHES, STONES, AND CLODS LARGER THAN 2 INCHES IN  
DIAMETER. FILL OR LEVEL LOW SPOTS IN ORDER TO AVOID  
STANDING WATER. RAKE OR HARROW THE SITE TO ACHIEVE A  
SMOOTH AND LEVEL FINAL GRADE. COMPLETE SOIL PREPARATION  
BY ROLLING OR CULTIPACKING TO FIRM SOIL.

**MAINTENANCE-**  
AFTER THE FIRST WEEK, WATER AS NECESSARY TO MAINTAIN  
ADEQUATE MOISTURE IN THE ROOT ZONE & PREVENT DORMANCY  
OF THE SOD.

DO NOT REMOVE MORE THAN ONE-THIRD OF THE SHOOTS IN ANY  
ONE MOWING. GRASS HEIGHT SHOULD BE MAINTAINED BETWEEN  
2-3 INCHES UNLESS OTHERWISE SPECIFIED.

AFTER FIRST GROWING SEASON, ESTABLISHED SOD REQUIRES  
FERTILIZATION, AND MAY ALSO REQUIRE LIME. FOLLOW SOIL TEST  
RECOMMENDATIONS.

**PERMANENT SEEDING**  
THE PURPOSE OF PERMANENT SEEDING IS TO REDUCE EROSION  
AND DECREASE SEDIMENT YIELD FROM DISTURBED AREAS, AND TO  
PERMANENTLY STABILIZE SUCH AREAS IN A MANNER THAT IS  
ECONOMICAL, ADAPTS TO SITE CONDITIONS, AND ALLOWS  
SELECTION OF THE MOST APPROPRIATE PLANT MATERIALS. THESE  
AREAS MUST BE SEED OR PLANTED WITHIN 15 WORKING DAYS  
OR 90 CALENDAR DAYS AFTER FINAL GRADE IS REACHED, UNLESS  
TEMPORARY STABILIZATION IS APPLIED.

**PERMANENT SEEDING SPECIFICATIONS**  
SEEDING RECOMMENDATIONS FOR SUMMER  
SEEDING DATES- APRIL TO JULY  
SEEDING MIXTURE  
SPECIES RATE  
COMMON BERMUDAGRASS 10/1,000 SF (SPRIGS)  
1-2 LB/1,000 SF (SEED)

**SEEDING NOTES-**  
1. SPRIG OR SOD. MOISTURE IS ESSENTIAL DURING INITIAL  
ESTABLISHMENT. SOD MUST BE KEPT WATERED FOR 2-3 WEEKS, BUT  
CAN BE PLANTED EARLIER OR LATER THAN SPRIGS.

**SOIL AMENDMENTS-**  
APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS OR APPLY  
3,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 500  
LB/ACRE 10-10-10 FERTILIZER, OR 50 LB/ACRE NITROGEN FROM  
TURF-TYPE  
SLOW-RELEASE FERTILIZER. ADD 25-50 LB/ACRE NITROGEN AT 2-3  
WEEK INTERVALS THROUGH MIDSUMMER.

**SPRIGGING-**  
PLANT SPRIGS IN FURROWS WITH A TRACTOR-DRAWN  
TRANSPLANTER, OR BROADCAST BY HAND.

FURROWS SHOULD BE 4-6 INCHES DEEP AND 2 FEET APART. PLACE  
SPRIGS ABOUT 2 FT. APART IN A ROW WITH ONE END AT OR ABOVE  
GROUND LEVEL.

BROADCAST AT RATES SHOWN ABOVE, AND PRESS SPRIGS INTO THE  
TOP 1/2-2 INCHES OF SOIL WITH A DISK SET STRAIGHT SO THAT  
SPRIGS ARE NOT BROUGHT BACK TOWARD THE SURFACE.

MULCH- DO NOT MULCH.

**MAINTENANCE-**  
WATER AS NEEDED AND MOW TO 3/4 TO 1-INCH HEIGHT.  
TOPDRESS WITH 40 LB/ACRE NITROGEN IN APRIL, 50 LB IN MAY, 50  
LB IN JUNE, 50 LB IN JULY, AND 25 LB IN AUGUST.

**SODDING**  
THE PURPOSE OF PERMANENT SEEDING IS TO PREVENT EROSION  
AND DAMAGE FROM SEDIMENT AND RUNOFF BY STABILIZING THE  
SOIL SURFACE WITH PERMANENT VEGETATION FOR THE PURPOSE OF:  
-THE PROVISION OF IMMEDIATE VEGETATIVE COVER IN CRITICAL  
AREAS  
-TO STABILIZE DISTURBED AREAS WITH A SUITABLE PLANT  
MATERIAL THAT CANNOT BE ESTABLISHED BY SEED.  
-TO STABILIZE DRAINAGEWAYS & CHANNELS AND OTHER AREAS OF  
CONCENTRATED FLOW WHERE FLOW VELOCITIES WILL NOT EXCEED  
THAT SPECIFIED GRASS LINING.

**SODDING SPECIFICATIONS**  
SOD QUALITY  
-SOD SHOULD BE MACHINE CUT AT A UNIFORM DEPTH OF 1 1/2-2  
INCHES  
-SOD SHOULD NOT HAVE BEEN CUT IN EXCESSIVELY WET OR DRY  
WEATHER.  
-SECTIONS OF SOD SHOULD BE STANDARD SIZE AS DETERMINED BY  
THE SUPPLIER. UNIFORM, AND UNIFORM  
-SECTIONS OF SOD SHOULD BE STRONG ENOUGH TO SUPPORT  
THEIR OWN WEIGHT, AND RETAIN THEIR SIZE AND SHAPE WHEN  
LIFTED BY ONE END.  
-HARVEST, DELIVERY, AND INSTALLATION OF SOD SHOULD TAKE  
PLACE WITHIN  
A PERIOD OF 36 HOURS.

**SOIL AMENDMENTS-**  
APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS OR APPLY 2  
TONS/ACRE OF PULVERIZED AGRICULTURAL LIMESTONE AND 1,000  
LB/ACRE 10-10-10 FERTILIZER IN THE FALL, OR 5-10-10 IN SPRING.

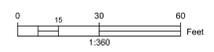
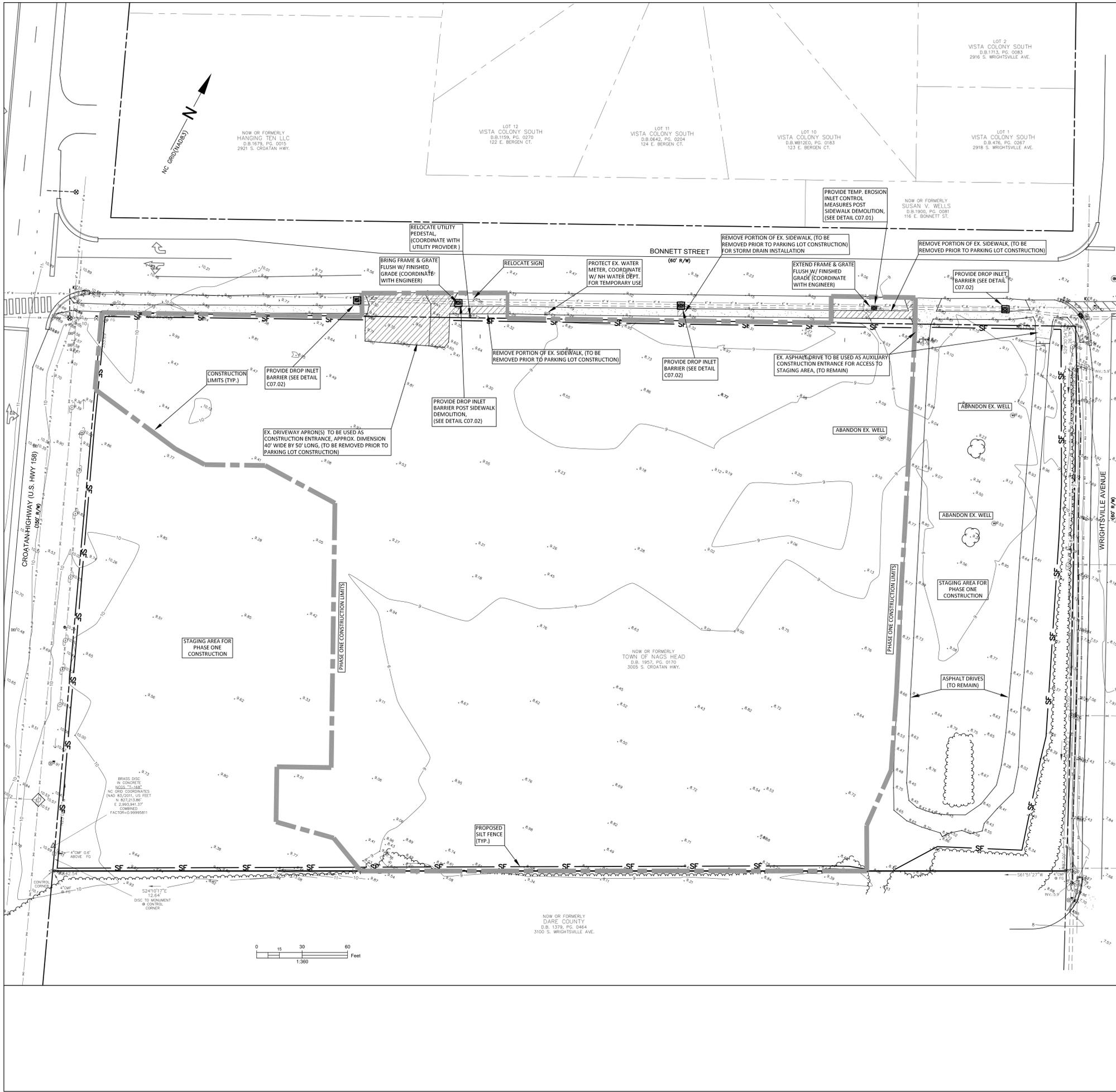
PRIOR TO LAYING SOD, CLEAR THE SOIL SURFACE OF TRASH, DEBRIS,  
ROOTS, BRANCHES, STONES, AND CLODS LARGER THAN 2 INCHES IN  
DIAMETER. FILL OR LEVEL LOW SPOTS IN ORDER TO AVOID  
STANDING WATER. RAKE OR HARROW THE SITE TO ACHIEVE A  
SMOOTH AND LEVEL FINAL GRADE. COMPLETE SOIL PREPARATION  
BY ROLLING OR CULTIPACKING TO FIRM SOIL.

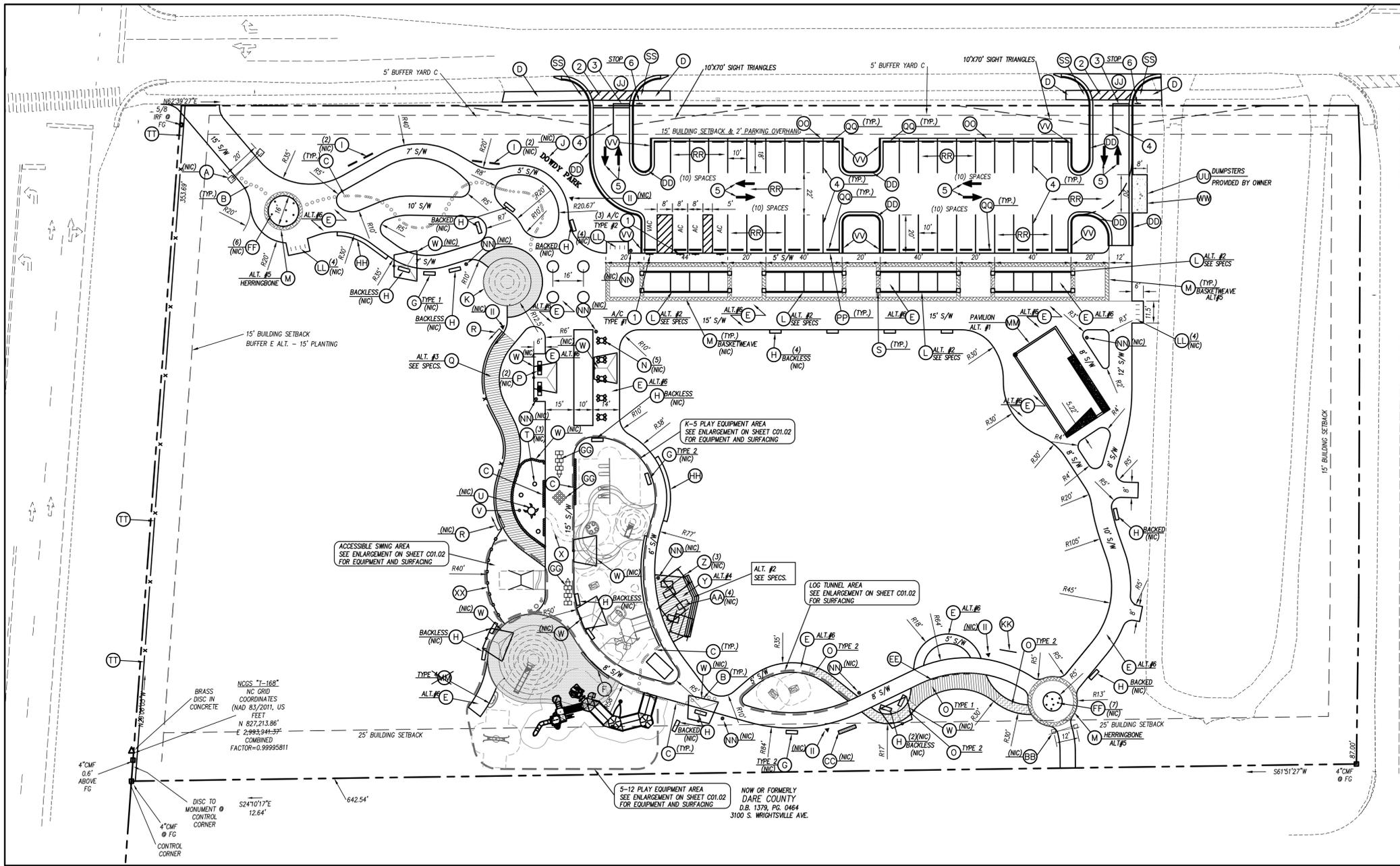
**MAINTENANCE-**  
AFTER THE FIRST WEEK, WATER AS NECESSARY TO MAINTAIN  
ADEQUATE MOISTURE IN THE ROOT ZONE & PREVENT DORMANCY  
OF THE SOD.

DO NOT REMOVE MORE THAN ONE-THIRD OF THE SHOOTS IN ANY  
ONE MOWING. GRASS HEIGHT SHOULD BE MAINTAINED BETWEEN  
2-3 INCHES UNLESS OTHERWISE SPECIFIED.

AFTER FIRST GROWING SEASON, ESTABLISHED SOD REQUIRES  
FERTILIZATION, AND MAY ALSO REQUIRE LIME. FOLLOW SOIL TEST  
RECOMMENDATIONS.

**NOTE:**  
THE CONTRACTOR SHALL INDICATE TO  
THE ENGINEER THE SOURCE FROM  
WHICH FILL MATERIAL WILL BE  
OBTAINED FROM. THE MATERIAL SHALL  
BE FROM A STATE APPROVED SOURCE  
AND BE PROVIDED TO THE CONTRACTOR  
PRIOR TO COMMENCING WITH ANY  
ON-SITE CONSTRUCTION ACTIVITIES.





**KEY NOTES**

- (A) LARGE ARBOR, NOT IN CONTRACT
- (B) LOG STAMPED CONCRETE, SEE SPECIFICATIONS.
- (C) PYLONS, SEE DETAIL SHEET C7.6.
- (D) CONCRETE SIDEWALK, SEE DETAIL SHEET C7.1.
- (E) CONCRETE SIDEWALK WITH PICTURE FRAME FINISH, SEE DETAIL SHEET C7.3, ALT.#6
- (F) CHALK WALL, SEE DETAIL SHEET C7.4.
- (G) ART BENCH, SEE DETAIL SHEET C7.6. MOUNT LEGS TO CONCRETE FOOTINGS, NOT IN CONTRACT
- (H) BENCH, SEE SPECIFICATIONS. MOUNT LEGS TO CONCRETE FOOTINGS, NOT IN CONTRACT
- (I) ART PANELS, NOT IN CONTRACT
- (J) FITNESS STATION: DOWDY PARK SCULPTURE, NOT IN CONTRACT
- (K) POURED-IN-PLACE DUNE #1, SEE DETAIL SHEET C7.3.
- (L) PROMENADE TRELLIS, SEE DETAIL SHEET C7.5. SEE SPECS, ALT.#2
- (M) PAVERS, SEE DETAIL SHEET C7.3, ALT.#5
- (N) TABLE, NOT IN CONTRACT
- (O) STAMPED CONCRETE, SEE SPECIFICATIONS.
- (P) GAME TABLE, NOT IN CONTRACT
- (Q) FITNESS STATION: WAVY WALK TERRAIN CHALLENGE, SEE DETAIL SHEET C7.6 & SPECIFICATIONS, SEE SPECS, ALT.#3
- (R) SAND FENCE, NOT IN CONTRACT
- (S) 2' X 2' PLANTING WELL, SEE DETAIL SHEET C7.5.
- (T) FOSSIL/NEST IMPRESSIONS, NOT IN CONTRACT
- (U) LOGGERHEAD TURTLE, NOT IN CONTRACT
- (V) SAND PLAY AREA, SEE DETAIL SHEET C7.6.
- (W) SHADE STRUCTURE: "TORNADO" BY SHADE SYSTEMS, NOT IN CONTRACT.
- (X) TURTLE TRACKS, SEE DETAIL SHEET C7.3
- (Y) OBSERVATION DECK, SEE SPECIFICATIONS, ALT.#4
- (Z) DECK STRUCTURES, NOT IN CONTRACT
- (AA) ADIRONDACK CHAIR, NOT IN CONTRACT
- (BB) SMALL ARBOR, NOT IN CONTRACT.
- (CC) FITNESS STATION: SIT UP LOG, NOT IN CONTRACT.
- (DD) CONCRETE CURB AND GUTTER (VERTICAL), SEE DETAIL SHEET C7.1.
- (EE) PEEL-A-BOO WALL, SEE DETAIL SHEET C7.5.
- (FF) COLORFUL POLES, NOT IN CONTRACT
- (GG) PAVED PLAY STRIPING, SEE DETAIL SHEET C7.4.
- (HH) HOLEY WALL, SEE DETAIL SHEET C7.4.
- (II) FITNESS STATION SIGNAGE, NOT IN CONTRACT
- (JJ) DRIVEWAY APRON, SEE SHEET C7.01.
- (KK) FITNESS STATION: CHIN-UP BARS, SEE DETAIL SHEET C7.5.
- (LL) BICYCLE RACKS, NOT IN CONTRACT
- (MM) PAVILION, SEE ARCHITECTURAL PLANS, ALT.#1
- (NN) TRASH RECEPTACLE, MOUNT TO 2'X2' CONCRETE PAD, NOT IN CONTRACT
- (OO) CONCRETE BORDER (FLUSH), SEE DETAIL SHEET C7.1.
- (PP) PARKING LOT/EVENT PLAZA SURFACE TRANSITION, SEE DETAIL SHEET C7.1.
- (QQ) CONCRETE WHEEL STOP, SEE DETAIL SHEET C7.3.
- (RR) LIGHT-DUTY PAVEMENT, SEE DETAIL SHEET C7.1.
- (SS) CURB RAMP RETROFIT, SEE DETAIL SHEET C7.1.
- (TT) STANDARD SPLIT RAIL FENCE, SEE DETAIL SHEET C7.5.
- (UU) DUMPSTER PAD, SEE DETAIL SHEET C7.1.
- (VV) CONCRETE CURB & GUTTER W/PEDESTAL SECTION, SEE DETAIL SHEET C7.1.
- (WW) DUMPSTER PAD WITH WOOD ENCLOSURE, SEE DETAIL SHEET C7.1.
- (XX) PICKET FENCE, SEE DETAIL SHEET C7.5.
- (YY) CHECK WALL, SEE DETAIL SHEET C7.4.

**PLAYGROUND NOTES**

\* GRADING CONTRACTOR SHALL GRADE TO SUBGRADE TO A DEPTH OF 12-IN. BELOW FINISHED GRADE UNDERNEATH POURED IN PLACE SURFACING AND 12-IN. BELOW FINISH GRADE UNDERNEATH THE ENGINEERED WOOD FIBER IN THE PLAY AREA LOCATIONS. SEE GRADING PLANS FOR FINISH GRADE. PLAYGROUND SURFACING, AGGREGATE, AND GEOTEXTILE FABRIC IS BY OWNER'S PLAYGROUND INSTALLER. CONTRACTOR SHALL COORDINATE WITH THE OWNER'S PLAYGROUND INSTALLER PRIOR TO CONSTRUCTION. (ALL WORK SHOWN IN THE ENLARGED DETAILS ON SHEET C1.2 AND PLAYGROUND SURFACING DETAILS ON SHEET C7.3 BESIDES PLAYGROUND SURFACING, EQUIPMENT, AGGREGATE BASE, AND GEOTEXTILE FABRIC IS IN BASE BID)

**GENERAL NOTES**

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL TOWN OF NAGS HEAD AND NCDOT STANDARDS AND SPECIFICATIONS.
2. ALL DIMENSIONS SHOWN ARE TO FACE OF CURB AND FACE OF BUILDING WALL, UNLESS OTHERWISE SHOWN.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL DIMENSIONS SHOWN AND CONTACT THE TOWN ENGINEER IF ANY DISCREPANCIES OCCUR.
4. CONSTRUCTION STAKE OUT IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. PAVEMENT MARKINGS AND SIGNAGE SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
6. ALL INTERIOR PARKING STALLS SHALL BE A MINIMUM OF 10'X20' (WITH EXCEPTION TO THE ACCESSIBLE SPACES) AND EXTERIOR SPACES SHALL BE A MINIMUM OF 10'X18'.
7. (AC) DENOTES ACCESSIBLE PARKING SPACE.
8. (VAC) DENOTES VAN ACCESSIBLE PARKING SPACE.
9. WITHIN THE SIGHT TRIANGLES SHOWN ON THIS PLAN, NO OBSTRUCTION BETWEEN 3 FEET AND 8 FEET IN HEIGHT ABOVE THE CURB LINE ELEVATION SHALL BE LOCATED IN WHOLE OR PART. OBSTRUCTIONS INCLUDE BUT ARE NOT LIMITED TO ANY BERM, FOLIAGE, FENCE, WALL, SIGN, OR PARKED VEHICLE.
10. MINIMUM CORNER CLEARANCE FROM CURB LINE OF INTERSECTION STREETS SHALL BE AT LEAST TWENTY (20) FEET FROM THE POINT OF TANGENCY.
11. RADIUS AT FACE OF CURB IS 4' UNLESS OTHERWISE NOTED.
12. CONCRETE SCORE JOINT PATTERN SHALL BE SUBMITTED TO LANDSCAPE ARCHITECT AND APPROVED PRIOR TO CONCRETE INSTALLATION.
13. SIDEWALK STAKING SHALL BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

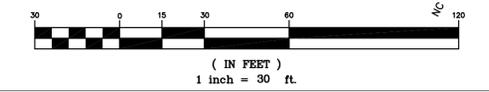
**TRAFFIC CONTROL KEY NOTES**

1. ACCESSIBLE PARKING & SIGNAGE, SEE DETAIL SHEET 7.1
2. STANDARD CROSSWALK, SEE TRAFFIC CONTROL NOTES THIS SHEET.
3. STOP BAR, SEE TRAFFIC CONTROL NOTES THIS SHEET.
4. SOLID WHITE MARKING, SEE TRAFFIC CONTROL NOTES THIS SHEET.
5. DIRECTIONAL ARROW, SEE TRAFFIC CONTROL NOTES THIS SHEET.
6. TRAFFIC CONTROL SIGNAGE, SEE DETAIL SHEET C7.1.

**TRAFFIC CONTROL NOTES**

1. ALL ON-SITE SIGNAGE SHALL USE PRISMATIC SHEETING AND SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND NCDOT STANDARDS.
  2. ALL SIGNS SHALL BE MOUNTED WITH 7-FIT MIN. VERTICAL CLEARANCE TO THE BOTTOM OF THE SIGN ON 3-LB. GALV. STEEL U-CHANNEL POST SET IN 3-FIT DEEP X 12-IN DIA. CONCRETE FOOTING.
  3. ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE MUTCD AND NCDOT STANDARDS AND THE PROJECT SPECIFICATIONS.
- | MARKING            | NCDOT STD.               | SIZE | COLOR |
|--------------------|--------------------------|------|-------|
| PARKING SPACES     | 1205.07(STANDARD)        | 4-IN | WHT.  |
| CROSSWALK          |                          | 8-IN | WHT.  |
| DIRECTIONAL ARROWS | 1205.08                  | STD. | WHT.  |
| SOLID              | 1205.01                  | 4-IN | WHT.  |
| STOP BAR           | SEE DETAIL SHEET C 07.01 |      |       |
4. ALL PAVEMENT MARKINGS SHALL BE ALKYD-RESIN TYPE PAINT, EXCEPT FOR FIRE LANE MARKINGS WHICH SHALL BE THERMOPLASTIC TYPE PAINT. BID SHALL INCLUDE ALLOWANCE OF 300 LF. COORDINATE WITH TOWN AND FIRE MARSHAL FOR LOCATIONS.
  5. ALL SIGNAGE SHALL BE FIELD STAKED AND THE LOCATIONS APPROVED BY TOWN OF NAGS HEAD PRIOR TO INSTALLATION.
  6. CENTER ALL DIRECTIONAL ARROWS WITHIN TRAVEL LANE. SEE DETAIL SHEET C7.1.

**GRAPHIC SCALE**



TOWN OF NAGS HEAD  
DEPARTMENT OF PUBLIC WORKS  
NAGS HEAD, NC 27959  
252.441.1122 • www.nagsheadnc.gov

**CLH DESIGN**  
CLH Design, PA  
400 Regency Forest Dr.  
Suite 120  
Cary, NC 27518  
Phone: 919.319.6716  
Fax: 919.319.7516  
LA: C-106 PE: C-1595



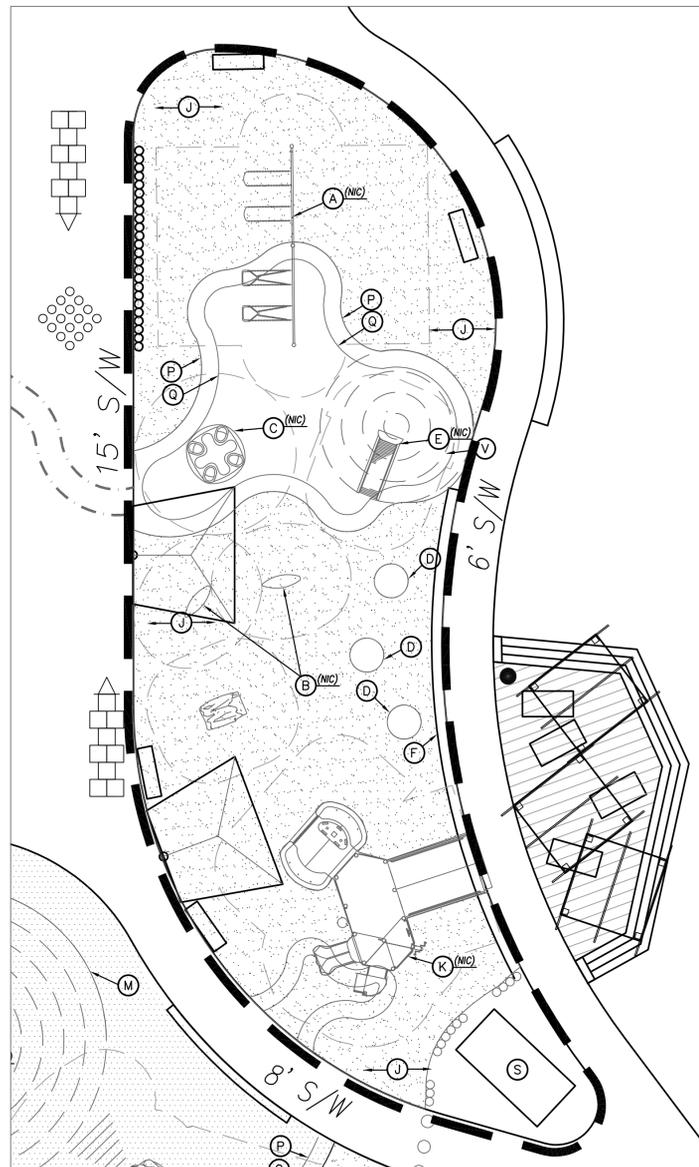
**DOWDY PARK - PHASE 1**  
**SITE DEVELOPMENT PLAN**  
TOWN OF NAGS HEAD, NC  
3005 SOUTH CROATAN HIGHWAY

REVISONS	NO.	DATE	DESCRIPTION
	#1	6-21-2016	ADDENDUM #1
	#2	6-24-2016	ADDENDUM #2

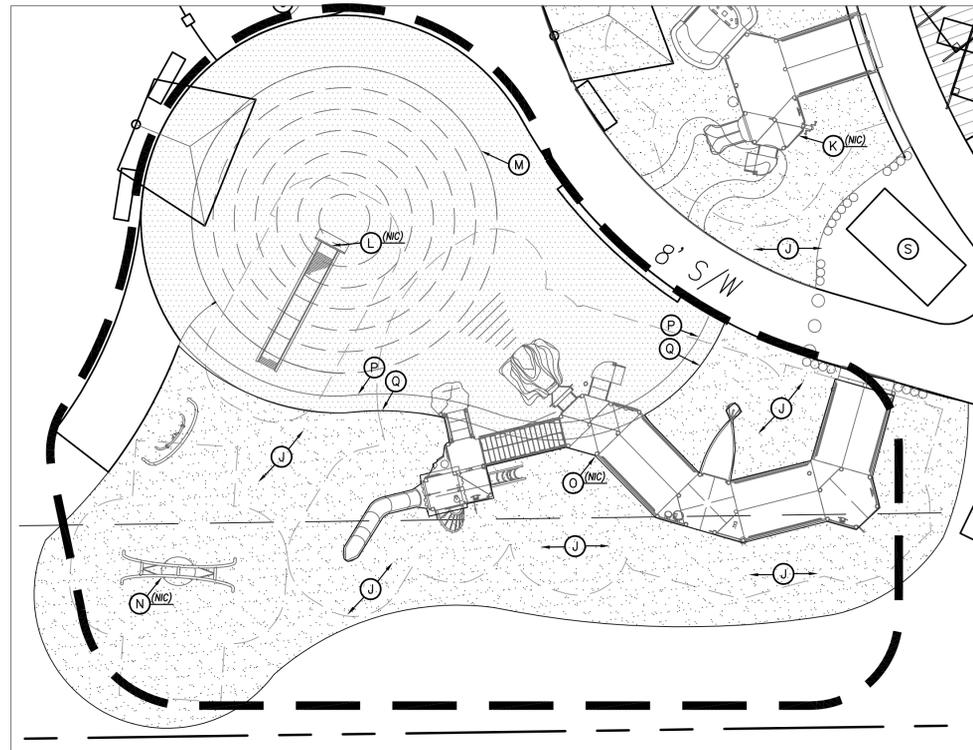
DESIGNED BY: AMR/BH  
DRAWN BY: HR  
DATE: JUNE-2-2016  
PROJECT NO: 16-115  
FILE:

**STAKING AND PAVEMENT MARKING PLAN**

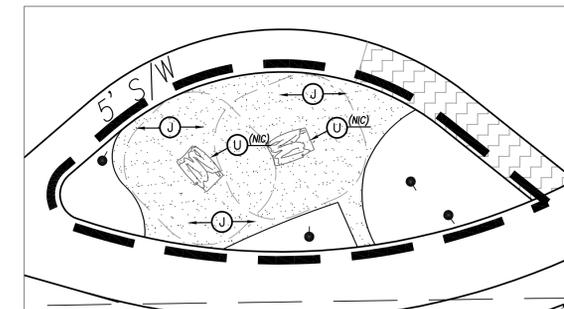
C1.1



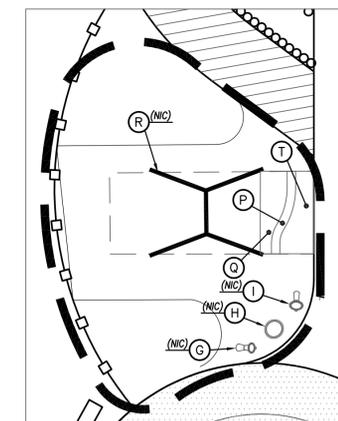
2-5 PLAY EQUIPMENT ENLARGEMENT  
1"=10'



5-12 PLAY EQUIPMENT ENLARGEMENT  
1"=10'



LOG TUNNEL AREA ENLARGEMENT  
1"=10'



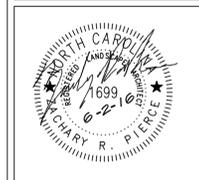
ACCESSIBLE SWING AREA ENLARGEMENT  
1"=10'

KEY NOTES

- (A) 8' HIGH TWO BAY A-FRAME SWING SET WITH 2 TODDLER BUCKET SWINGS AND TWO MOLDED HARNESS SWINGS, LANDSCAPE STRUCTURES #17350, NOT IN CONTRACT
- (B) WOBBLE POD, NOT IN CONTRACT
- (C) MOLDED SPINNER, LANDSCAPE STRUCTURES #173591, NOT IN CONTRACT
- (D) PLAY DUNE #4, 4' DIA. X 2' HIGH POURED IN PLACE MOUND. SEE DETAIL SHEET C7.3
- (E) ON-GRADE ROLLER SLIDE, NOT IN CONTRACT
- (F) CONCRETE SEAT/RETAINING WALL, SEE DETAIL C07.04
- (G) IN-GROUND MOUNT KETTLE DRUM, LANDSCAPE STRUCTURES #214445, NOT IN CONTRACT
- (H) IN-GROUND MOUNT KUNDU DRUM, LANDSCAPE STRUCTURES #214444, NOT IN CONTRACT
- (I) IN-GROUND MOUNT GOBLET DRUM, LANDSCAPE STRUCTURES #214443, NOT IN CONTRACT
- (J) ENGINEERED WOOD FIBER SAFETY SURFACING, SEE DETAIL SHEET C7.3
- (K) 2-5 PLAY STRUCTURE, LANDSCAPE STRUCTURES #93628, NOT IN CONTRACT
- (L) ROLLER SLIDE, NOT IN CONTRACT
- (M) PLAY DUNE #2, SEE DETAIL SHEET C7.3
- (N) OODLE SWING, LSI #173592, NOT IN CONTRACT
- (O) 5-12 PLAY EQUIPMENT, NOT IN CONTRACT
- (P) POURED IN PLACE SAFETY SURFACING, COLOR: AQUA BLUE, SEE DETAIL SHEET C7.3
- (Q) POURED IN PLACE SAFETY SURFACING, COLOR: LIGHT BLUE, SEE DETAIL SHEET C7.3
- (R) LIBERTY SWING, NOT IN CONTRACT
- (S) SEATING SCULPTURE (LUNGO MARE), SEE SPECIFICATIONS.
- (T) POURED IN PLACE SAFETY SURFACING, COLOR: RED, SEE DETAIL SHEET C7.3.
- (U) LOG TUNNEL, LSI #173594, NOT IN CONTRACT
- (V) PLAY DUNE #3, SEE DETAIL SHEET C7.3



TOWN OF NAGS HEAD  
DEPARTMENT OF PUBLIC WORKS  
P.O. BOX 99  
NAGS HEAD, NC 27959  
252.441.1122 - www.nagsheadnc.gov



**DOWDY PARK - PHASE 1**  
**SITE DEVELOPMENT PLAN**  
TOWN OF NAGS HEAD, NC  
3005 SOUTH CROATAN HIGHWAY

NO.	DATE	DESCRIPTION

DESIGNED BY: AMR/BH  
DRAWN BY: HR  
DATE: JUNE-2-2016  
PROJECT NO: 16-115  
FILE: .

STAKING  
ENLARGEMENTS

C1.2



TOWN OF NAGS HEAD  
DEPARTMENT OF PUBLIC WORKS  
P.O. BOX 99  
NAGS HEAD, NC 27959  
D.B. 1915, PG. 1  
200 E. BONNETT ST.  
252.441.1122 • www.nagsheadnc.gov

**CLH DESIGN**  
CLH Design, PA  
400 Regency Forest Dr.  
Suite 120  
Cary, NC 27518  
Phone: 919.319.6716  
Fax: 919.319.7516  
LA: C-106 PE: C-1595

NORTH CAROLINA PROFESSIONAL SEAL  
030406  
ENGINEER  
DAVID M. RYAN  
6/27/2016

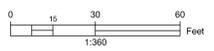
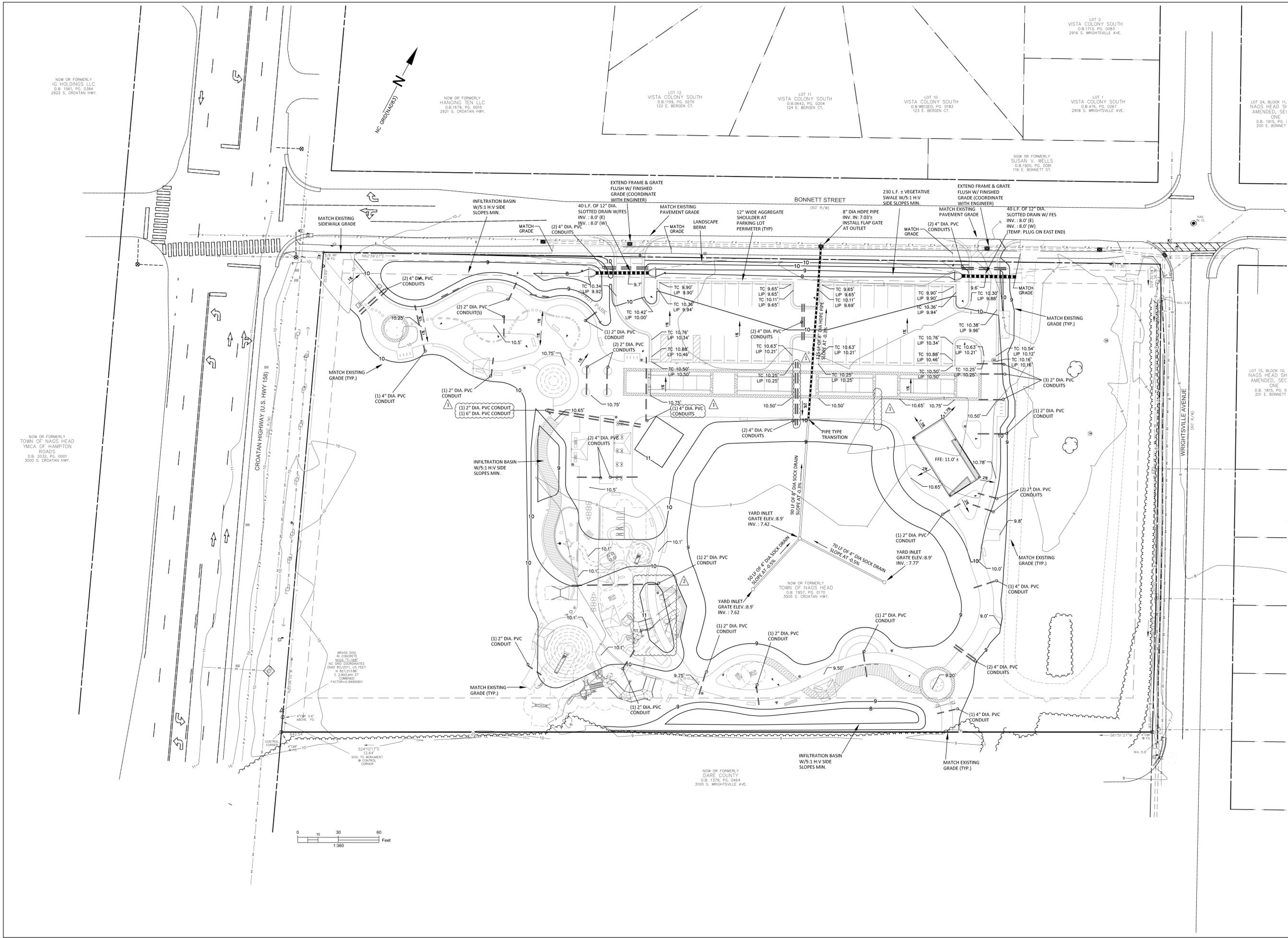
**DOWDY PARK - PHASE 1**  
SITE DEVELOPMENT PLAN  
TOWN OF NAGS HEAD, NC  
3005 S. CROATAN HIGHWAY

NO.	DATE	DESCRIPTION
1	6-21-16	RELEASED FOR BID
2	6-21-16	ADDENDUM #1 (REV'D CONCERNING REVISIONS AROUND OBSERVATION DECK)
3	6-27-16	

DESIGNED BY: AMR/BH  
DRAWN BY: HBR  
DATE: APRIL-2016  
PROJECT NO: 16-115  
FILE:

GRADING,  
DRAINAGE AND  
CONDUIT PLAN

C3.0





TOWN OF NAGS HEAD  
DEPARTMENT OF PUBLIC WORKS  
P.O. BOX 99  
NAGS HEAD, NC 27959  
252.441.1122 • www.nagsheadnc.gov



CLH Design, PA  
400 Repercy Forest Dr.  
Suite 120  
Cary, NC 27518  
Phone: 919.319.6716  
Fax: 919.319.7516  
LA: C-106 PE: C-1595

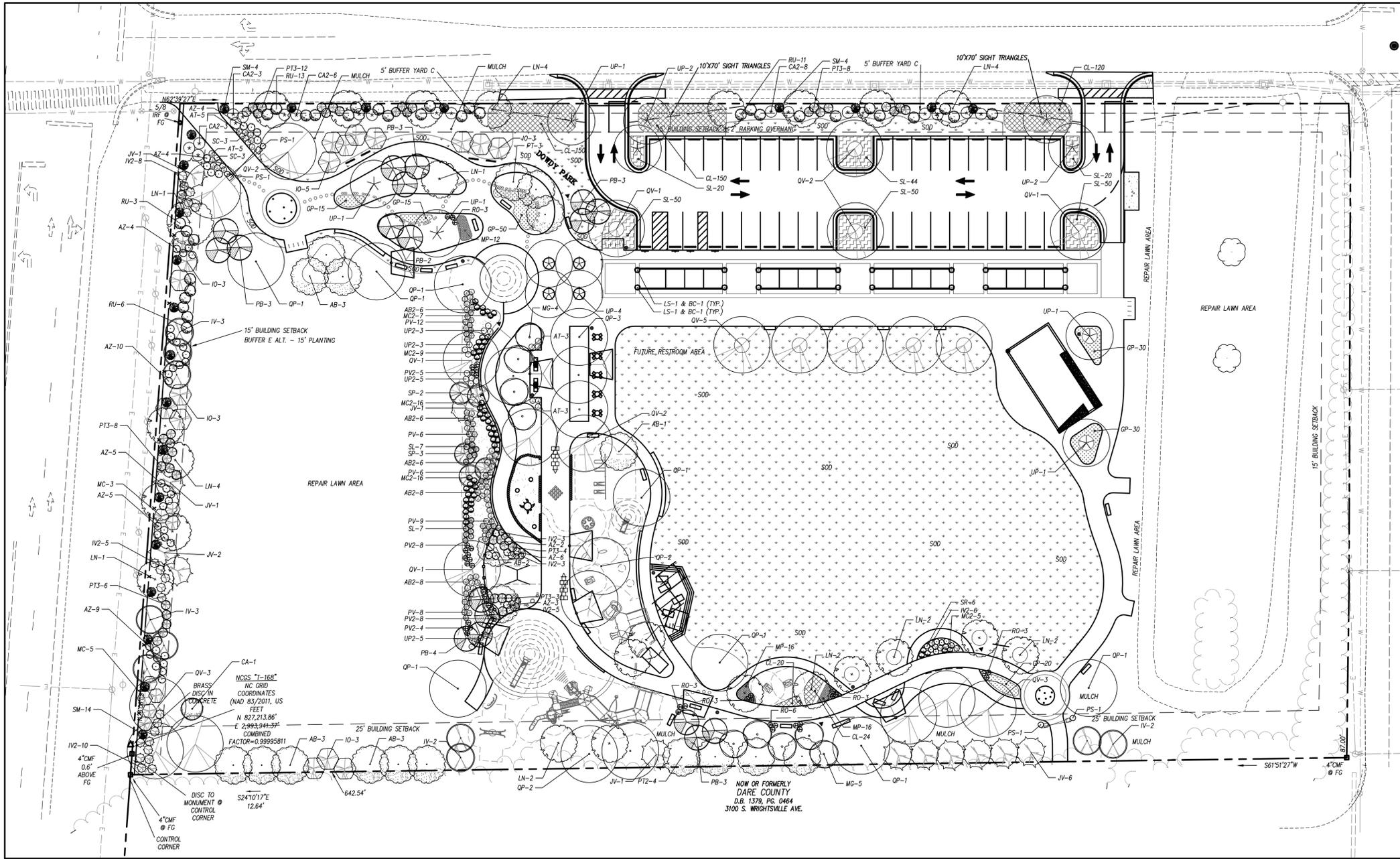


DOWDY PARK - PHASE 1  
SITE DEVELOPMENT PLAN  
TOWN OF NAGS HEAD, NC  
3005 SOUTH CROATAN HIGHWAY

**PLANT SCHEDULE**

KEY	QTY	PLANT NAME	MIN. SIZE	REMARKS
<b>TREES</b>				
AB	12	FRIDENT MAPLE <i>Acer buergerianum</i>	6'-8" H 1 1/2" Cal	Straight Trunk, Full Matched Specimens
CA	1	BLUE CYPRESS <i>Cupressus arborescens 'Blue Sapphire'</i>	6'-8" H B&B	Full Plants
IO	17	AMERICAN HOLLY <i>Ilex opaca 'Tina'</i>	5'-6" H	Matched Specimens
IV	10	YAUPEON HOLLY <i>Ilex vomitoria</i>	5'-6" H	Full Plants
JV	12	EASTERN RED CEDAR <i>Juniperus virginiana var. silicola</i>	5'-6" H	Straight Trunk, Full Cont.
LN	23	CRAPE MYRTLE 'NATCHEZ' <i>Lagarostrobilus indica 'Natchez'</i>	6'-8" H	3-5 Trunks
MG	9	SWEETBAY MAGNOLIA <i>Magnolia virginiana</i>	6'-8" H	Matched Specimens
PB	18	REDBAY <i>Persea borbonica</i>	6'-8" H	Straight Trunk
PI	3	BLACKJACK PINE <i>Pinus thunbergii</i>	1 1/2" Cal	Matched Specimens
PT	4	WILLOW OAK <i>Quercus phellos</i>	6'-8" H B&B	Straight Trunk, Full Matched Specimens
QP	16	LIVE OAK <i>Quercus virginiana</i>	6'-8" H B&B	Straight Trunk, Full Matched Specimens
UV	13	ALLEE ELM <i>Ulmus parvifolia 'Allee'</i>	6'-8" H	Straight Trunk, Full Matched Specimens
<b>SHRUBS</b>				
AZ	52	ENCORE AZALEA <i>Azalea x Autumn Royalty</i>	18" - 24" H	Full Plants
CA	20	AMERICAN BEAUTY BERRY <i>Callicarpa americana</i>	18" - 24" H	Full Plants
IV	40	DWARF YAUPEON HOLLY <i>Ilex vomitoria 'Nana'</i>	18" - 24" H	Full Plants
MC	8	SOUTHERN WAX MYRTLE <i>Myrica caribaea</i>	24" - 36" H	Full Plants
PT	41	WHEELER'S DWARF PHYTOSPORUM <i>Phytosporum tobira 'Wheeler's Dwarf'</i>	24" - 36" H	Full Plants
RU	33	INDIAN HAWTHORN <i>Raphanopappus umbellata 'Mojeat Beauty'</i>	24" - 36" H	Full Plants
RO	18	ROSEMARY <i>Rosemary officinalis 'Ary'</i>	18" - 24" H	Full Plants
SM	22	DWARF PALMETTO <i>Sabal minor</i>	24" - 36" H	Full Plants
<b>ORNAMENTAL GRASSES</b>				
AB	36	AMERICAN BEACHGRASS <i>Ammophila breviflora</i>	1-Gal Cont	Full Plants
MC	53	PINK MULLET GRASS <i>Muhlenbergia capillaris 'sericea'</i>	3-Gal Cont	Full Plants
PV	41	NORTHWIND SWITCH GRASS <i>Panicum virgatum 'Northwind'</i>	1-Gal Cont	Full Plants
PV	25	SHENANDOAH SWITCH GRASS <i>Panicum virgatum 'Shenandoah'</i>	1-Gal Cont	Full Plants
SL	248	SEASIDE LITTLE BLUESTEM <i>Schizachyrium littorale</i>	1-Gal Cont	Full Plants
UP	16	SEA OATS <i>Uniola paniculata</i>	1-Gal Cont	Full Plants
<b>VINES</b>				
BC	16	CROSSVINE <i>Bignonia capreolata</i>	1-Gal Cont	Full Plants
LS	16	CORAL HONEYSUCKLE <i>Lonicera sempervirens</i>	1-Gal Cont	Full Plants
PS	4	PASSIONFLOWER <i>Passiflora incarnata</i>	1-Gal Cont	Full Plants
<b>PERENNIALS AND GROUNDCOVERS</b>				
AT	16	BUTTERFLY WEED <i>Asclepias tuberosa</i>	3-Gal Cont	Full Plants
CL	464	COREOPSIS <i>Coreopsis lanceolata</i>	3-Gal Cont	Full Plants
GP	160	BLANKET FLOWER <i>Gaillardia pulchella</i>	1-Gal Cont	Full Plants
MP	44	HORSEBIT <i>Monarda punctata</i>	1-Gal Cont	Full Plants
SC	6	LAVENDER COTTON <i>Santolina chamaecyparissus</i>	1-Gal Cont	Full Plants
SR	6	GOLDENROD <i>Solidago rugosa 'Fireworks'</i>	1-Gal Cont	Full Plants
SOD	TBD	TURF GRASS T-419 Hybrid Bermudagrass		

GRAPHIC SYMBOLS SUPERCEDE WRITTEN QUANTITIES WHERE DISCREPANCIES OCCUR.  
FOR NOTES AND DETAILS, SEE DETAIL SHEET C7.7.



**LANDSCAPE NOTES**

- LOCATE ALL EXISTING UTILITIES PRIOR TO INSTALLATION OF PLANT MATERIAL. NOTIFY OWNER OF ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND THOSE SHOWN ON THE PLAN.
- VERIFICATION OF TOTAL QUANTITIES AS SHOWN ON THE PLANT LIST SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. AND THE TOTAL QUANTITIES SHALL BE AS SHOWN ON THE PLAN.
- ALL PLANT MATERIAL SHALL CONFORM WITH THE STANDARDS SET FORTH BY THE AMERICAN ASSOCIATION OF NURSERYMEN AND THE WRITTEN SPECIFICATIONS.
- ALL PLANT MATERIAL (SHRUBS/TREES) SHALL BE A MINIMUM DISTANCE OF 4 1/2 FEET FROM BACK OF CURB, EXCEPT ALONG ANY NEW WALLS ADJACENT TO PARKING WHERE CURB STOPS WILL BE USED.
- ALL PLANT GROUPINGS SHALL BE MULCHED AS ONE BED WITH 3" (AFTER SETTLING) OF BROWN DYED TRIPLE SHREDDED HARDWOOD MULCH. THE REMOTE BUFFER PLANTINGS SHALL BE MULCHED WITH 3" (AFTER SETTLING) TRIPLE SHREDDED HARDWOOD MULCH. DO NOT USE "TOWN" MULCH.
- APPLY PRE-EMERGENT HERBICIDE TO ALL NEW PLANTING BEDS AT MANUFACTURER'S RECOMMENDED RATE PRIOR TO INSTALLATION OF MULCH.
- ESTABLISH POSITIVE DRAINAGE IN ALL PLANTING BEDS AND AWAY FROM BUILDINGS.
- DO NOT INSTALL PLANT MATERIAL IN IMPERVIOUS SOILS. (I.E. HOLES WHICH, WHEN FILLED WITH WATER, DO NOT COMPLETELY DRAIN WITHIN TWO HOURS.) SEE SPECIFICATIONS FOR TOPSOIL REQUIREMENTS.
- LAWN AREAS NOT SHOWN ON THE PLANS TO BE SODED OR MULCHED. LAWN AREAS SHALL BE SEEDED WITH BERMUDA GRASS 95% COVERAGE (BASED ON A PER SQUARE YARD SAMPLE) WHICH SHALL BE ATTAINED PRIOR TO FINAL INSPECTION. SEE DETAIL SHEET FOR RATES AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- CONTACT THE LANDSCAPE ARCHITECT FOR INSPECTION 48 HOURS IN ADVANCE OF THE SCHEDULED SITE VISIT AND AT THE FOLLOWING INTERVALS:
  - REVIEW OF GRADING PRIOR TO PLANT AND LAWN INSTALLATION
  - REVIEW OF PLANT MATERIAL PRIOR TO INSTALLATION.
  - ONE SUBSTANTIAL COMPLETION MEETING FOR PLANT INSTALLATION.
  - ONE FINAL INSPECTION FOR ALL SEEDING/PLANTING OPERATIONS.
- THE TREE PROTECTION FENCE SHALL BE MAINTAINED ON THE SITE UNTIL ALL SITE WORK IS COMPLETED AND THE FINAL SITE INSPECTION PRIOR TO THE CERTIFICATE OF OCCUPANCY (CO) IS SCHEDULED. THE FENCING SHALL BE REMOVED PRIOR TO FINAL SITE INSPECTION FOR THE CO.
- LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING ALL PLANTS AND LAWN AREAS AT HIS COST FROM HIS OWN WATER SOURCE INCLUDING DURING PERIODS OF DROUGHT UNTIL THE PLANTS AND LAWN ARE DECLARED SUBSTANTIALLY COMPLETE. PLANT MATERIALS OR AREAS OF GRASS WHICH PERISH SHALL BE RE-ESTABLISHED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ALL EQUIPMENT & SUBCONTRACTORS AWAY FROM ALL SODED AND SEEDING AREAS. IF DAMAGE OCCURS, THROUGH NO FAULT OF THE OWNER, AREAS SHALL BE REGRADED AND RESEED IMMEDIATELY AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR SHALL WATER AND MAINTAIN THOSE AREAS UNTIL THEY ARE AT 95% COVERAGE AT SUBSTANTIAL COMPLETION.
- SUBSTITUTIONS OF PLANT MATERIAL SHALL ONLY BE ACCEPTED 60 DAYS PRIOR TO COMMENCEMENT OF PLANTING OPERATIONS. SUBSTITUTION REQUESTS MUST BE IN WRITING AND WILL ONLY BE ACCEPTED FOR LACK OF AVAILABILITY REASONS WHICH CAN BE SUBSTANTIATED OR FOR SUPERIOR STOCK SUBSTITUTIONS.
- LANDSCAPE CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT TO REVIEW GRADING ONE WEEK PRIOR TO SEEDING. IF THE LANDSCAPE CONTRACTOR AND LANDSCAPE ARCHITECT FIND GRADING UNACCEPTABLE FOR FINAL SEEDING, LANDSCAPE CONTRACTOR SHALL BRING IT TO THE ATTENTION OF THE GENERAL CONTRACTOR. LANDSCAPE CONTRACTOR SHALL NOT PROCEED WITHOUT APPROVAL BY LANDSCAPE ARCHITECT.
- IF CONFLICTS OCCUR BETWEEN WRITTEN SPECIFICATIONS AND THE DRAWINGS, THE WRITTEN SPECIFICATIONS SHALL PREVAIL.
- ALL SOD SHALL BE TIFWAY 419 BERMUDA GRASS.
- CONTRACTOR SHALL STABILIZE AND REPAIR ALL DISTURBED AREAS.

**SEEDBED PREPARATION**

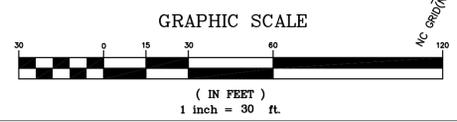
- DISC ALL AREAS TO RECEIVE GRASS TO A MINIMUM OF 8 INCHES. MIX AND AMEND WITH 3 INCHES OF TOPSOIL. REFER TO SPECIFICATIONS FOR TOPSOIL REQUIREMENTS.
- REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER OBSTRUCTIONS LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM. CONSTRUCTION EQUIPMENT & TRAFFIC SHALL BE REMOVED PRIOR TO SEEDING.
- CONTINUE TILLAGE UNTIL A WELL-PULVERIZED, FIRM, REASONABLY UNIFORM SEEDBED IS PREPARED TO A 6 INCHES DEPTH.

**CONTRACTOR RESPONSIBILITY NOTES:**

- THE MAIN PROJECT BIDDING PACKAGE WILL NOT INCLUDE LANDSCAPING OR IRRIGATION. THE TOTAL PROJECT LANDSCAPE SHEETS HAVE BEEN INCLUDED FOR COORDINATION PURPOSES.
- THE GENERAL CONTRACTOR TO INCLUDE ALL TEMPORARY SEEDING, NECESSARY GRADING, FINAL GRADING, TOPSOIL AMENDMENTS AND ADEQUATE TOPSOIL AS NEEDED FOR THE LANDSCAPE CONTRACTOR TO COMPLETE THE SCOPE OF LANDSCAPING WHEN AWARDED.
- THE FOLLOWING SHEETS HAVE BEEN INCLUDED FOR REFERENCE ONLY: C5.1, C5.2 AND C7.7
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE FUTURE LANDSCAPE CONTRACTOR.
- TOPSOIL SHALL BE ACCEPTED BY THE OWNER BEFORE THE LANDSCAPE CONTRACTOR BEGINS WORK. GENERAL CONTRACTOR SHALL CONTACT THE OWNER FOR TOPSOIL INSPECTION.
- ALL CONTRACTORS SHALL REFER TO THE EROSION CONTROL CONSTRUCTION SEQUENCE AND ADDITIONAL INFORMATION ON SHEETS C2.0.

**LANDSCAPE CALCULATIONS**

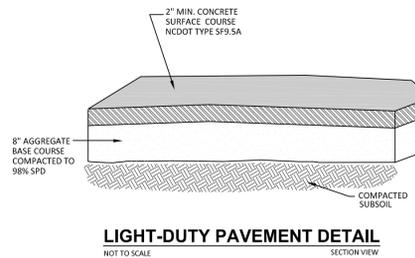
<b>PARKING AREA PLANTING REQUIREMENTS</b>	
INTERIOR PARKING PLANTING AREA REQUIRED:	= (100)/7,700 SF = 770 SF
INTERIOR PARKING PLANTING AREA PROVIDED:	= 1,400 SF
LANDSCAPE ISLANDS MUST HAVE A PERMANENT, NON-EROSIVE GROUNDCOVER	
<b>BUFFER YARD REQUIREMENTS</b>	
CROATAN HIGHWAY (WEST)	= 354 LF
BUFFER YARD TYPE E REQUIRED:	= 36 TREES, 142 SHRUBS, 354 GRASSES OR HERB.
15' UNDISTURBED FROM R/W, 10' BUFFER	
2 ROWS 4' APART	
5 TREES/20 SHRUBS/50 GRASSES OR HERBACEOUS PER 100 LF (DOUBLE FOR 2 ROWS)	
50% EVERGREEN	
5' WHEN INSTALLED, 8' AT MATURITY	
MAY BE COMBINED WITH BERMS	
BONNETT STREET (NORTH) = 618 LF (-SIDEWALK, ENTRY DRIVES, PHASE 2) = 474 LF	
5' BUFFER YARD TYPE C REQUIRED: = 24 TREES, 95 SHRUBS, 237 GRASSES OR HERB.	
5 TREES/20 SHRUBS/50 GRASSES OR HERBACEOUS PER 100 LF	
50% EVERGREEN	
5' WHEN INSTALLED	
MAY BE COMBINED WITH BERMS	
WRIGHTSVILLE AVENUE (EAST) = 344 LF	
PHASE 2	
OPEN SPACE LANDSCAPING REQUIREMENTS	



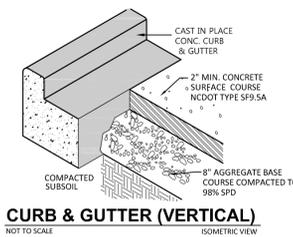
DESIGNED BY: AMR/BH  
DRAWN BY: HR  
DATE: JUNE-2-2016  
PROJECT NO: 16-115  
FILE:

LANDSCAPE PLAN

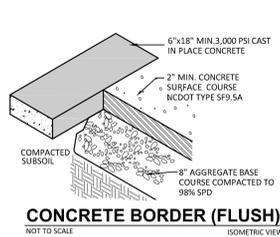
C5.1



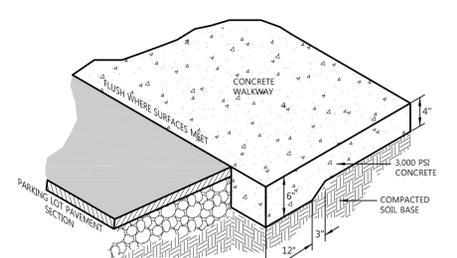
**LIGHT-DUTY PAVEMENT DETAIL**  
NOT TO SCALE SECTION VIEW



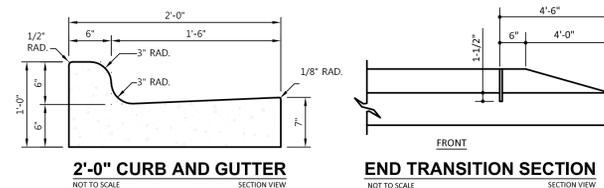
**CURB & GUTTER (VERTICAL)**  
NOT TO SCALE ISOMETRIC VIEW



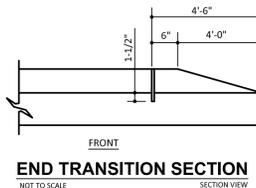
**CONCRETE BORDER (FLUSH)**  
NOT TO SCALE ISOMETRIC VIEW



**PARKING LOT/EVENT PLAZA SURFACE TRANSITION**  
NOT TO SCALE ISOMETRIC VIEW

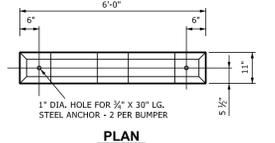


**2'-0" CURB AND GUTTER**  
NOT TO SCALE SECTION VIEW

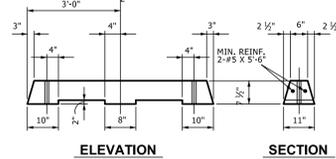


**END TRANSITION SECTION**  
NOT TO SCALE SECTION VIEW

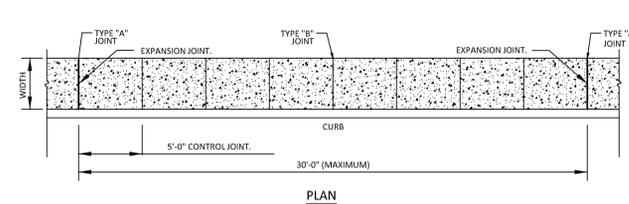
**CONCRETE CURB & GUTTER DETAIL**  
NOT TO SCALE



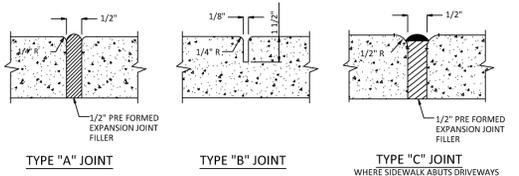
**CONCRETE WHEEL STOP**  
NOT TO SCALE SECTION, ELEVATION, PLAN



**CONCRETE WHEEL STOP**  
NOT TO SCALE SECTION, ELEVATION, PLAN



**CONCRETE SIDEWALK INSTALLATION DETAILS**  
NOT TO SCALE SECTION, ELEVATION, PLAN

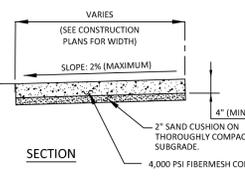


**CONCRETE SIDEWALK INSTALLATION DETAILS**  
NOT TO SCALE SECTION, ELEVATION, PLAN

TABLE OF SIDEWALK JOINTS	
TYPE	LOCATION
"A"	BY MAX. CENTER TO CENTER ON SIDEWALKS, P.C. AND P.T. OF CURVES, JUNCTION OF EXISTING AND NEW SIDEWALKS, DRIVEWAYS, AND SIMILAR STRUCTURES.
"B"	5' CENTER TO CENTER ON SIDEWALKS.

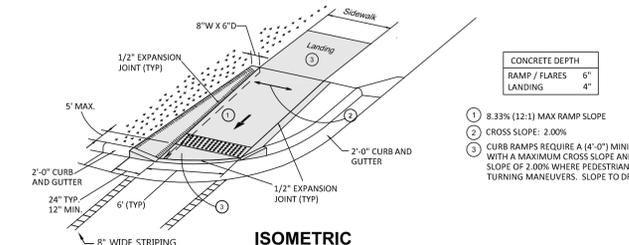
  

TABLE OF CONCRETE TYPE	
TYPE	REINFORCEMENT
"D"	DUMPSTER PAD & APRON #4 BARS @ 12" OC EW
"E"	MECHANICAL EQUIPMENT PADS & APRONS #4 BARS @ 12" OC EW
"F"	SIDEWALK #6 W3.4WV3.4

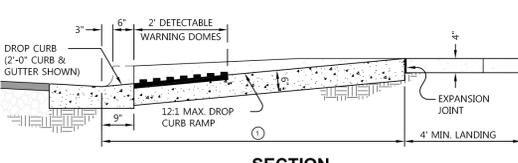


**CONCRETE SIDEWALK INSTALLATION DETAILS**  
NOT TO SCALE SECTION, ELEVATION, PLAN

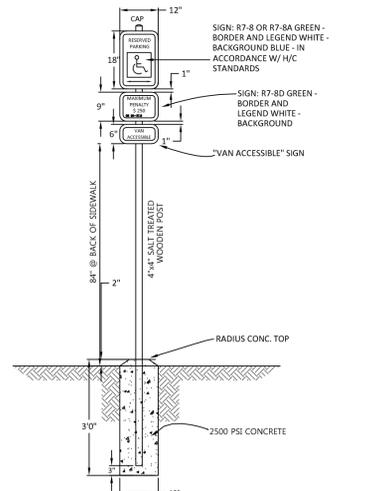
- NOTES:
- SIDEWALKS SHALL HAVE A 4" MINIMUM THICKNESS.
  - ALL SIDEWALKS WILL BE CONSTRUCTED A MINIMUM OF 5 FEET WIDE.
  - ALL CONCRETE USED FOR SIDEWALKS SHALL BE A MINIMUM OF 4,000 PSI FIBERMESH DESIGN MIX.
  - SIDEWALKS SHALL FORM A CONTINUOUS PATH TO MAIN ENTRANCES OF FACILITIES.



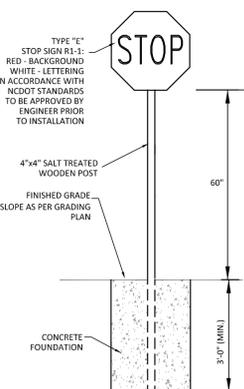
**CURB RAMP RETROFIT DETAIL**  
NOT TO SCALE ISOMETRIC



**CURB RAMP RETROFIT DETAIL**  
NOT TO SCALE SECTION

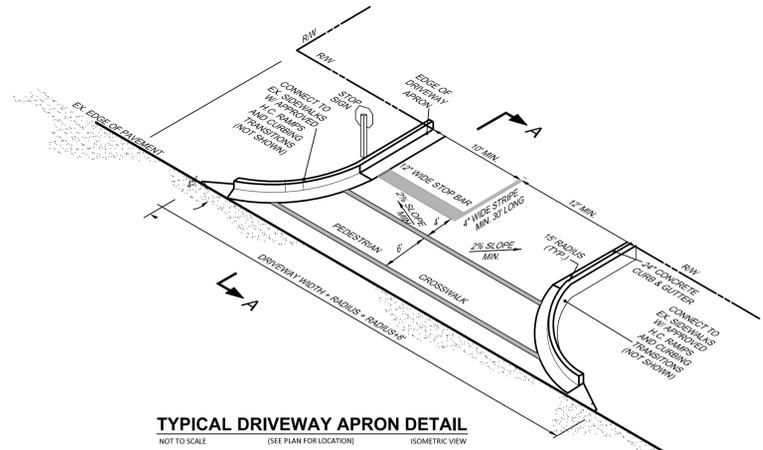


**HANDICAP SIGN DETAIL**  
NOT TO SCALE SECTION VIEW

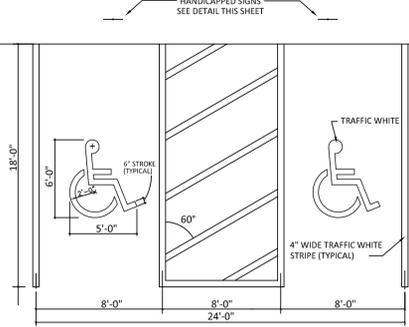


**STOP SIGN DETAIL**  
NOT TO SCALE SECTION VIEW

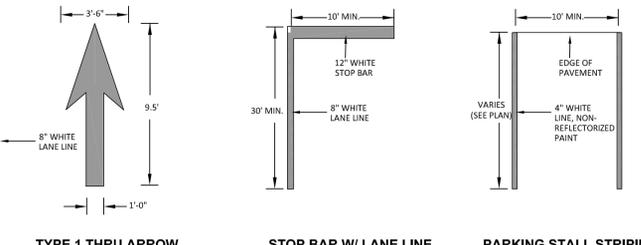
NOTE: SIGN SHALL CONFORM W/ MUTCD BY THE FEDERAL HIGHWAY ADMINISTRATION



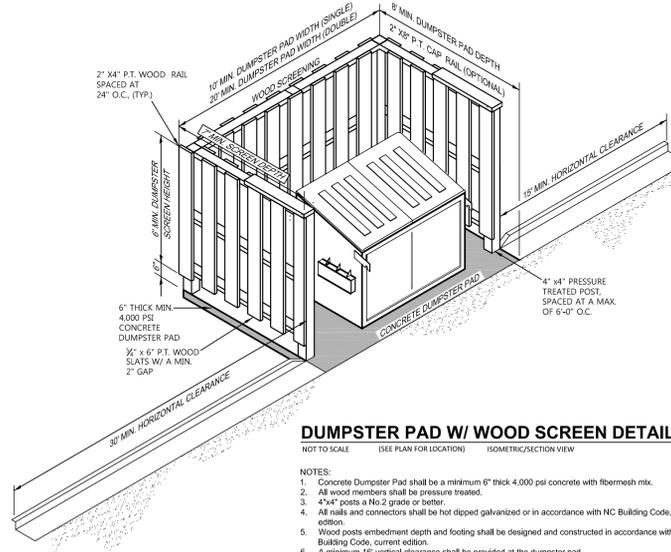
**TYPICAL DRIVEWAY APRON DETAIL**  
NOT TO SCALE ISOMETRIC VIEW



**HANDICAP STALL DETAIL**  
NOT TO SCALE PLAN VIEW

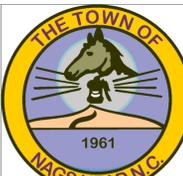


**TYPICAL PAVEMENT STRIPING DETAIL**  
NOT TO SCALE PLAN VIEW



**DUMPSTER PAD W/ WOOD SCREEN DETAIL**  
NOT TO SCALE ISOMETRIC/SECTION VIEW

- NOTES:
- Concrete Dumpster Pad shall be a minimum 6" thick 4,000 psi concrete with fibermesh mix.
  - All wood members shall be pressure treated.
  - 4"x4" posts a No. 2 grade or better.
  - All rails and connectors shall be hot dipped galvanized or in accordance with NC Building Code, current edition.
  - Wood posts embedment depth and footing shall be designed and constructed in accordance with NC Building Code, current edition.
  - A minimum 16" vertical clearance shall be provided at the dumpster pad.



TOWN OF NAGS HEAD  
DEPARTMENT OF PUBLIC WORKS  
P.O. BOX 99  
NAGS HEAD, NC 27959  
252.441.1122 • www.nagsheadnc.gov

**CLH DESIGN**  
CLH Design, PA  
400 Regency Forest Dr.  
Suite 120  
Cary, NC 27518  
Phone: 919.319.6716  
Fax: 919.319.7516  
LA: C-105 PE: C-1595

NORTH CAROLINA PROFESSIONAL SEAL 030406 ENGINEER DAVID M. RYAN 6/2/2016

DOWDY PARK - PHASE 1  
SITE DEVELOPMENT PLAN  
TOWN OF NAGS HEAD, NC  
3005 S. CROATAN HIGHWAY

NO.	DATE	DESCRIPTION
1	6-2-16	RELEASED FOR BID

DESIGNED BY: AMR/BH  
DRAWN BY: HBR  
DATE: APRIL-2016  
PROJECT NO: 16-115  
FILE:

**SITE DETAILS**

C7.1



TOWN OF NAGS HEAD  
DEPARTMENT OF PUBLIC WORKS  
P.O. BOX 99  
NAGS HEAD, NC 27959  
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**CLH  
DESIGN**

CLH Design, PA  
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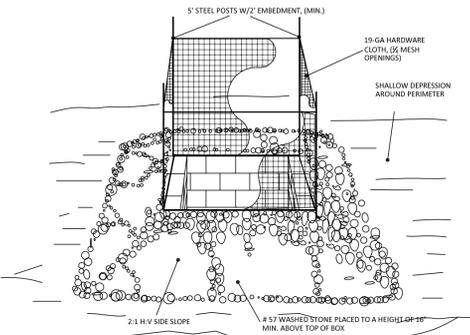
**PHASE 1**  
**DOWDY PARK -**  
**SITE DEVELOPMENT PLAN**  
**TOWN OF NAGS HEAD, NC**  
**3005 S. CROATAN HIGHWAY**

REVISONS	NO.	DATE	DESCRIPTION
	1	6-2-16	RELEASED FOR BID

DESIGNED BY: AMR/BH  
DRAWN BY: HBR  
DATE: APRIL-2016  
PROJECT NO: 16-115  
FILE:

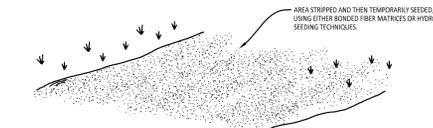
SITE DETAILS

C7.2



- CONSTRUCTION SPECIFICATIONS**
- UNIFORMLY GRADE A SHALLOW DEPRESSION AROUND INLET.
  - DRIVE 5" STEEL POSTS 2-FT INTO GROUND SURROUNDING INLET. SPACE POSTS EVENLY AROUND INLET. MAX. 4" SPACING.
  - SURROUND POSTS WITH WIRE MESH HARDWARE CLOTH. SECURE WIRE MESH TO THE STEEL POSTS AT TOP, MIDDLE & BOTTOM. PLACE A 2" FLAP OF WIRE UNDER GRAVEL FOR ANCHORING.
  - PLACE CLEAN GRAVEL (NO COOT #6 OR #10) STONE) ON A 2:1 SLOPE TO A HEIGHT OF 18" AROUND BARRIER AND SMOOTH TO EVEN GRADE.
  - ONCE CONTRIBUTING DRAINAGE AREAS IS STABILIZED, REMOVE ACCUMULATED SEDIMENT & ESTABLISH FINAL GRADE.
  - COMPACT THE AREA PROPERLY & STABILIZE W/GRASS/COVER.

**DROP INLET BARRIER INSTALLATION**  
NOT TO SCALE LOCATIONS AS NOTED ON PLAN ISOMETRIC VIEW

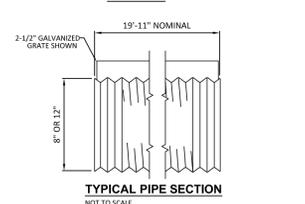
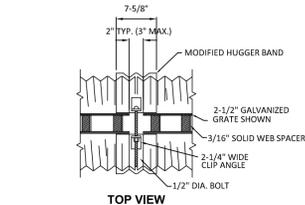


- LAND DISTURBANCE & STABILIZATION DETAIL**  
NOT TO SCALE
- STREAM MULCHING:**
- FOR AREAS OF SITE WITH LESS THAN 30% SLOPE, 2-3 BAYS OF STRAW EQUALS 2-INCHES OF STRAW MULCH OVER 1,000 SQUARE FEET.
  - MULCH SHALL BE WEED FREE STRAW.
- TO PROVIDE TEMPORARY SOIL STABILIZATION BY PLANTING GRASSES AND LEGUMES TO AREAS THAT WOULD REMAIN BARE FOR MORE THAN 7 CALENDAR DAYS. (SEE TEMPORARY SEEDING TABLE FOR APPLICABILITY). WIRE PERMANENT COVER IS NOT NECESSARY OR APPROPRIATE.

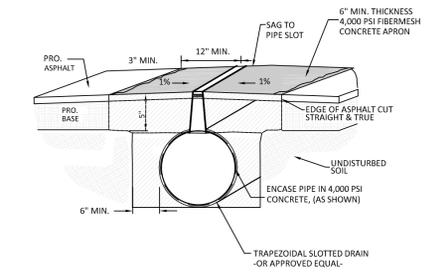
**LAND DISTURBANCE & STABILIZATION DETAIL**  
NOT TO SCALE



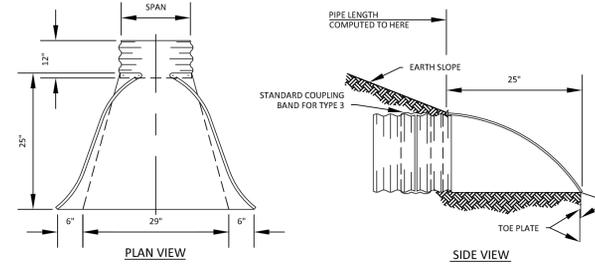
- SLOTTED DRAIN NOTES**
- GRATING DEPTH IS 6".
  - VERTICAL GRATING (STRAIGHT SIDES) WITH VERTICAL SPACERS IS ALSO AVAILABLE.
  - FOR 6" TRAPEZOIDAL REQUIREMENTS, THE SLOTTED DRAIN BAND MAY BE FURNISHED WITH THE 4" BAND ANGLE.
  - DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
- SLOTTED DRAIN DETAIL**  
NOT TO SCALE
- SECTION A-A STANDARD DETAIL**



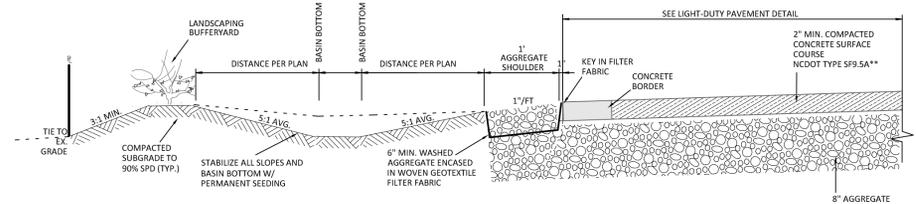
**TYPICAL PIPE SECTION**  
NOT TO SCALE



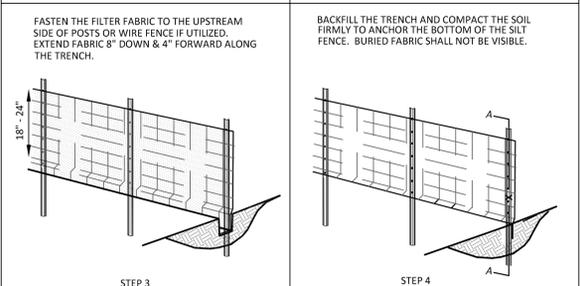
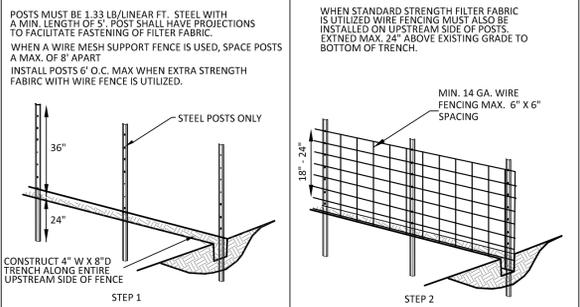
**SLOTTED DRAIN INSTALLATION DETAIL**  
NOT TO SCALE (AS NOTED ON PLANS) ISOMETRIC VIEW



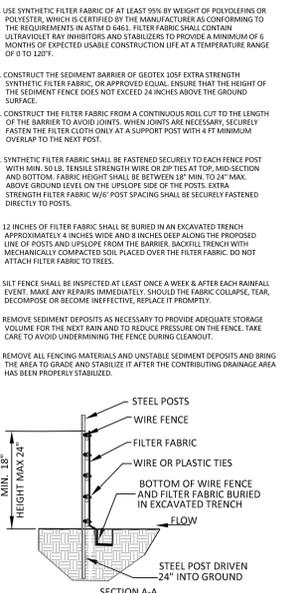
**FLARED END SECTION DETAIL**  
NOT TO SCALE



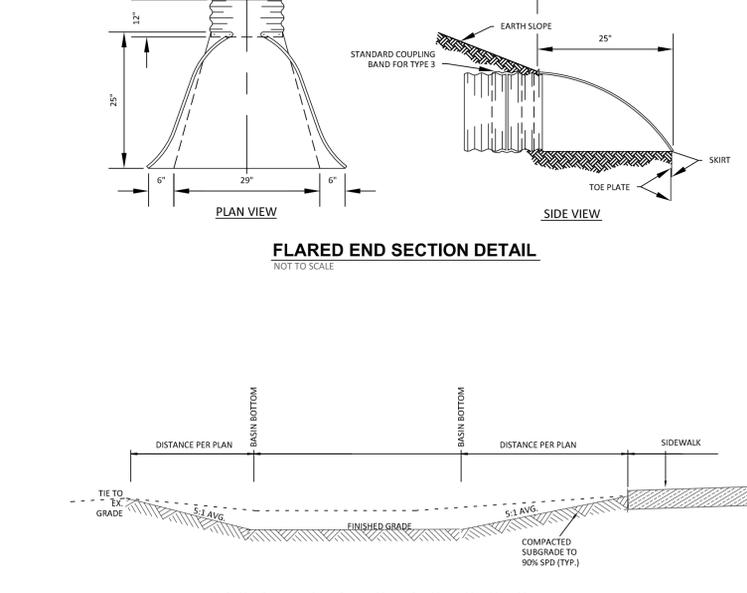
**TYPICAL PARKING LOT SECTION**  
NOT TO SCALE SECTION VIEW



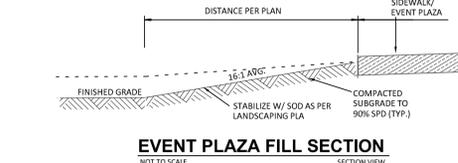
**TYPICAL SILTING DETAIL**  
NOT TO SCALE LOCATIONS AS NOTED ON PLAN



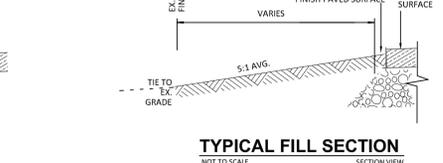
**SECTION A-A**



**TYPICAL INFILTRATION BASIN SECTION**  
NOT TO SCALE SECTION VIEW



**EVENT PLAZA FILL SECTION**  
NOT TO SCALE SECTION VIEW



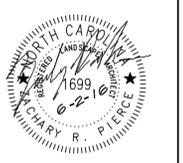
**TYPICAL FILL SECTION**  
NOT TO SCALE SECTION VIEW



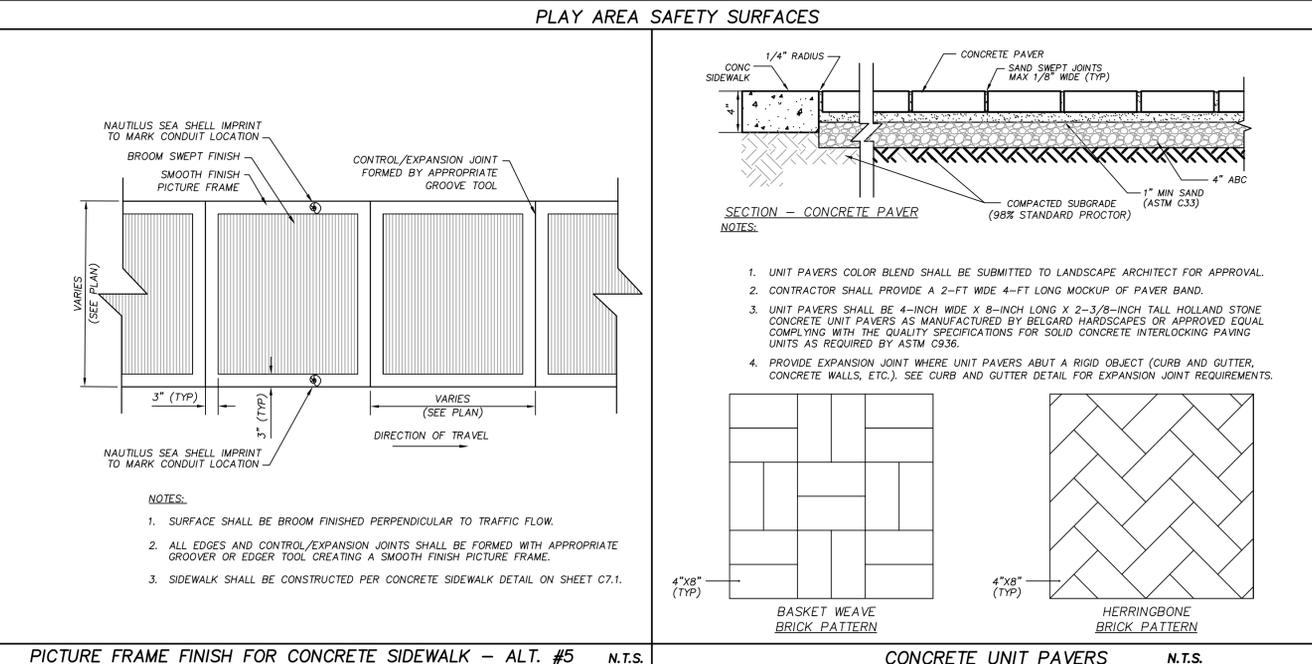
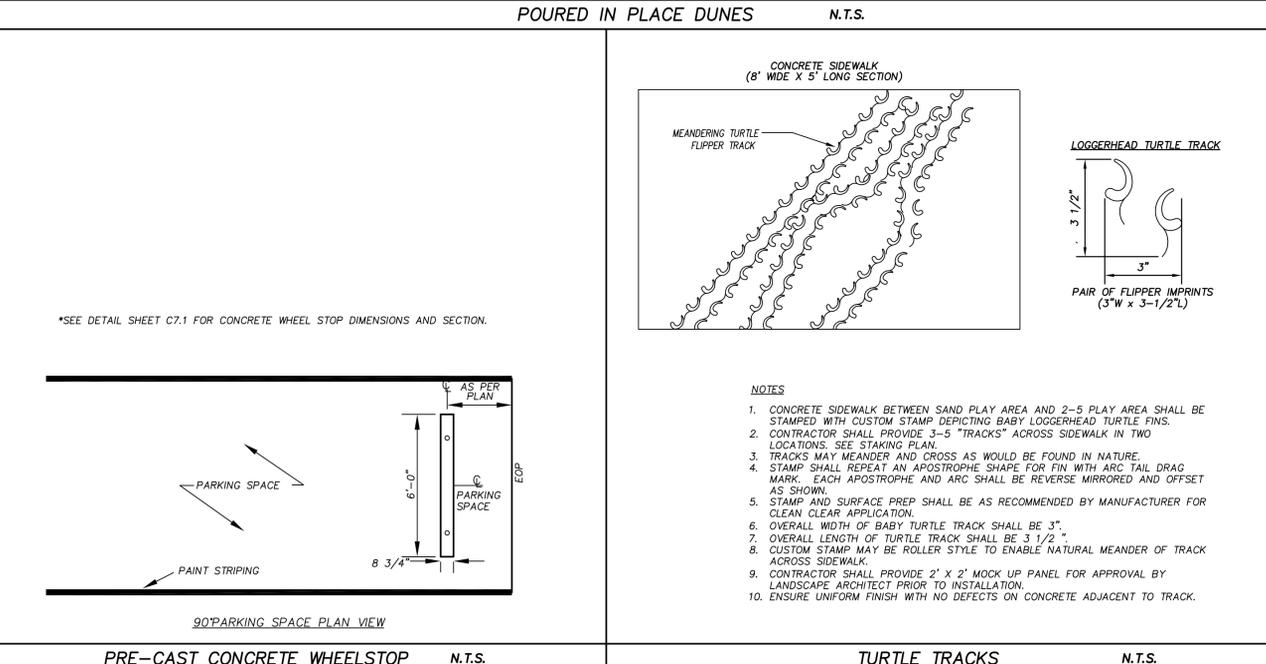
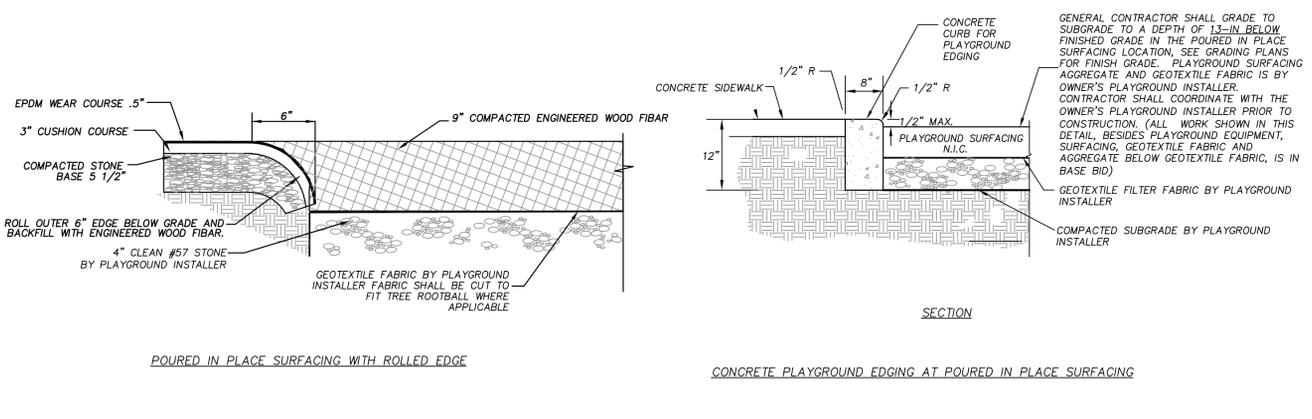
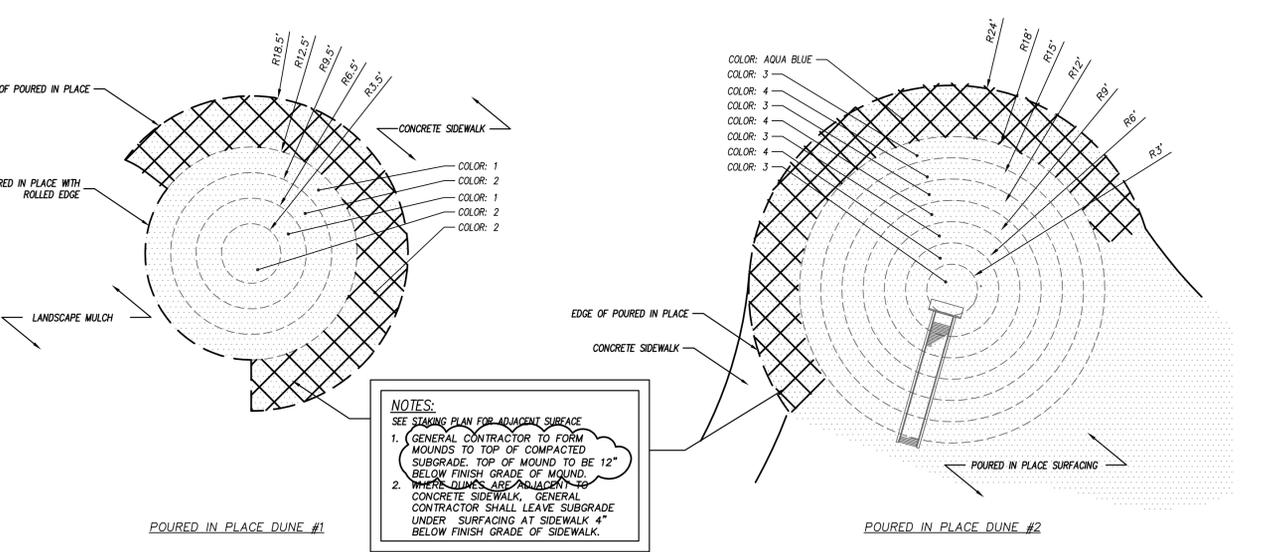
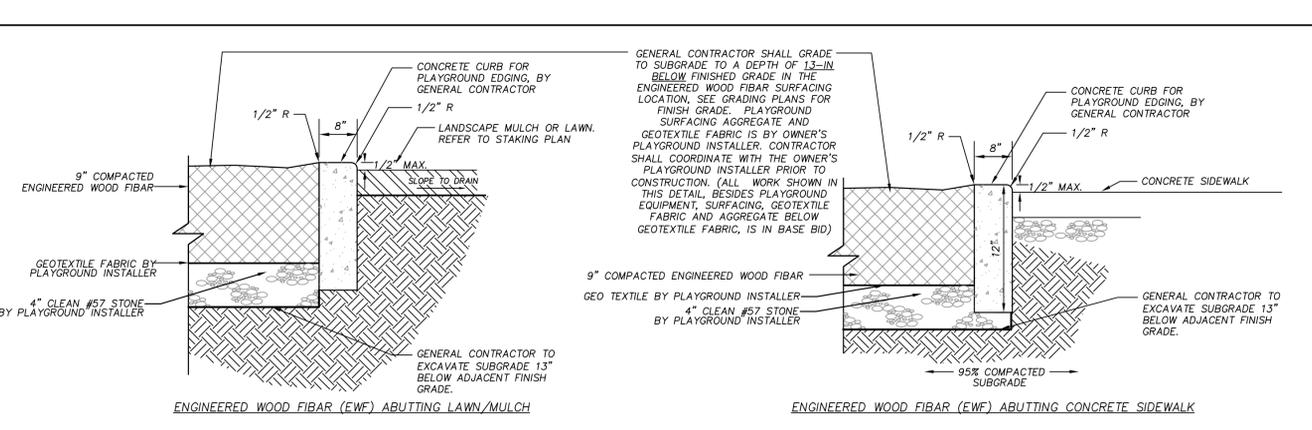
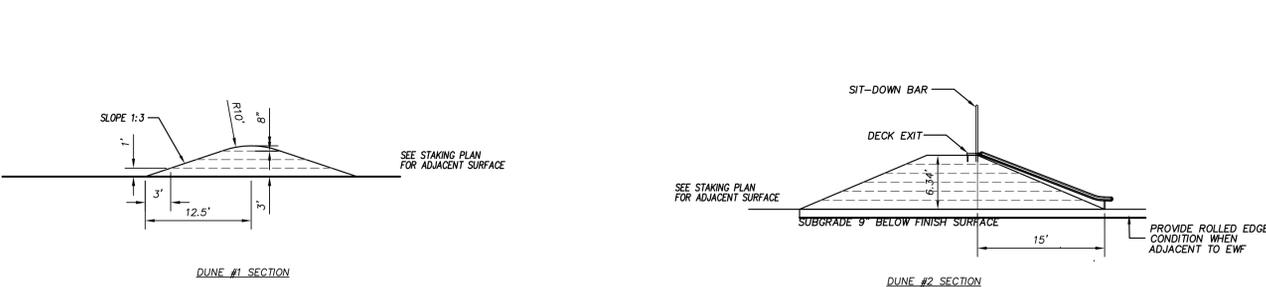
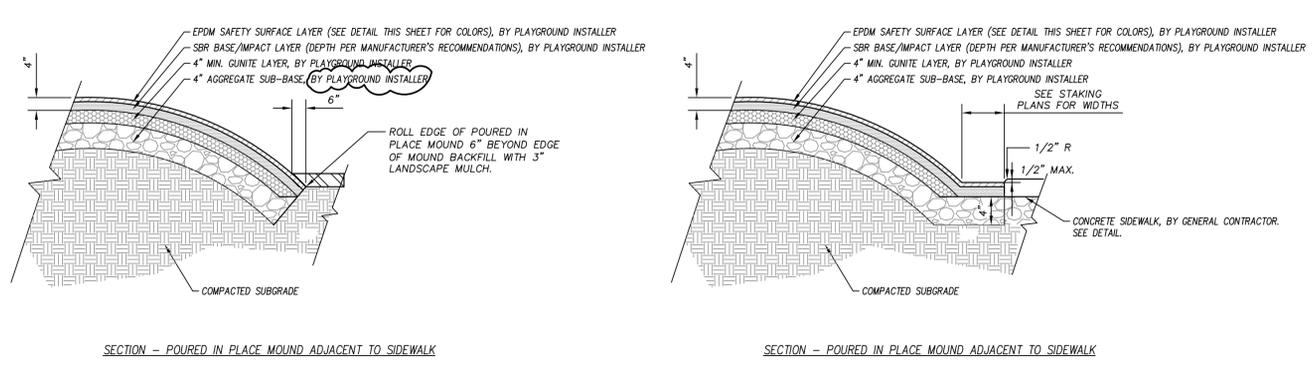
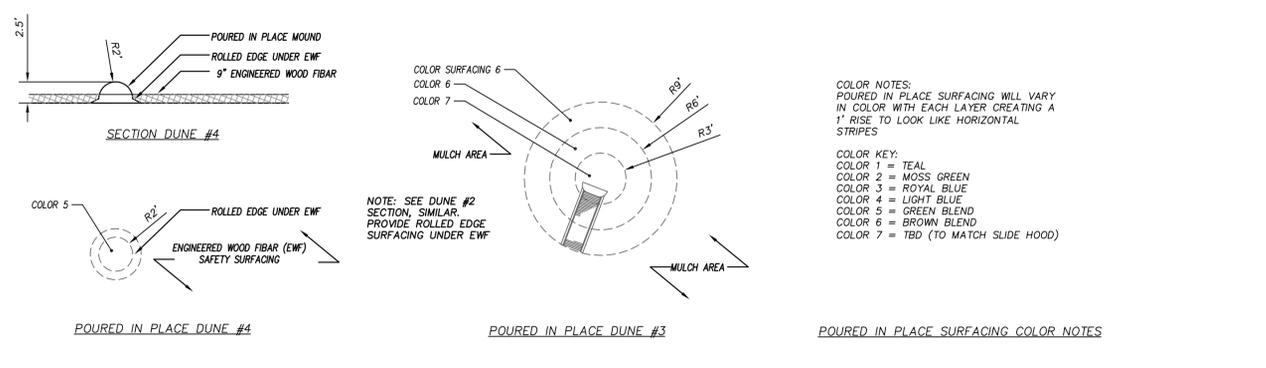
TOWN OF NAGS HEAD  
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CLH Design, PA  
400 Regency Forest Dr.  
Suite 120  
Cary, NC 27518  
Phone: 919.319.6716  
Fax: 919.319.7516  
LA: C-106 PE: C-1595



**DOWDY PARK - PHASE 1**  
**SITE DEVELOPMENT PLAN**  
 TOWN OF NAGS HEAD, NC  
 3005 SOUTH CROATAN HIGHWAY



NO.	DATE	DESCRIPTION
#1	6-21-2016	ADDENDUM #1
#2	6-24-2016	ADDENDUM #2

DESIGNED BY: AMR/BH  
DRAWN BY: HR  
DATE: JUNE-2-2016  
PROJECT NO: 16-115  
FILE:

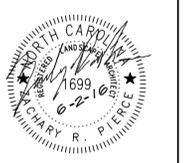
**SITE DETAILS**

**C7.3**



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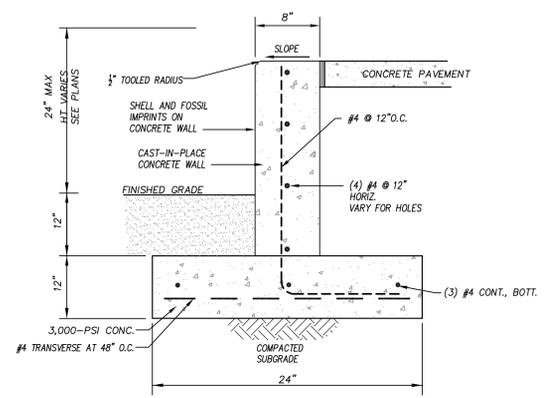
**DOWDY PARK - PHASE 1**  
 SITE DEVELOPMENT PLAN  
 TOWN OF NAGS HEAD, NC  
 3005 SOUTH CROATAN HIGHWAY

REVISIONS	
NO.	DATE
#1	6-21-2016
#2	6-24-2016

DESIGNED BY:	AMR/BH
DRAWN BY:	HR
DATE:	JUNE-2-2016
PROJECT NO:	16-115
FILE:	

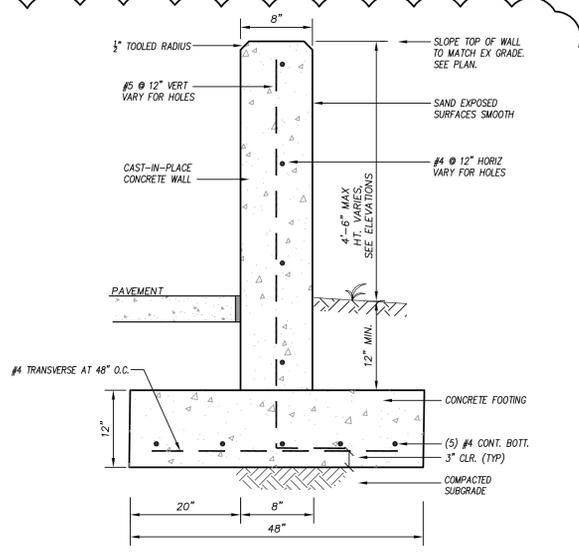
**SITE DETAILS**

**C7.4**

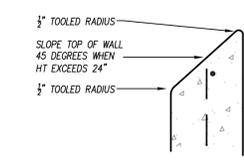


- NOTES:**
- CONCRETE SHALL BE 3,000-PSI @ 28 DAYS.
  - PROVIDE EXPANSION JOINT BETWEEN CONCRETE PAVING AND WALL.
  - SKATE STOPS (SEE HOLEY WALL DETAILS) SHALL BE 3" O.C. ON TOP OF WALL.
  - SHELL AND FOSSILS SHALL BE A MIXTURE OF A SAND DOLLAR, NAUTILUS, SHARK TOOTH, AND STAR FISH.
  - FINAL SHELL AND FOSSIL PLACEMENT SHALL BE UNDER DIRECTION OF LANDSCAPE ARCHITECT.

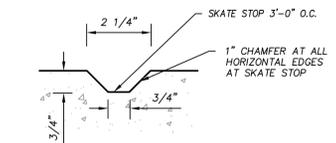
**CONCRETE SEAT/RETAINING WALL** N.T.S.



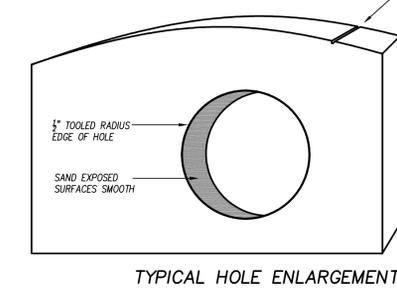
**CHALK AND HOLEY WALL** N.T.S.



**TOP OF WALL ENLARGEMENT (WHEN HT EXCEEDS 24")**



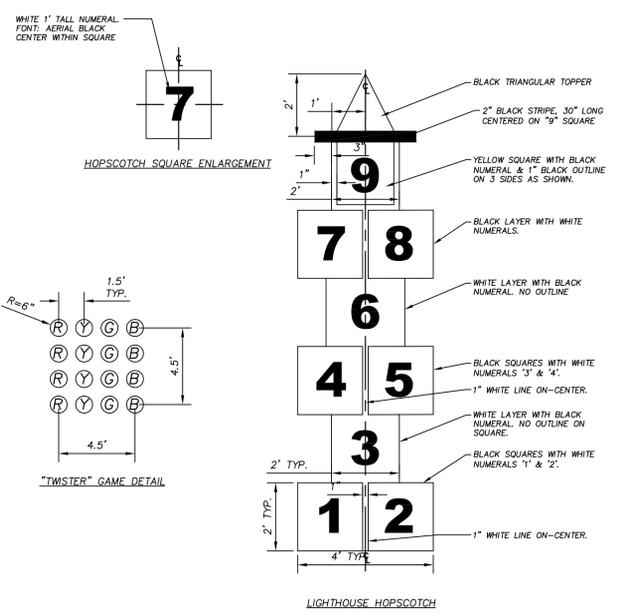
**SKATE STOP ENLARGEMENT**



**TYPICAL HOLE ENLARGEMENT**

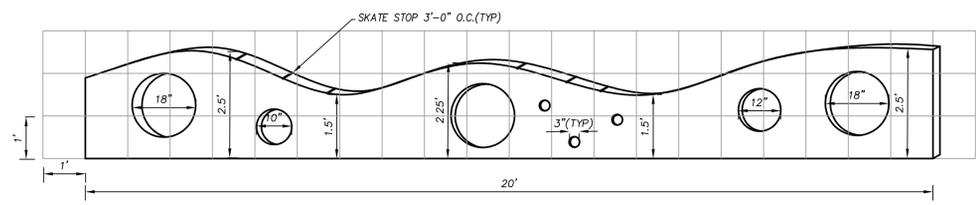
- NOTES:**
- DETAILS FOR LOW, CAST-IN-PLACE CURB WALL.
  - ALL CONCRETE TO BE 3,000-PSI AT 28-DAYS.
  - FORM BOARDS TO BE MARKED WITH CURB TIME FINISH FOR PROJECT LANDSCAPE ARCHITECT'S INSPECTION. CONTRACTOR TO ADJUST PER FIELD DIRECTION.
  - LANDSCAPE ARCHITECT TO APPROVE OF WALL FORMS PRIOR TO CONCRETE POUR.
  - WALL WAVES TO BE SMOOTH GRADUAL CURVES.
  - TOP OF WALL SHALL BE FLAT WHEN WALL HT IS LESS THAN 24" WITH GRADUAL SMOOTH TRANSITION TO 45 DEGREES WITH WALL HTS GREATER THAN 24".
  - SKATE STOPS (SEE ENLARGEMENT DETAIL) SHALL BE 3" O.C. ON FLAT TOP OF WALL ONLY.
  - ALL EDGES SHALL BE 1/2" TOOLED RADIUS.
  - ALL SURFACES OF WALL SHALL BE SANDED SMOOTH.
  - CONCRETE COLOR SHALL BE FROM AN INTEGRAL IRON OXIDE PIGMENT ADDED TO THE CONCRETE.

**CHALK AND HOLEY WALL DETAILS** N.T.S.



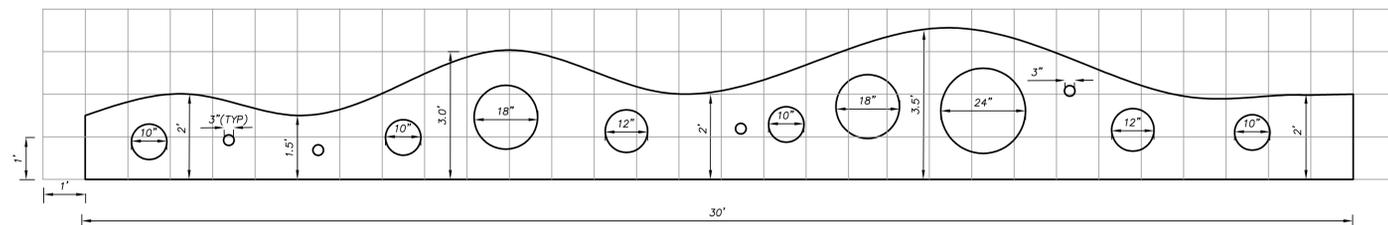
- PAINTING NOTES:**
- MARKING PAINT SHALL BE ACRYLIC OR WATER BASED AND APPROVED BY THE MANUFACTURER FOR APPLICATION ON THE SURFACE COURSE FINISH MATERIAL, SUCH AS "MASONRY" OR "TRAFFIC" PAINT. ASBESTOS, OIL, ALKYD OR SOLVENT VEHICLE TYPE PAINTS ARE PROHIBITED.
  - CONTRACTOR SHALL SPECIAL ORDER PAINT TO ACHIEVE SPECIFIED COLORS. GREEN PAINT SHALL BE KELLY GREEN AND IS AVAILABLE FROM GLIDDEN AND SHERWIN WILLIAMS. ALL PAINT COLORS SHALL BE APPROVED BY OWNER PRIOR TO ORDER AND APPLICATION.
  - PAINT SHALL BE APPLIED PER MANUFACTURER'S INSTRUCTIONS. THOROUGHLY CLEAN PAVEMENT PRIOR TO APPLICATION OF COATINGS OR MARKINGS.
  - STRIPING & NUMBERS SHALL BE 2-INCH WIDE WHITE PAINT (UNLESS NOTED OTHERWISE). NUMBER FONT SHALL BE ARIAL BLACK. CENTER NUMBERS WITHIN SQUARES.
  - GAME COLORS SHALL BE BRIGHT PRIMARY COLORS. COLOR ABBREVIATIONS INDICATED IN DETAILS ARE FOR REFERENCE ONLY. SPACES SHALL BE SOLID COLORS. DO NOT PAINT COLOR INITIAL IN SPACE UNLESS SPECIFICALLY NOTED.
- R = RED  
Y = YELLOW  
G = GREEN  
B = BLUE  
O = ORANGE

**PAVED PLAY STRIPING** N.T.S.

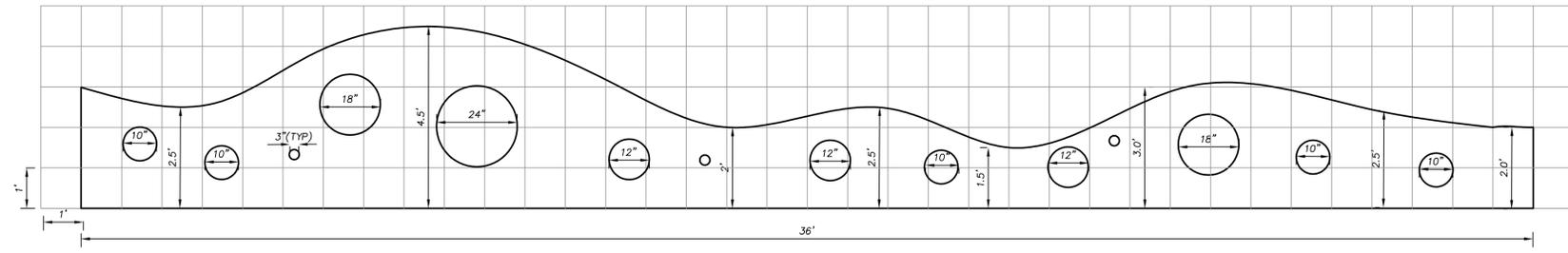


**CHALK WALL ELEVATION SECTION - 20 LF**

**CHALK WALL ELEVATIONS** N.T.S.



**HOLEY WALL ELEVATION SECTION - 30 LF**



**HOLEY WALL ELEVATION SECTION - 36 LF**

**HOLEY WALL ELEVATIONS** N.T.S.

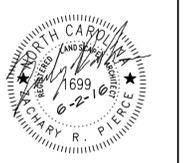


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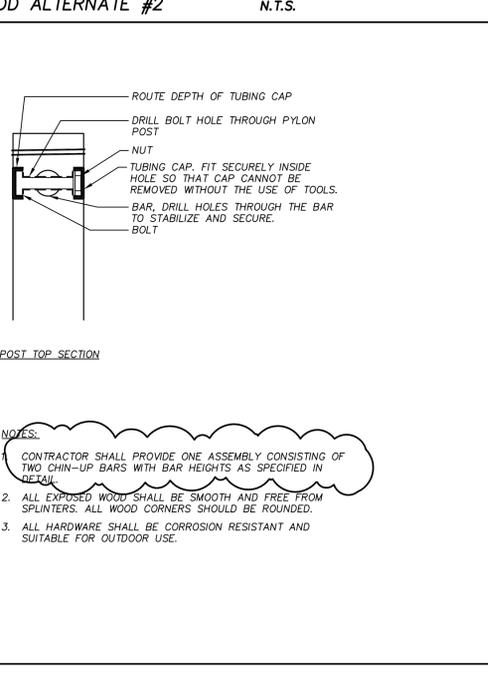
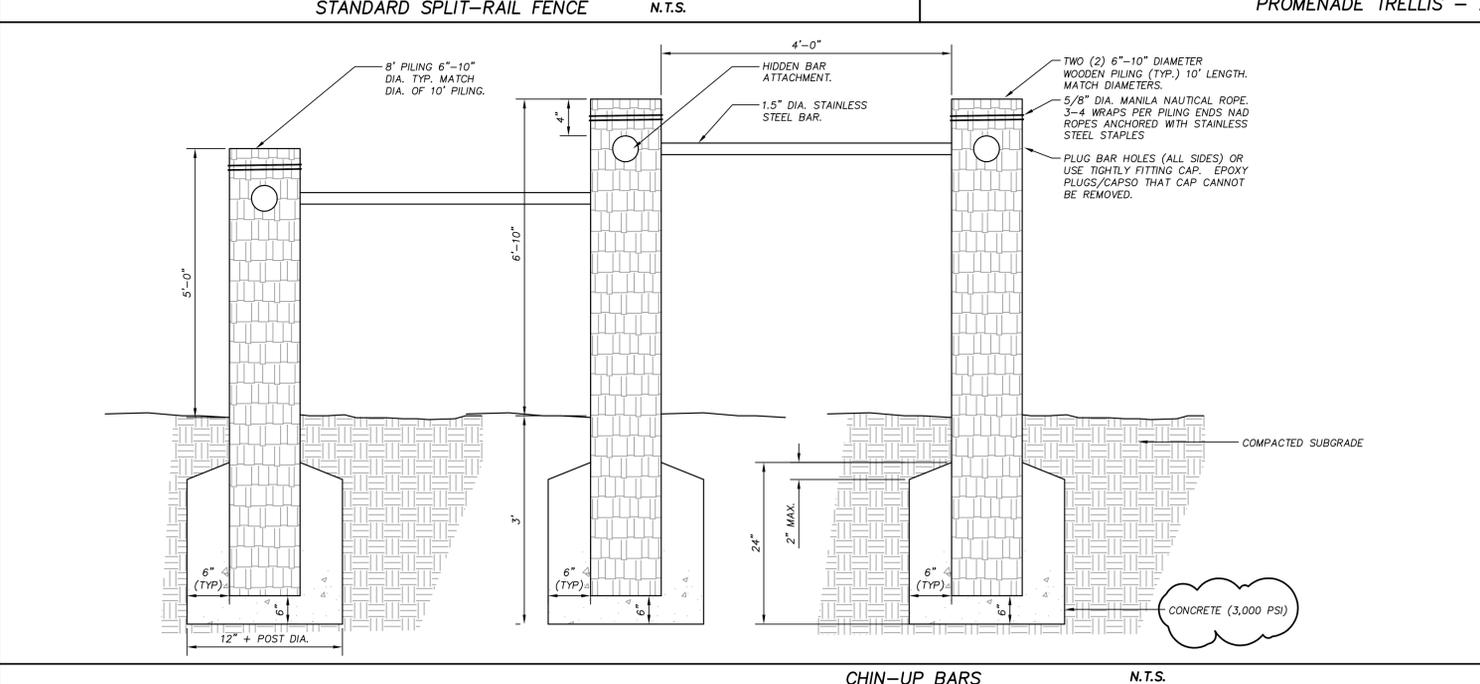
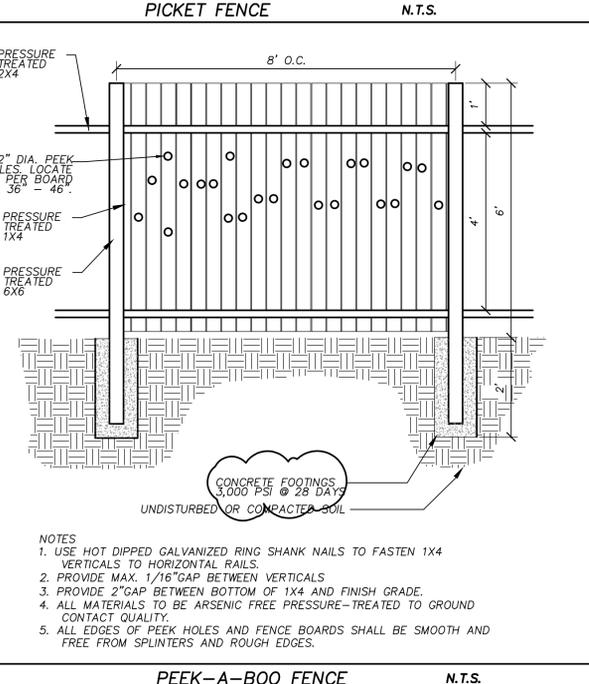
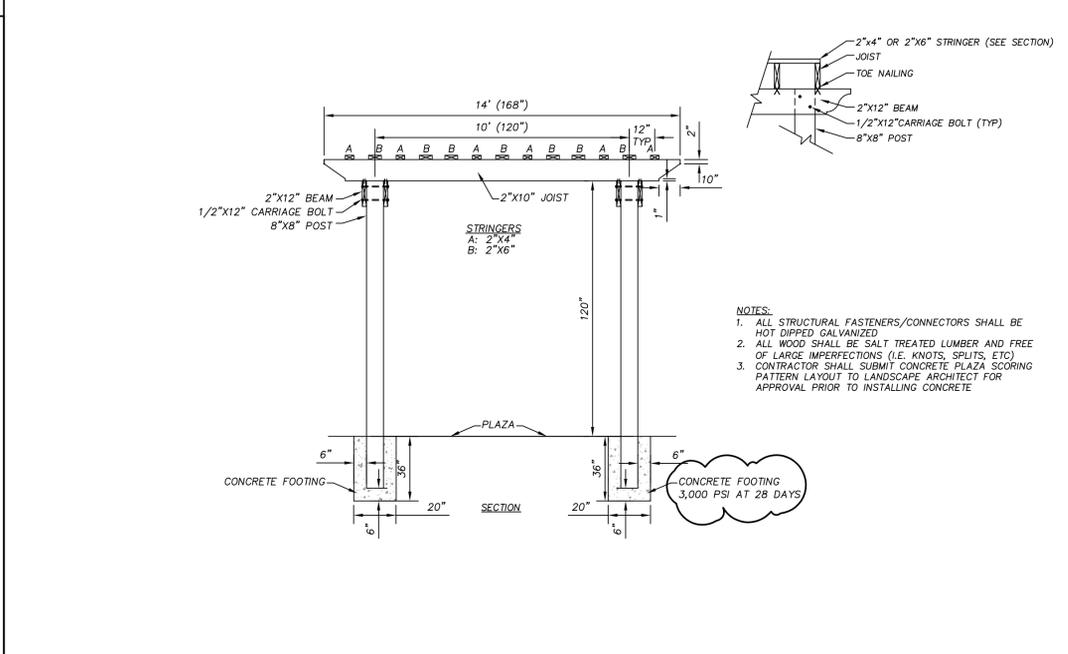
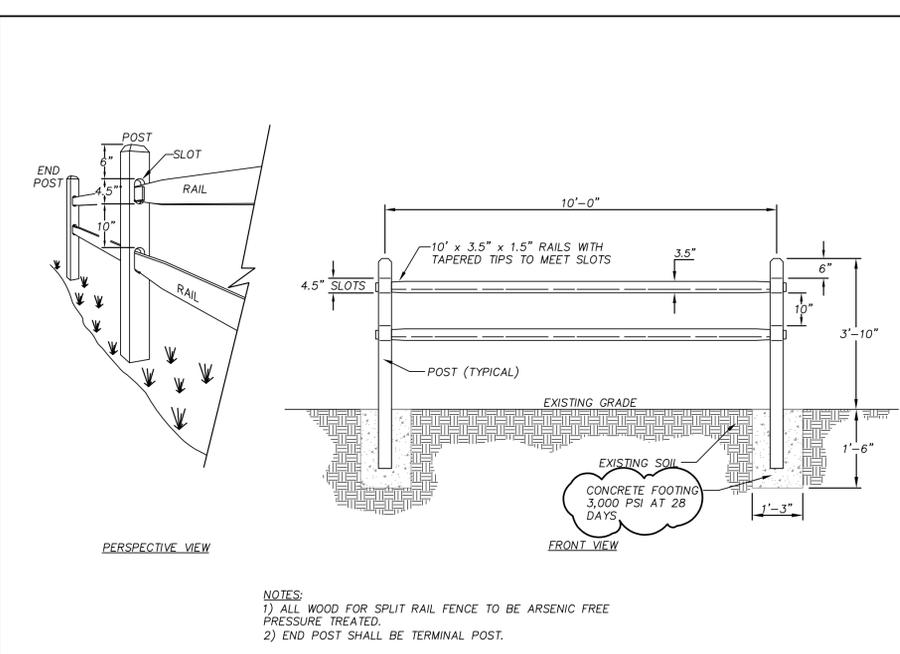
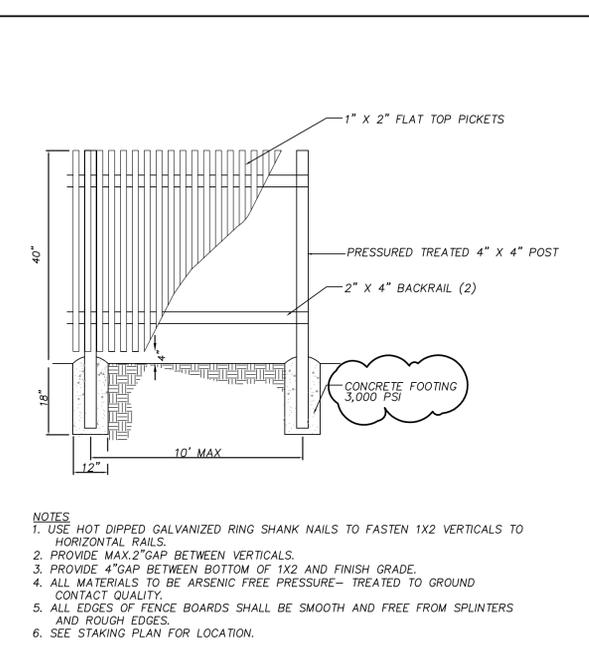
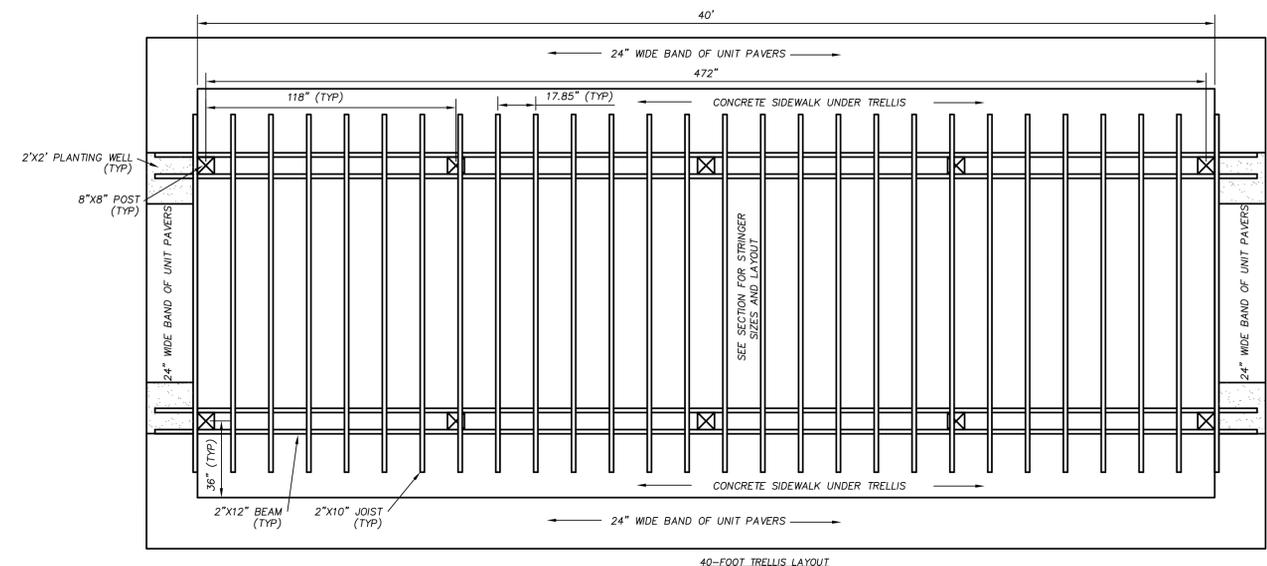
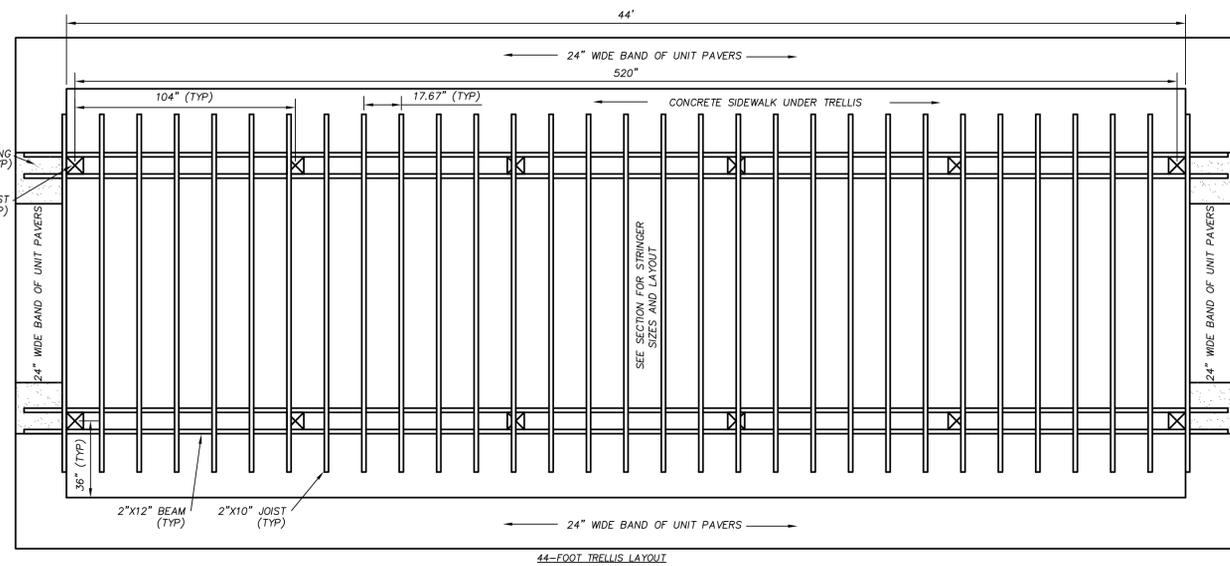


**CLH DESIGN**

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400 Regency Forest Dr.  
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**DOWDY PARK - PHASE 1**  
SITE DEVELOPMENT PLAN  
TOWN OF NAGS HEAD, NC  
3005 SOUTH CROATAN HIGHWAY

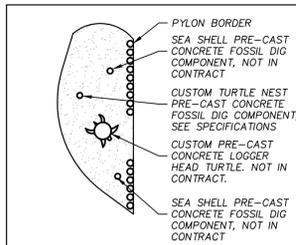


NO.	DATE	DESCRIPTION
#1	6-21-2016	ADDENDUM #1
#2	6-24-2016	ADDENDUM #2

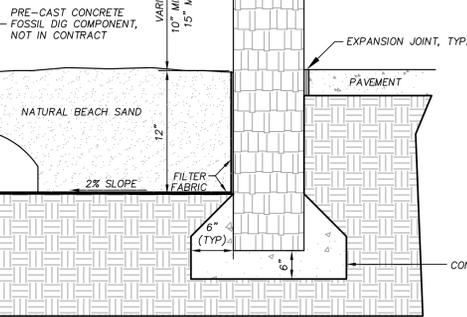
DESIGNED BY: AMR/BH  
DRAWN BY: HR  
DATE: JUNE-2-2016  
PROJECT NO: 16-115  
FILE:

**SITE DETAILS**

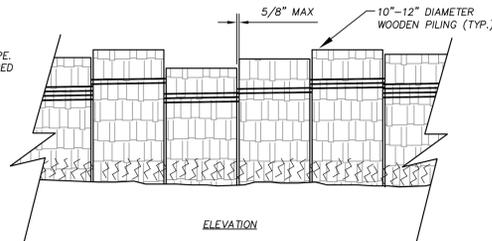
**C7.5**



SAND PLAY AREA LAYOUT



SECTION



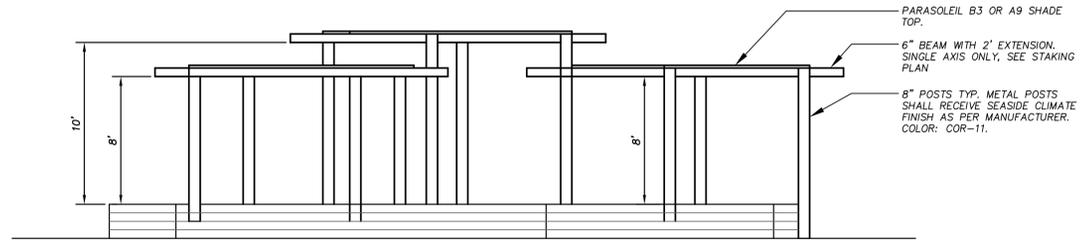
ELEVATION

NOTES:

1. ALL WOOD SHALL BE ARSENIC FREE PRESSURE TREATED POSTS RATED FOR GROUND CONTACT.
2. ALL EXPOSED WOOD SHALL BE SMOOTH AND FREE FROM SPLINTERS. ALL WOOD CORNERS SHOULD BE ROUNDED.
3. WOOD PILING SHALL BE INSTALLED TIGHTLY TOGETHER.
4. NAUTICAL ROPE SHALL BE ONE CONTINUOUS STRAND WRAPPING AROUND THE WOOD PILING.
5. ENDS OF THE ROPE SHALL BE SEALED TO PREVENT FRAYING.
6. OWNER'S PLAYGROUND INSTALLER SHALL INSTALL THREE FOSSIL DIG COMPONENTS IN SAND PLAY AREA MIN. 12" AWAY FROM PERIMETER OF SAND PLAY AREA. CUSTOM TURTLE NEST PIECE SHALL BE INSTALLED BY OWNER'S PLAYGROUND INSTALLER NEAR TURTLE PATH IN SIDEWALK. LOCATION TO BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

SAND PLAY AREA AND PYLONS

N.T.S.



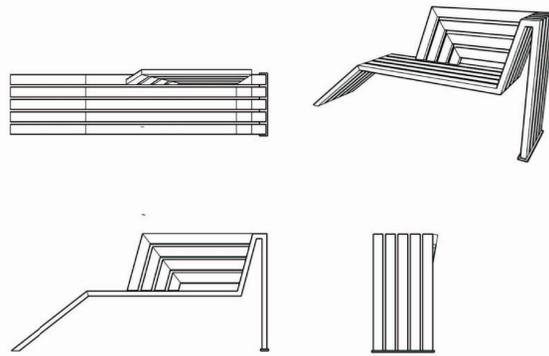
PARASOLEIL CUSTOM SHADE PANEL AND SHADE STRUCTURE BY POLIGON STEEL PARK SHELTERS, CONTACT: HUDSON VEAL, CAROLINA PARKS AND PLAY, 919-805-0934. LASER CUT ALUMINUM PANEL, 1/8" THICK, PATTERN: B3, FINISH: COR-11 POWDERCOAT WITH SEASIDE CLIMATE TREATMENT. SHOP DRAWINGS REQUIRED FOR APPROVAL BY LANDSCAPE ARCHITECT. SEASIDE CLIMATE FINISH REQUIRED.

DECK SHADE STRUCTURES - NOT IN CONTRACT

N.T.S.

IRONHOUSE FORGE

IronHouseForge.com  
Lucas House  
919-345-6359  
OR APPROVED EQUAL

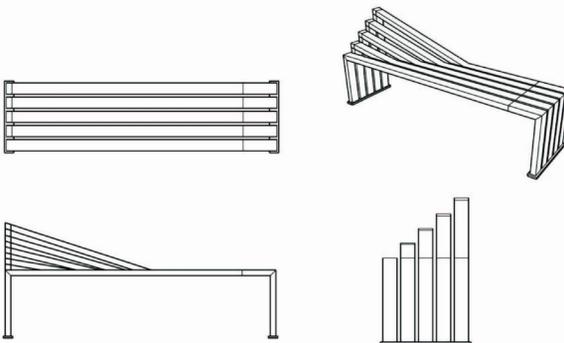


ART BENCH-TYPE 1 - NOT IN CONTRACT

N.T.S.

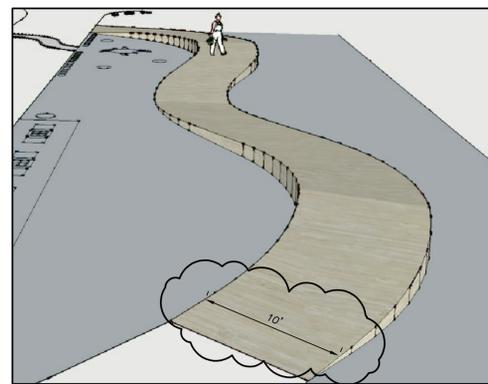
IRONHOUSE FORGE

IronHouseForge.com  
Lucas House  
919-345-6359  
OR APPROVED EQUAL

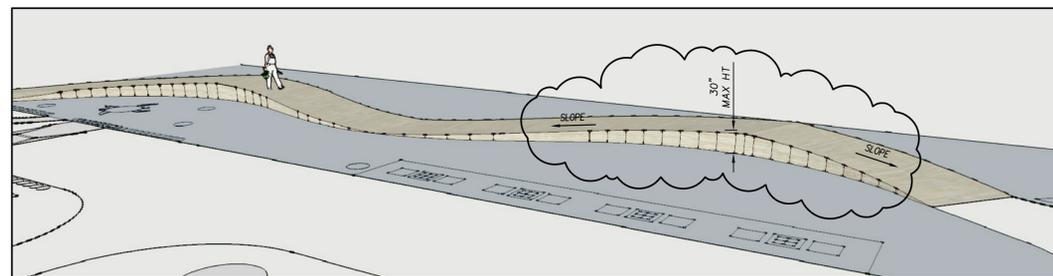


ART BENCH-TYPE 2 - NOT IN CONTRACT

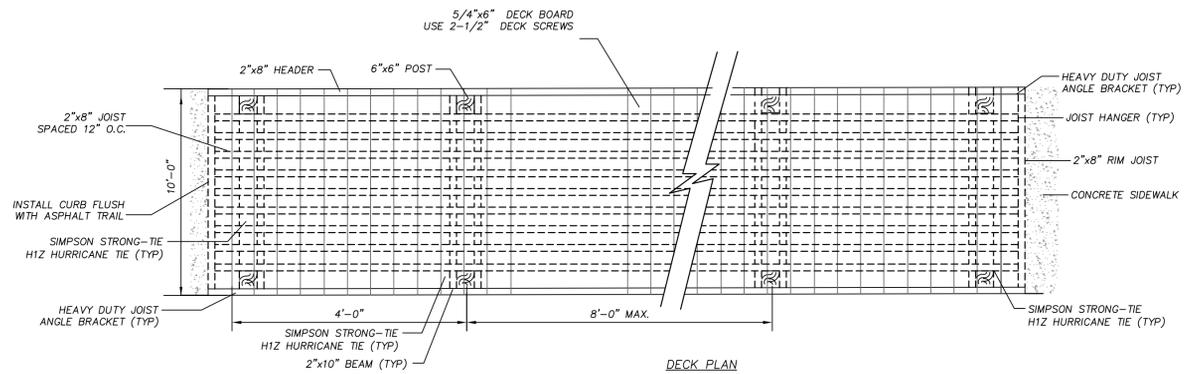
N.T.S.



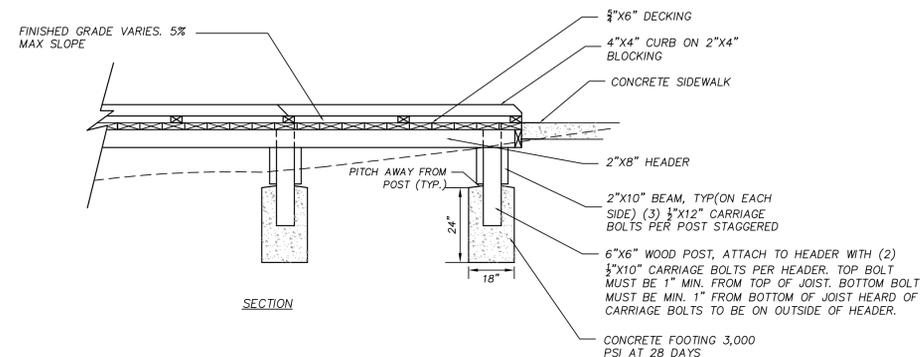
PERSPECTIVE VIEW



PERSPECTIVE VIEW



DECK PLAN



SECTION

NOTES:

1. ALL POSTS, PICKETS, JOISTS AND HEADERS SHALL BE ARSENIC FREE #2 PRESSURE TREATED S.Y. PINE.
2. ALL FASTENERS/CONNECTORS SHALL BE STAINLESS STEEL.
3. ALL BOLTS MUST BE COUNTERSUNK AND ALL FASTENERS INSTALLED SO THAT NO PART PROTRUDES BEYOND FACE OF WOOD.
4. ALL FASTENERS AND CONNECTORS SHOULD NOT LOOSEN WITHOUT THE USE OF TOOLS. LOCK WASHERS, SELF-LOCKING NUTS, OR OTHER LOCKING MEANS SHOULD BE PROVIDED FOR ALL NUTS AND BOLTS TO PROTECT THEM FROM DETACHMENT.
5. WOOD PARTS SHOULD BE SMOOTH AND FREE FROM SPLINTERS. ALL WOOD CORNERS SHOULD BE ROUNDED.
6. ALL CONCRETE SUPPORTS SHOULD PROVIDE POSITIVE DRAINAGE AWAY FROM WOOD POSTS.
7. MAX. HEIGHT SHALL NOT EXCEED 30".

WAVY WALK - ADD ALTERNATE #3

N.T.S.



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DOWDY PARK - PHASE 1  
SITE DEVELOPMENT PLAN

TOWN OF NAGS HEAD, NC  
3005 SOUTH CROATAN HIGHWAY

REVISIONS	NO.	DATE	DESCRIPTION
	#1	6-21-2016	ADDENDUM #1
	#2	6-24-2016	ADDENDUM #2

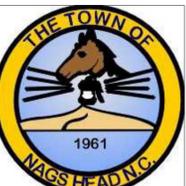
DESIGNED BY: AMR/BH  
DRAWN BY: HR  
DATE: JUNE-2-2016  
PROJECT NO: 16-115  
FILE:

SITE DETAILS

C7.6







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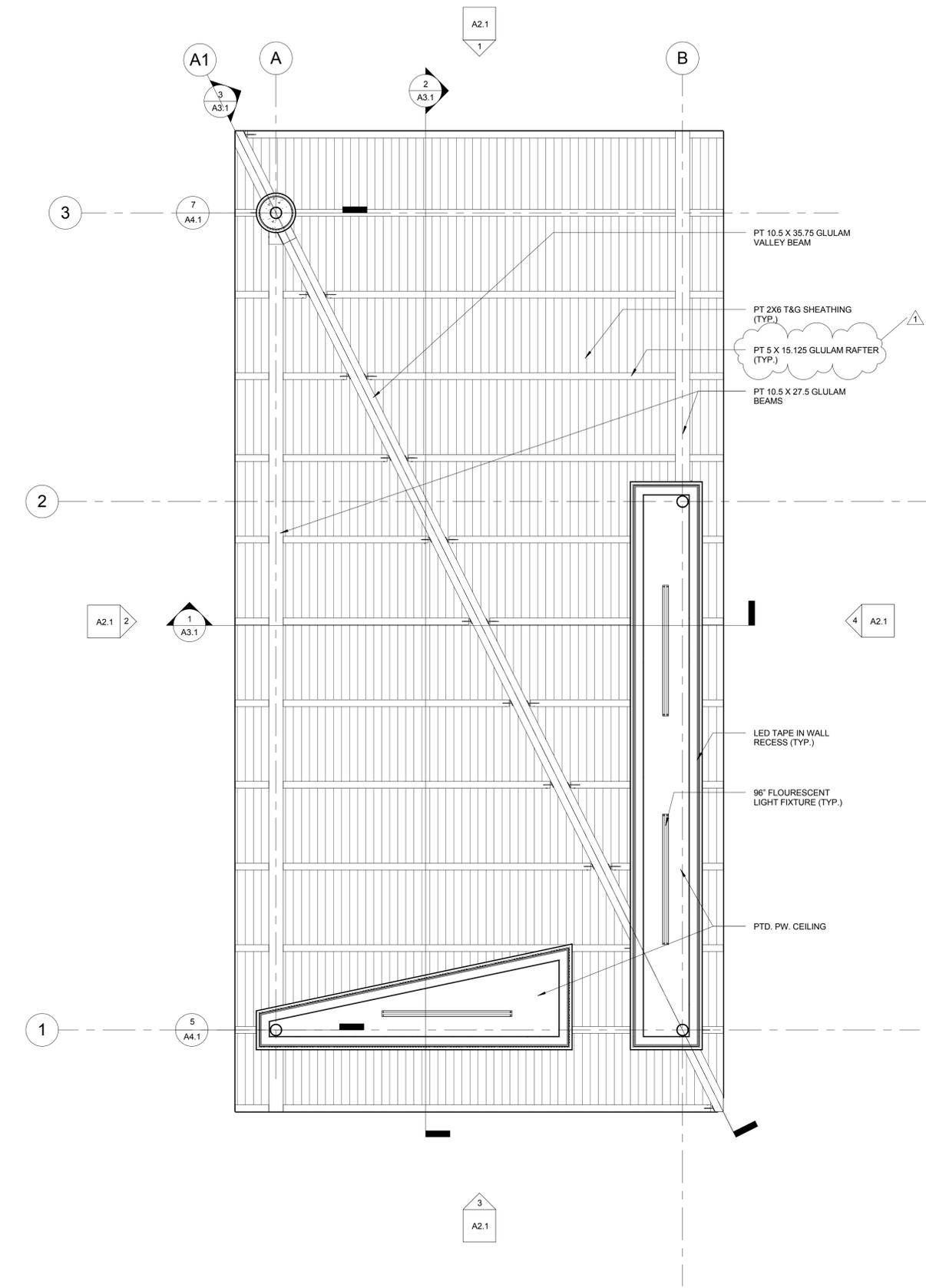
**SCHEMATIC DESIGN  
PRELIMINARY PLANS**  
FOR REVIEW ONLY  
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CONSTRUCTION

**DOWDY PARK - PHASE 1  
SITE DEVELOPMENT PLAN**  
TOWN OF NAGS HEAD, NC  
3005 SOUTH CROATAN HIGHWAY

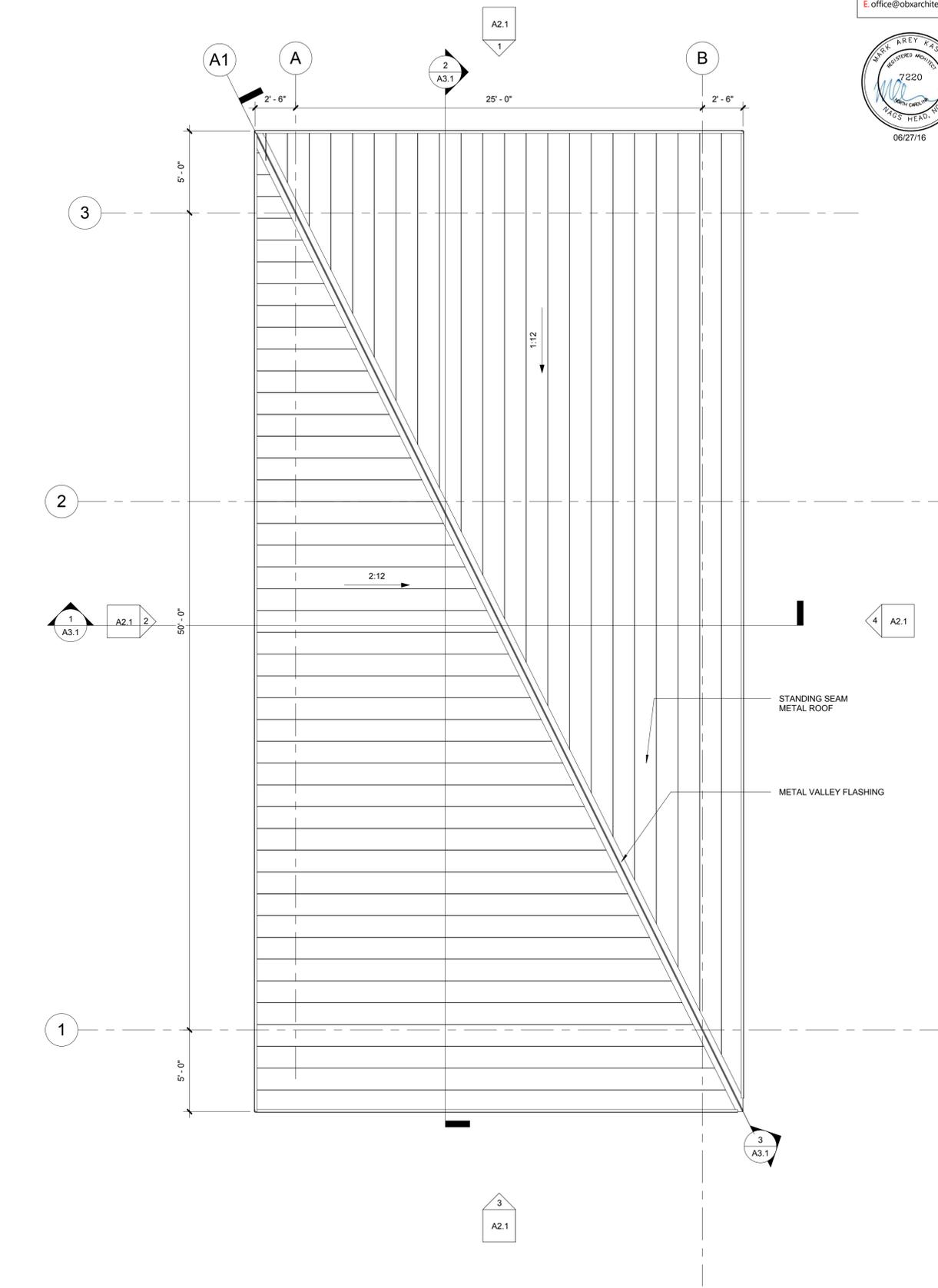
REVISIONS	No.	Description	Date
	1	ADDENDUM #1	06/27/16

DESIGNED BY: MAK  
DRAWN BY: MAK  
DATE: June 2, 2016  
PROJECT NO: 16005RF  
FILE:

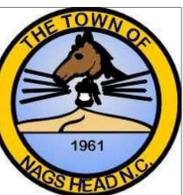
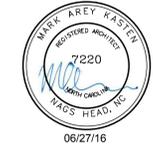
Pavilion Roof & Reflected Ceiling Plans



② (1) First Floor  
1/4" = 1'-0"



① Roof Plan  
1/4" = 1'-0"



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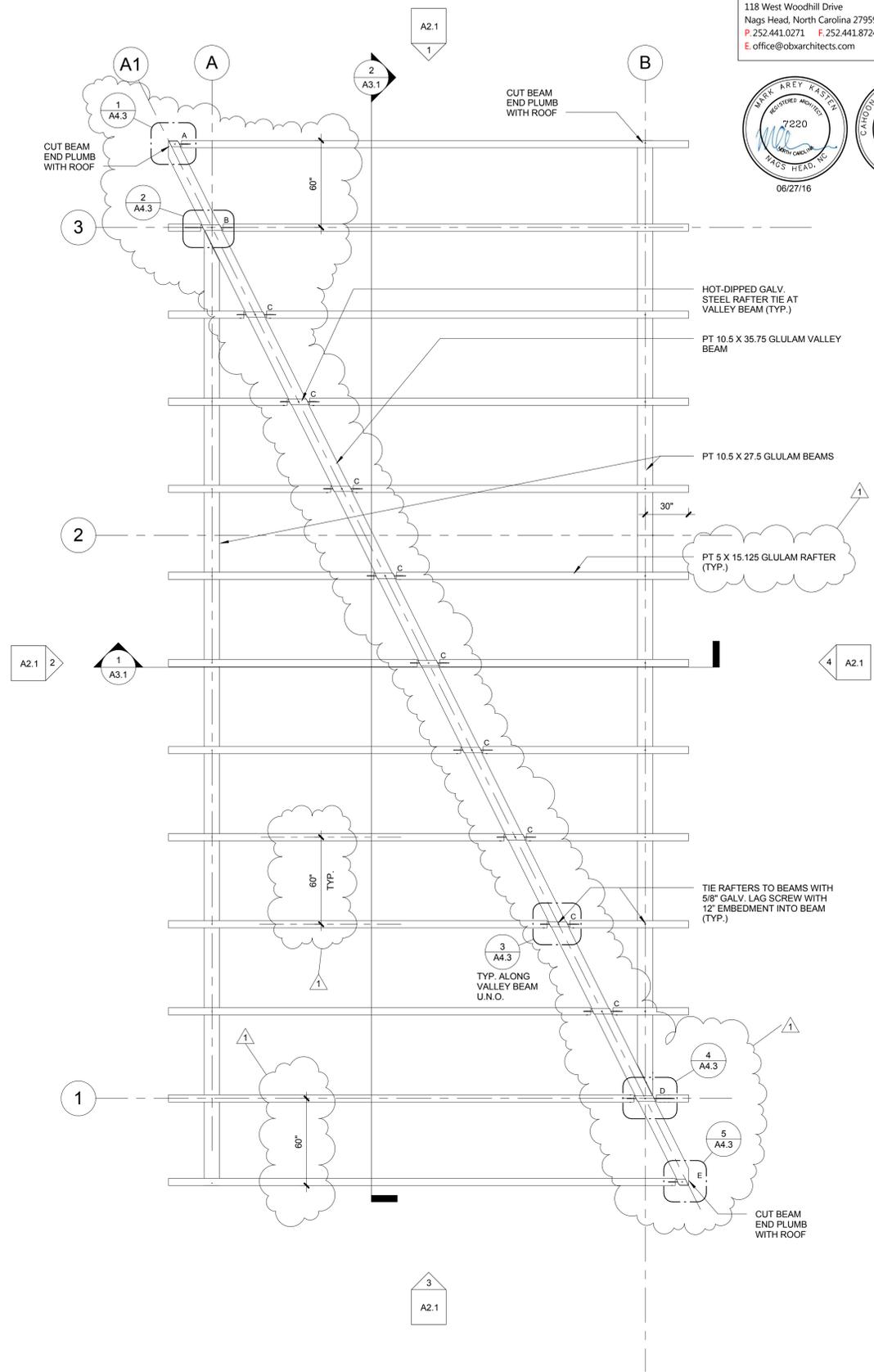
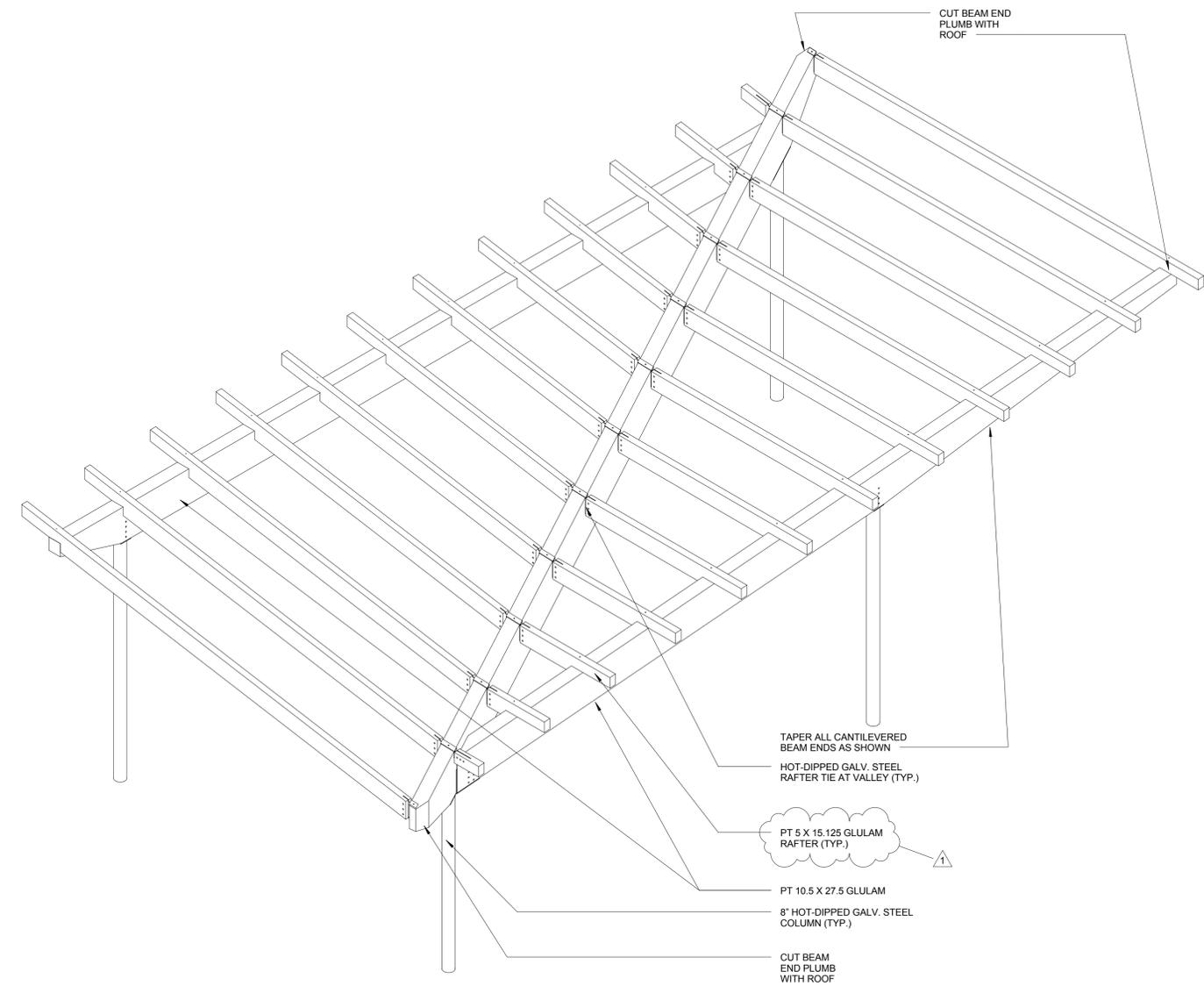
**SCHEMATIC DESIGN  
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**DOWDY PARK - PHASE 1  
SITE DEVELOPMENT PLAN**  
TOWN OF NAGS HEAD, NC  
3005 SOUTH CROATAN HIGHWAY

REVISIONS	No.	Description	Date
	1	ADDENDUM #2	06/27/16

DESIGNED BY: MAK  
DRAWN BY: MAK  
DATE: June 2, 2016  
PROJECT NO: 16005RF  
FILE:

Pavilion Roof Framing Plan



2 Roof Framing Iso

1 Roof Plan  
1/4" = 1'-0"

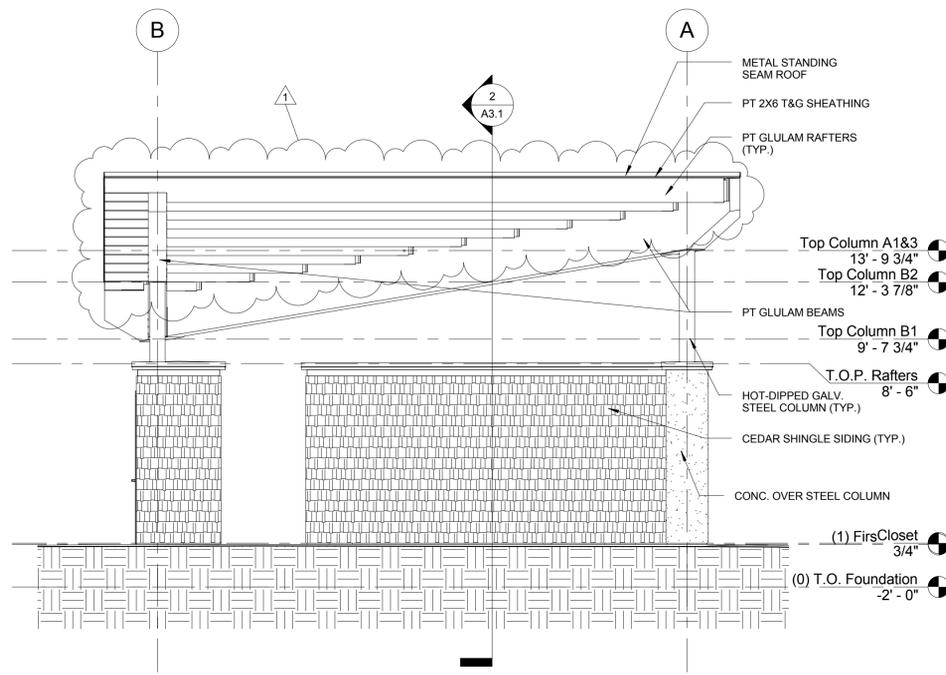


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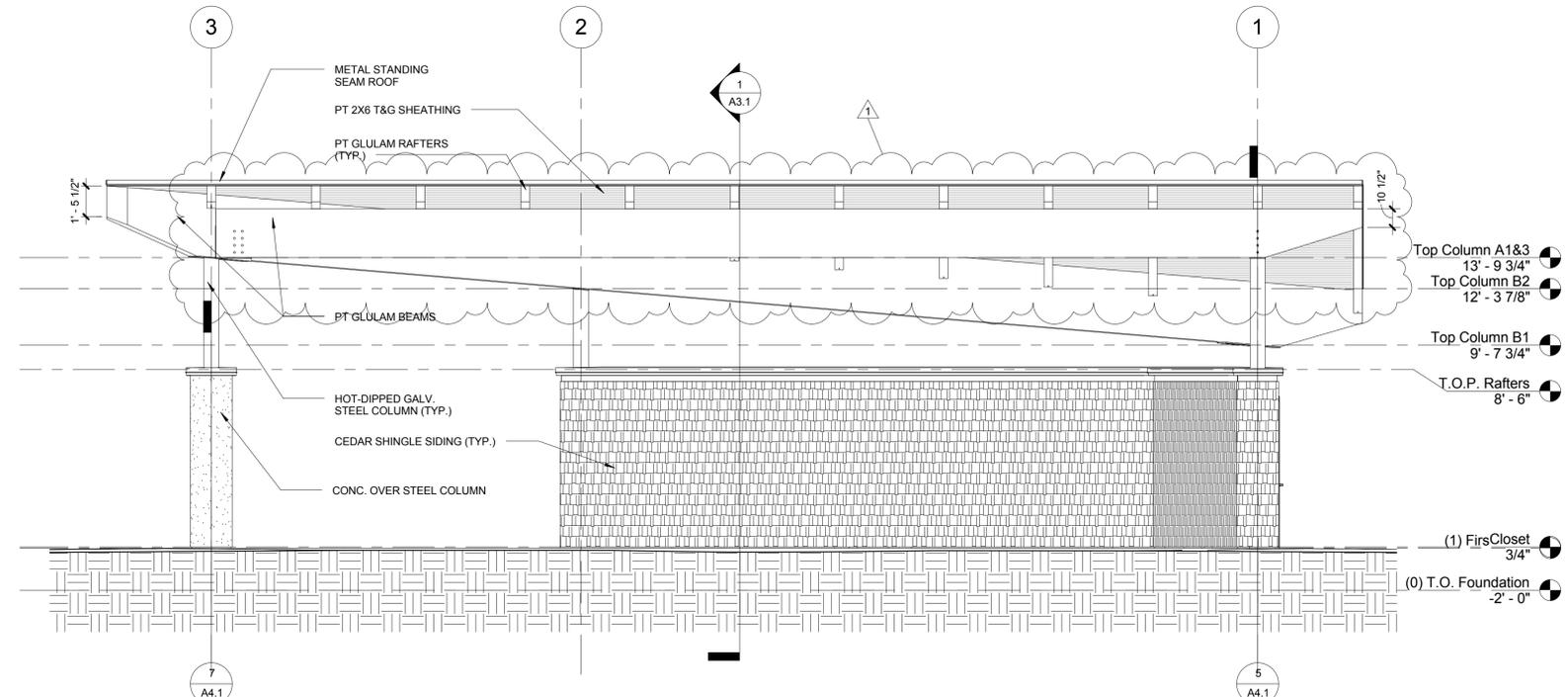


**SCHEMATIC DESIGN  
PRELIMINARY PLANS**  
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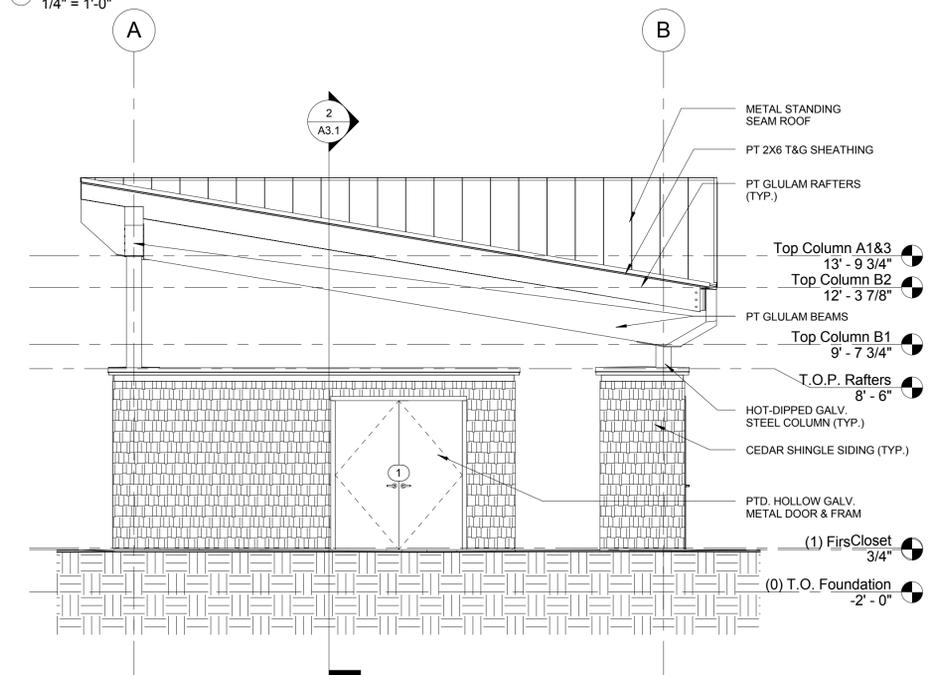
**DOWDY PARK - PHASE 1**  
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TOWN OF NAGS HEAD, NC  
3005 SOUTH CROATAN HIGHWAY



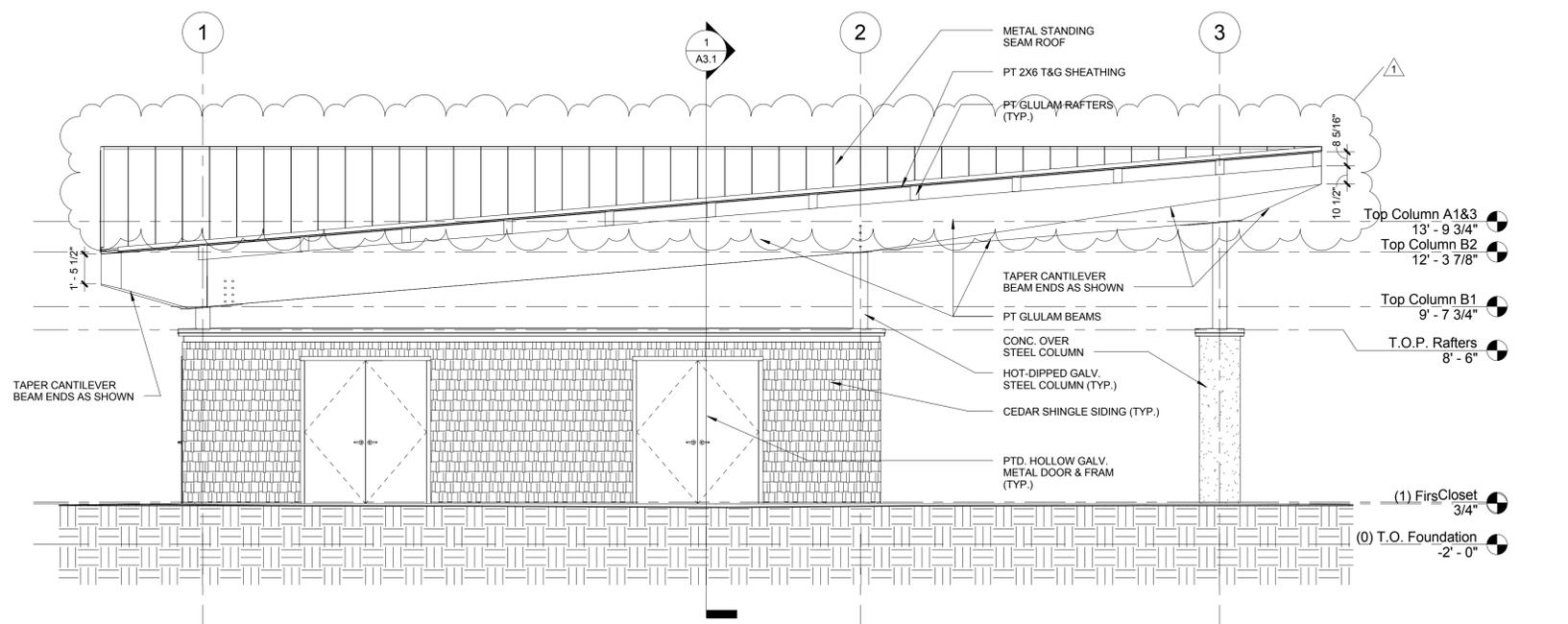
1 North Elevation  
1/4" = 1'-0"



2 West Elevation  
1/4" = 1'-0"



3 South Elevation  
1/4" = 1'-0"



4 East Elevation  
1/4" = 1'-0"

REVISIONS	Date	Description
No. 1	06/27/16	ADDENDUM #2

DESIGNED BY: MAK  
DRAWN BY: MAK  
DATE: June 2, 2016  
PROJECT NO: 16005RF  
FILE:

Pavilion Exterior Elevations



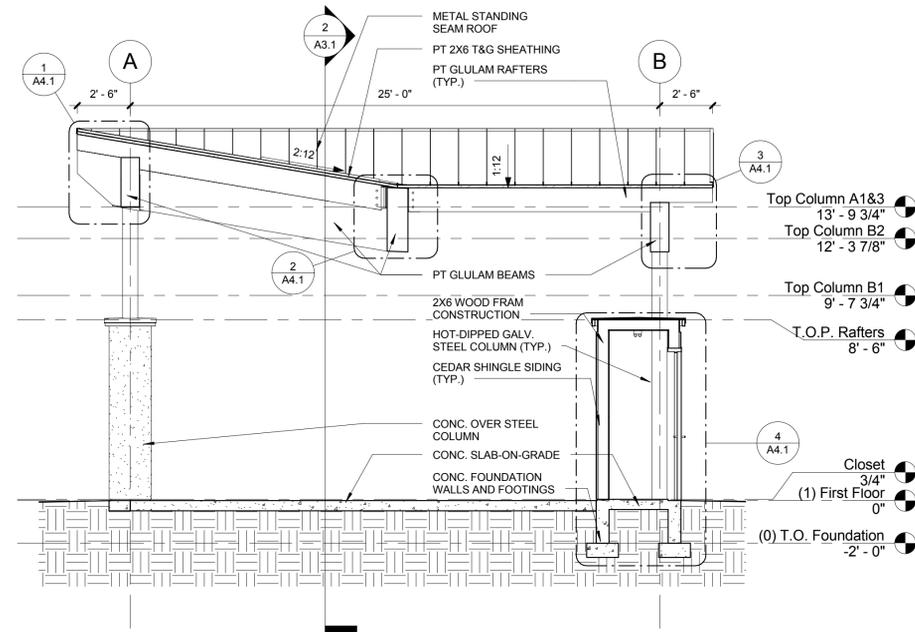
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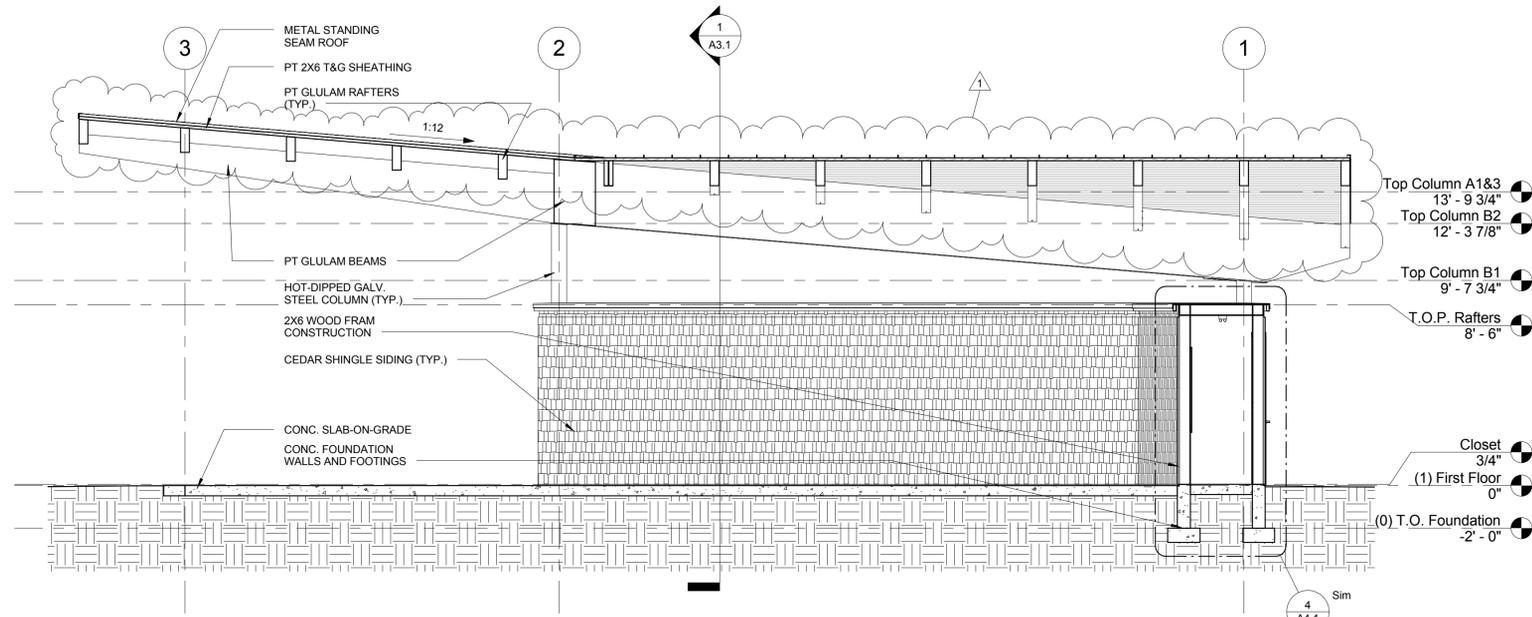
SCHEMATIC DESIGN  
PRELIMINARY PLANS

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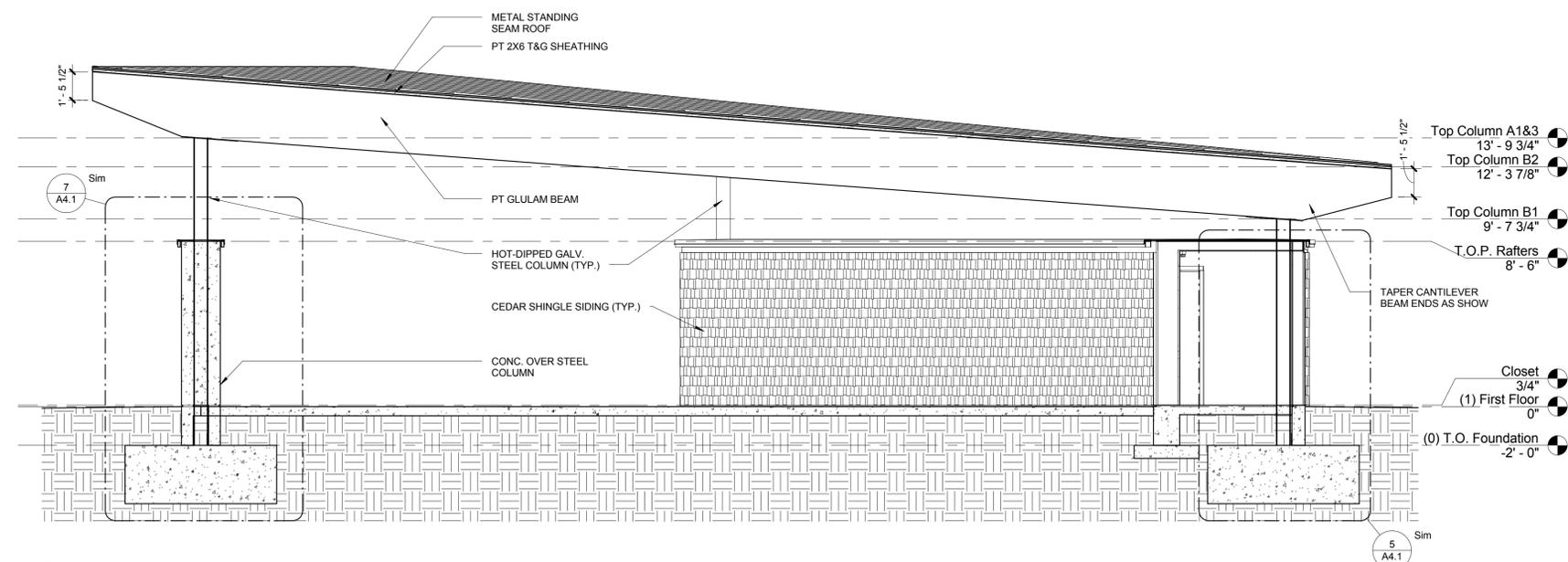
**DOWDY PARK - PHASE 1**  
SITE DEVELOPMENT PLAN  
TOWN OF NAGS HEAD, NC  
3005 SOUTH CROATAN HIGHWAY



1 Section 1  
1/4" = 1'-0"



2 Section 2  
1/4" = 1'-0"

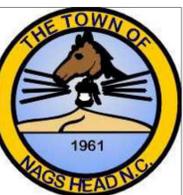
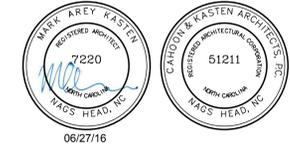


3 Section 3  
1/4" = 1'-0"

REVISIONS	Date	Description
1	06/27/16	ADDENDUM #2

DESIGNED BY: MAK  
DRAWN BY: MAK  
DATE: June 2, 2016  
PROJECT NO: 16005RF  
FILE:

Pavilion Building Sections

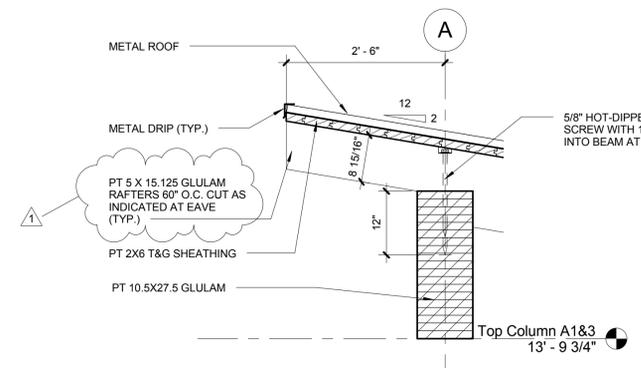


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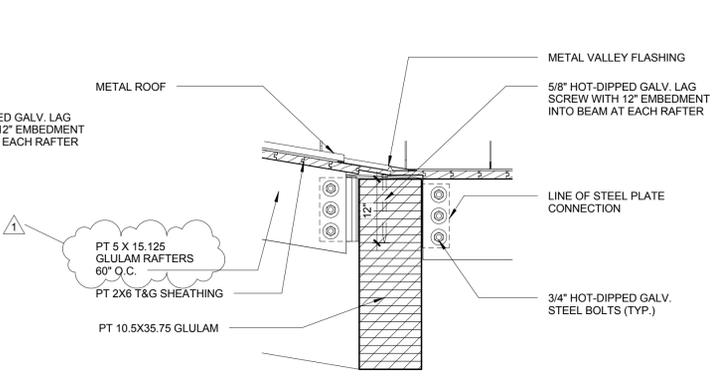


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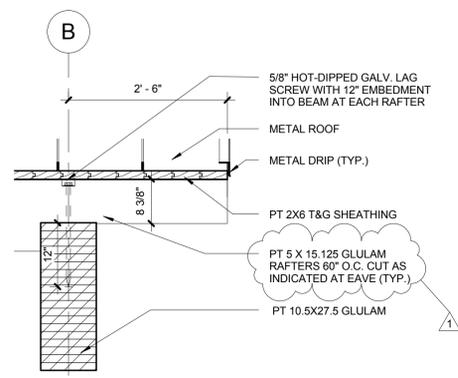
**DOWDY PARK - PHASE 1  
SITE DEVELOPMENT PLAN**  
TOWN OF NAGS HEAD, NC  
3005 SOUTH CROATAN HIGHWAY



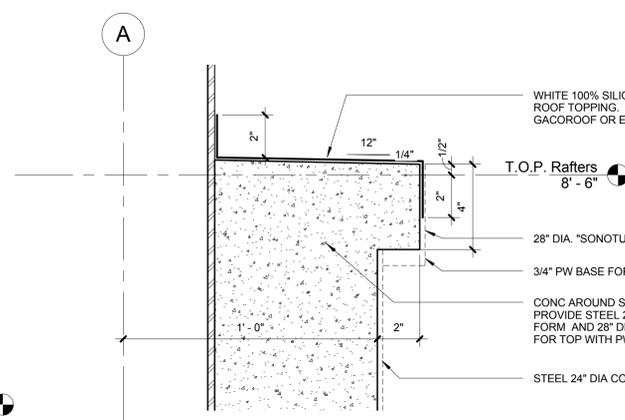
1 Eave Detail 01  
3/4" = 1'-0"



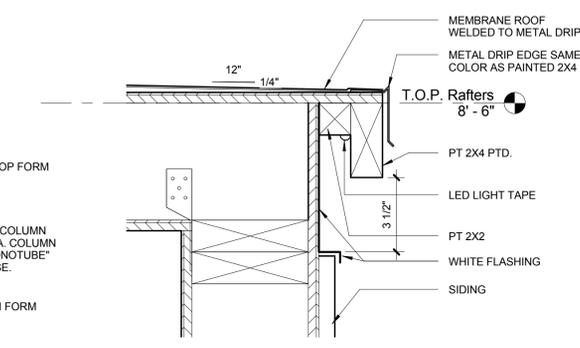
2 Valley Detail  
3/4" = 1'-0"



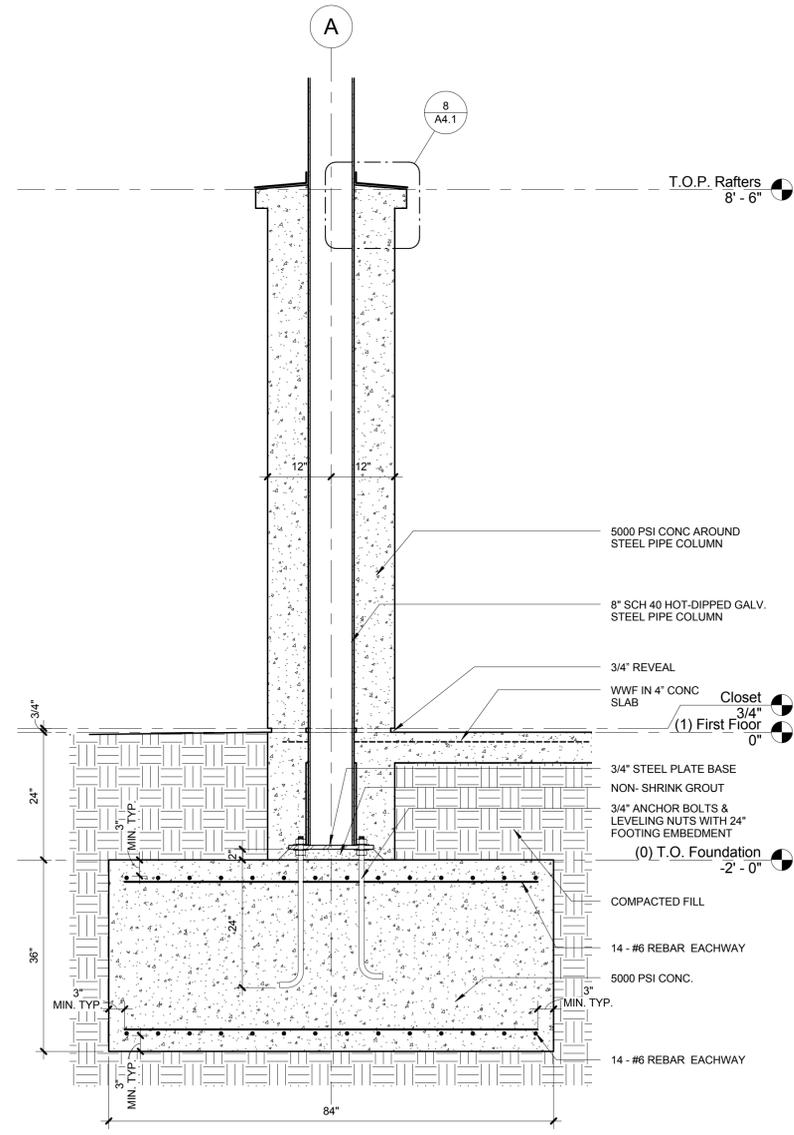
3 Eave Detail 02  
3/4" = 1'-0"



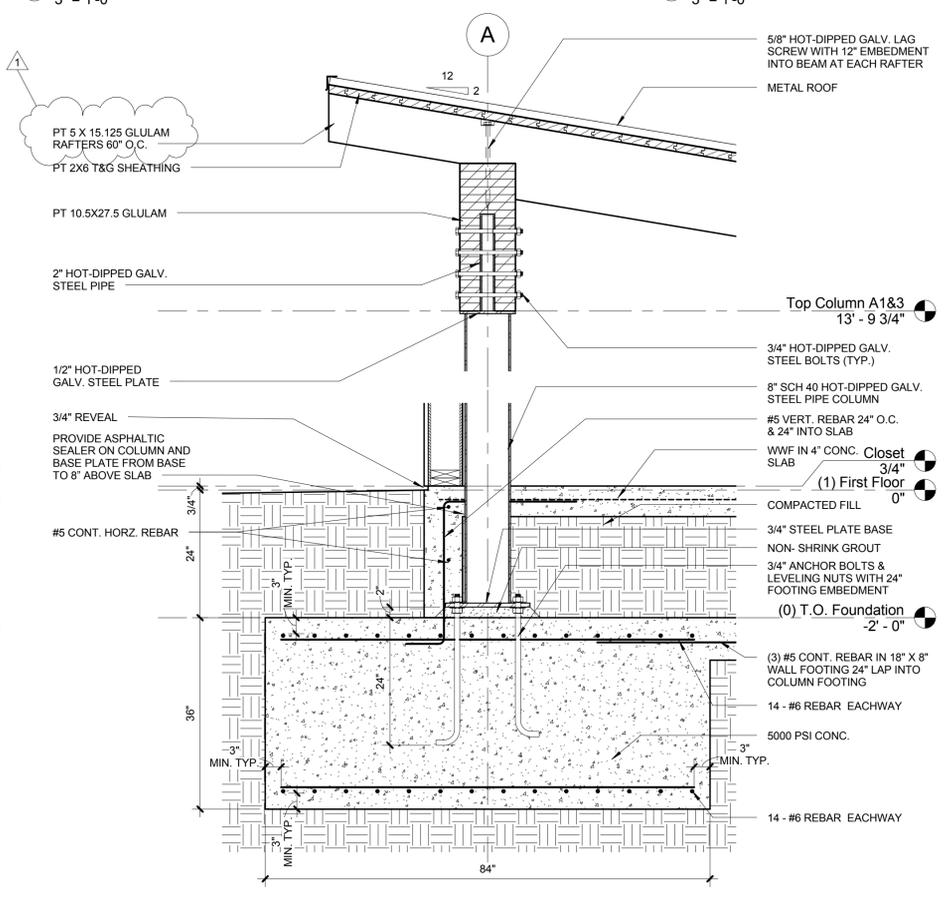
8 Conc. Column Detail  
3" = 1'-0"



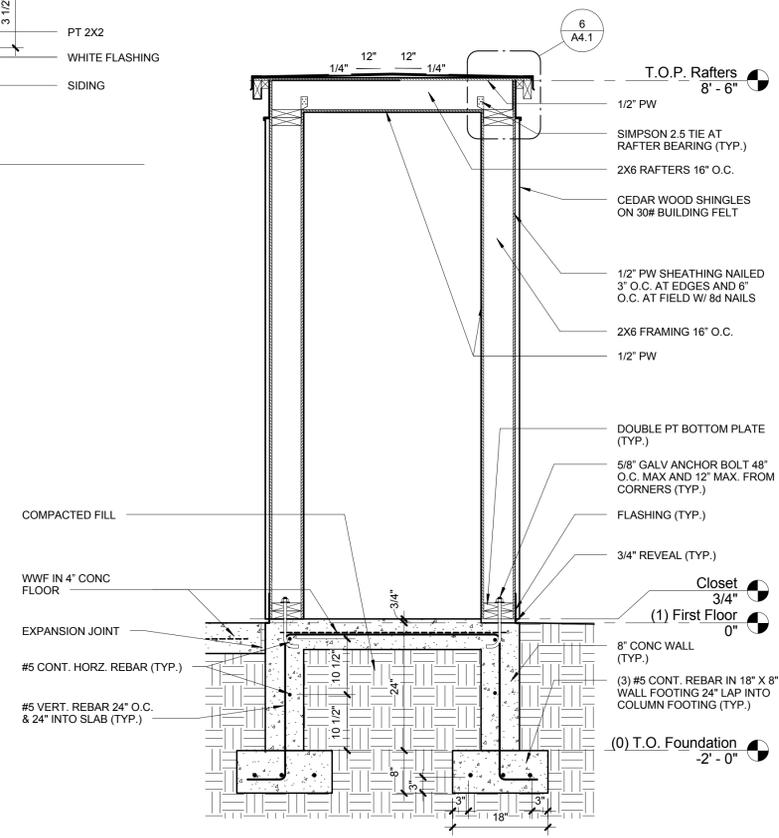
6 Closet Eave Detail  
3" = 1'-0"



7 Column A3 Section  
3/4" = 1'-0"



5 Typical Column Section  
3/4" = 1'-0"

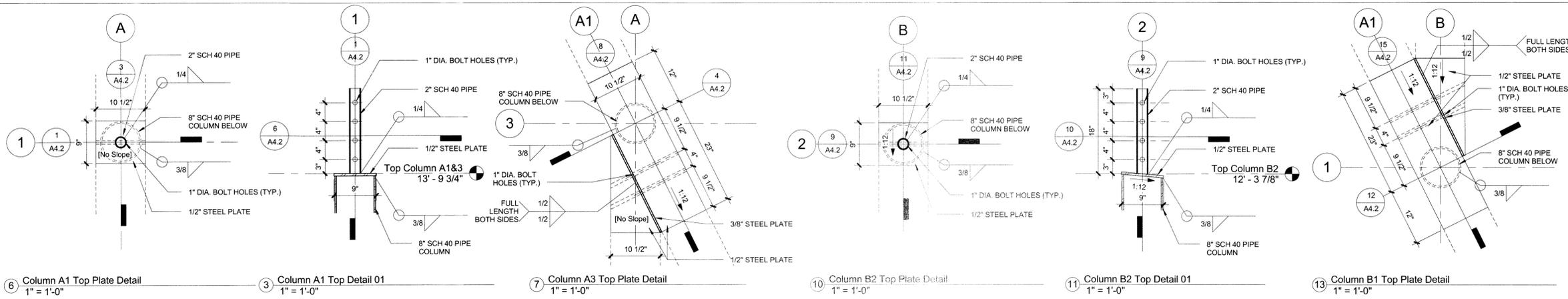


4 Wall Section  
3/4" = 1'-0"

REVISIONS	Date	Description
No. 1	06/27/16	ADDENDUM #2

DESIGNED BY: MAK  
DRAWN BY: MAK  
DATE: June 2, 2016  
PROJECT NO: 16005RF  
FILE:

Pavilion Construction Details



6 Column A1 Top Plate Detail 1" = 1'-0"  
 7 Column A3 Top Plate Detail 1" = 1'-0"  
 10 Column B2 Top Plate Detail 1" = 1'-0"  
 11 Column B2 Top Detail 01 1" = 1'-0"  
 13 Column B1 Top Plate Detail 1" = 1'-0"

**cahoon + kasten**  
 ARCHITECTS  
 118 West Woodhill Drive  
 Nags Head, North Carolina 27959  
 P. 252.441.0271 F. 252.441.8724  
 E. office@obxarchitects.com

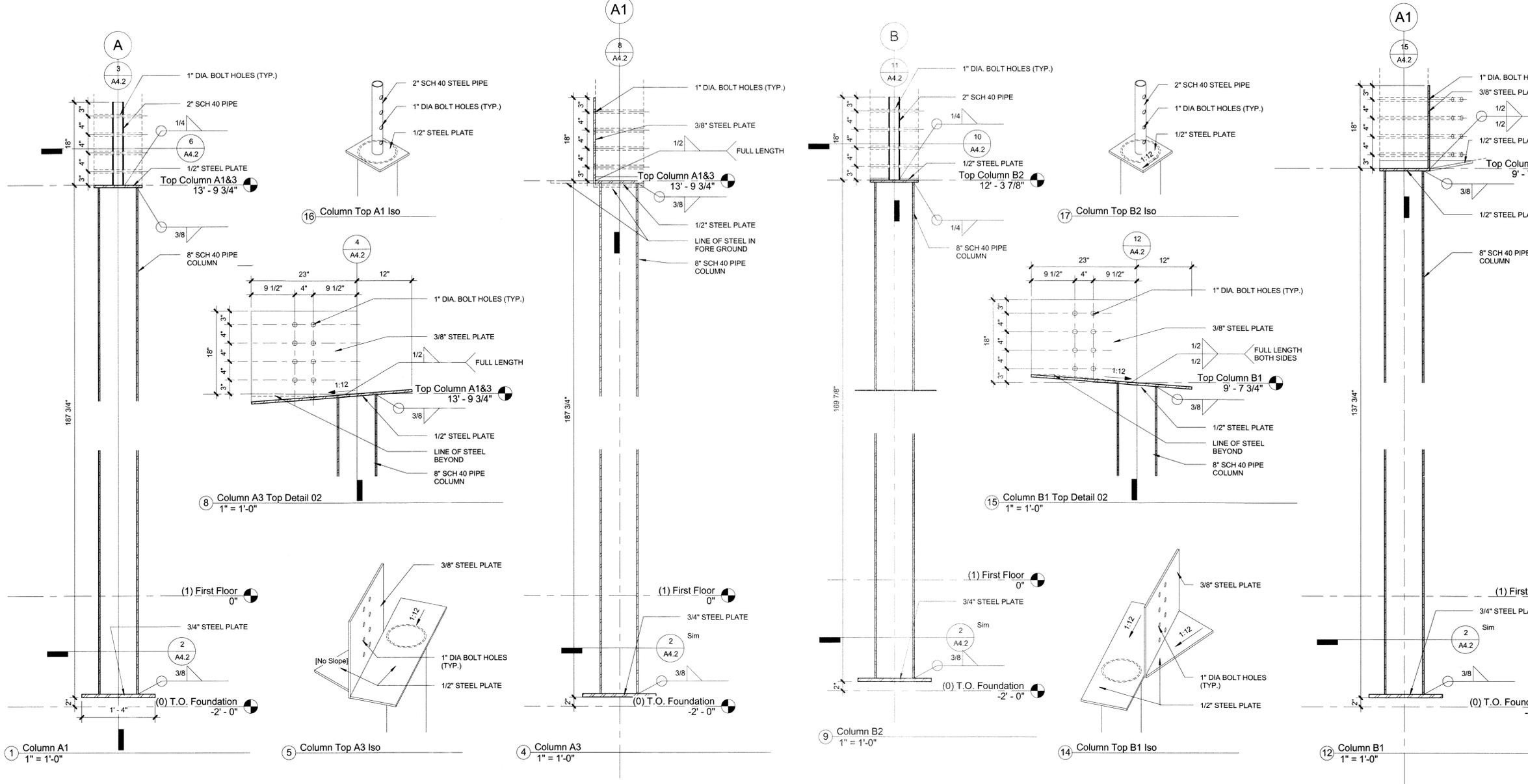


*Barrett C. Crook*  
 NORTH CAROLINA  
 PROFESSIONAL ENGINEER  
 027540  
 BARRETT C. CROOK  
 6-1-2016

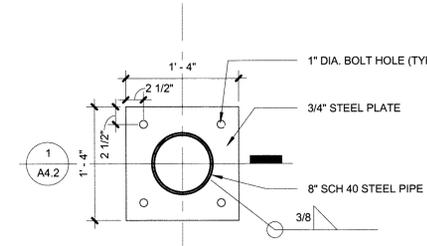


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 P.O. BOX 99  
 NAGS HEAD, NC 27959  
 252.441.1122 www.nagsheadnc.gov

**CLH DESIGN**  
 CLH Design, PA  
 400 Regency Forest Dr.  
 Suite 120  
 Cary, NC 27518  
 Phone: 919.319.6716  
 Fax: 919.319.7516  
 LA: C-106 PE: C-1595



8 Column A3 Top Detail 02 1" = 1'-0"  
 16 Column Top A1 Iso  
 17 Column Top B2 Iso  
 14 Column Top B1 Iso  
 15 Column B1 Top Detail 02 1" = 1'-0"  
 9 Column B2 1" = 1'-0"  
 12 Column B1 1" = 1'-0"



2 Typical Base Plate Detail 1" = 1'-0"

**NOTE: ALL STEEL FABRICATIONS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION**

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**DOWDY PARK - PHASE 1**  
 SITE DEVELOPMENT PLAN  
 TOWN OF NAGS HEAD, NC  
 3005 SOUTH CROATAN HIGHWAY

No.	REVISIONS	Description	Date

DESIGNED BY: MAK  
 DRAWN BY: MAK  
 DATE: June 2, 2016  
 PROJECT NO: 16005RF  
 FILE:

Pavilion Column Elevations & Details

**A4.2**



06/27/16

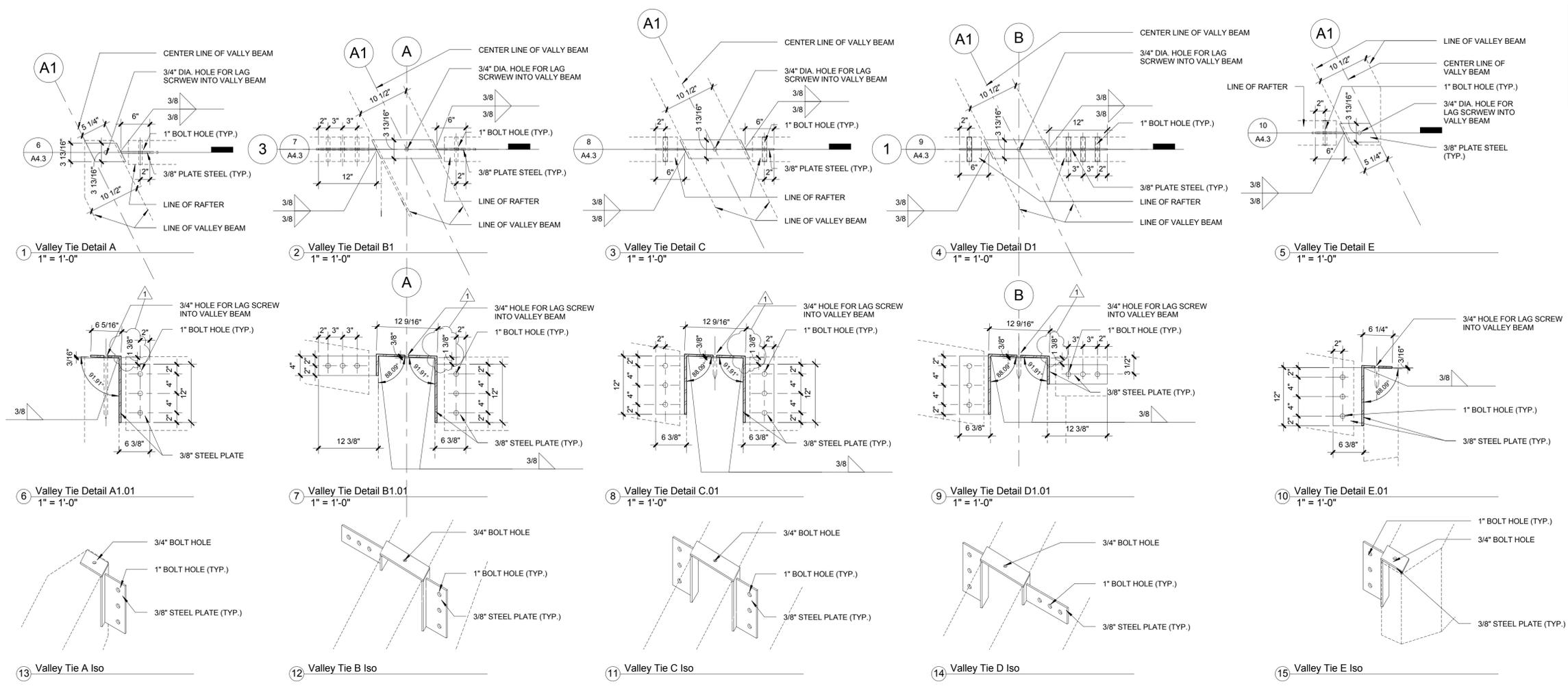


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**NOTE: ALL STEEL FABRICATIONS  
SHALL BE HOT-DIPPED GALVANIZED  
AFTER FABRICATION**

REVISIONS

No.	Description	Date
1	ADDENDUM #2	06/27/16

DESIGNED BY: MAK  
DRAWN BY: MAK  
DATE: June 2, 2016  
PROJECT NO: 16005RF  
FILE:

Pavilion Rafter Tie Details

## GENERAL NOTES

ALL HYDRANTS SHALL BE MOUNTED 36" ABOVE FINISHED GRADE UNLESS OTHERWISE SPECIFIED.

SLOPES & INVERT ELEVATIONS OF ALL PIPING SHALL BE ESTABLISHED BEFORE ANY TRENCHING OCCURS. ALL PIPING SHALL BE RUN TO AVOID CONFLICTS WITH OTHER TRADES.

COORDINATE WITH SITE PLAN WORKING DRAWINGS BEFORE COMMENCING ANY WORK.

MAKE PROPER COLD WATER PIPING CONNECTIONS TO ALL VALVES AND HYDRANTS.

COORDINATE LOCATION OF ALL HYDRANTS & PIPING WITH ALL UTILITIES AND EXISTING CONDITIONS.

REFER TO SITE PLAN FOR EXTENT OF ALL WORK RELATED TO THE PROJECT CONTRACTOR. SHALL CALL MISS UTILITY PRIOR TO ANY EXCAVATION.

ALL COLD WATER PIPING INDICATED SHALL BE INSTALLED IN A LEVEL AND PROPERLY BEDDED TRENCH.

EXISTING SEWERS, MANHOLES, ETC., SHALL BE IDENTIFIED & VERIFIED BY PLUMBING CONTRACTOR BEFORE ANY TRENCHING HAS BEGUN IN ORDER ALL ROUTES CAN BE ESTABLISHED & NECESSARY INVERT ELEVATIONS OBTAINED.

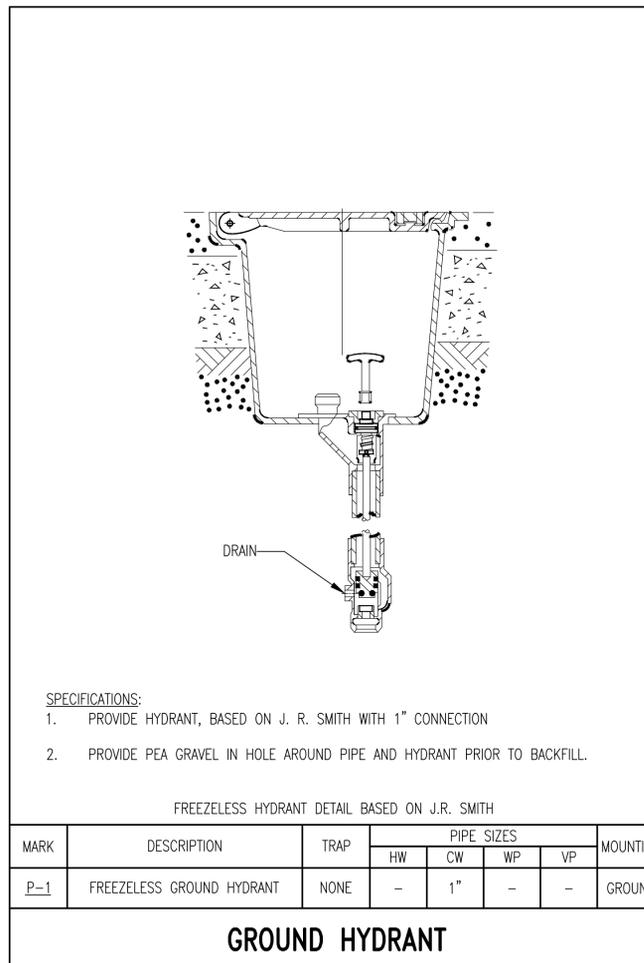
IT IS THE INTENTION OF THESE DRAWINGS TO COVER ALL WORK & MATERIAL FOR A COMPLETE FIRST CLASS INSTALLATION. ANY EQUIPMENT, PLUMBING FITTINGS &/OR DEVICES USUALLY UTILIZED IN THE CLASS OF WORK, THOUGH NOT SPECIFICALLY MENTIONED OR SHOWN ON THE DRAWINGS, BUT WHICH MAY BE NECESSARY FOR THE SATISFACTORY COMPLETION OF THE WORK (AS DETERMINED BY THE ENGINEER) SHALL BE FURNISHED & INSTALLED BY THE CONTRACTOR AS PART OF HIS TOTAL WORK.

THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID AND THOROUGHLY FAMILIARIZE HIMSELF/HERSELF WITH THE EXISTING CONDITIONS. NOT ALL EQUIPMENT AND APPURTENANCES ARE SHOWN. FAILURE TO FOLLOW THIS STEP SHALL NOT BE A BASIS FOR CHANGE ORDERS.

VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK OR ORDERING EQUIPMENT, PIPING, HYDRANTS, ETC.

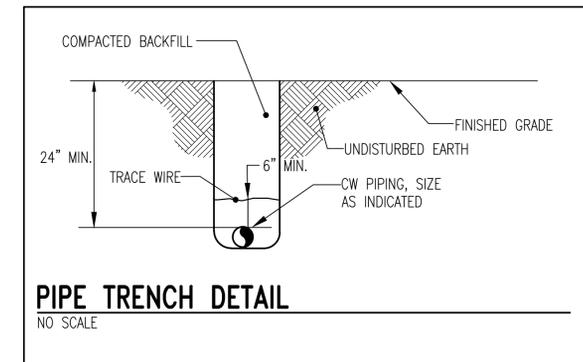
BACKFILL AND COMPACT ALL TRENCHES AS IS INDICATED IN THE 2012 IPC AND/OR NORTH CAROLINA STATEDWIDE BUILDING CODE.

INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS & ALL APPLICABLE LISTING REQUIREMENTS.

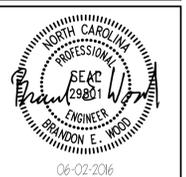


## LEGEND & ABBREVIATIONS

	DOMESTIC COLD WATER (DCW)
	DIRECTION OF FLOW
	WATER METER
	BALL VALVE (BV)
	HOT BOX FOR RPBP
	CAPPED PIPE
	PIPE TURN UP
	NEW WORK NOTE DESIGNATION
	PLUMBING FIXTURE MARK
	REDUCED PRESSURE BACKFLOW PREVENTER
	FUTURE PIPE LINE FOR EXPANSION



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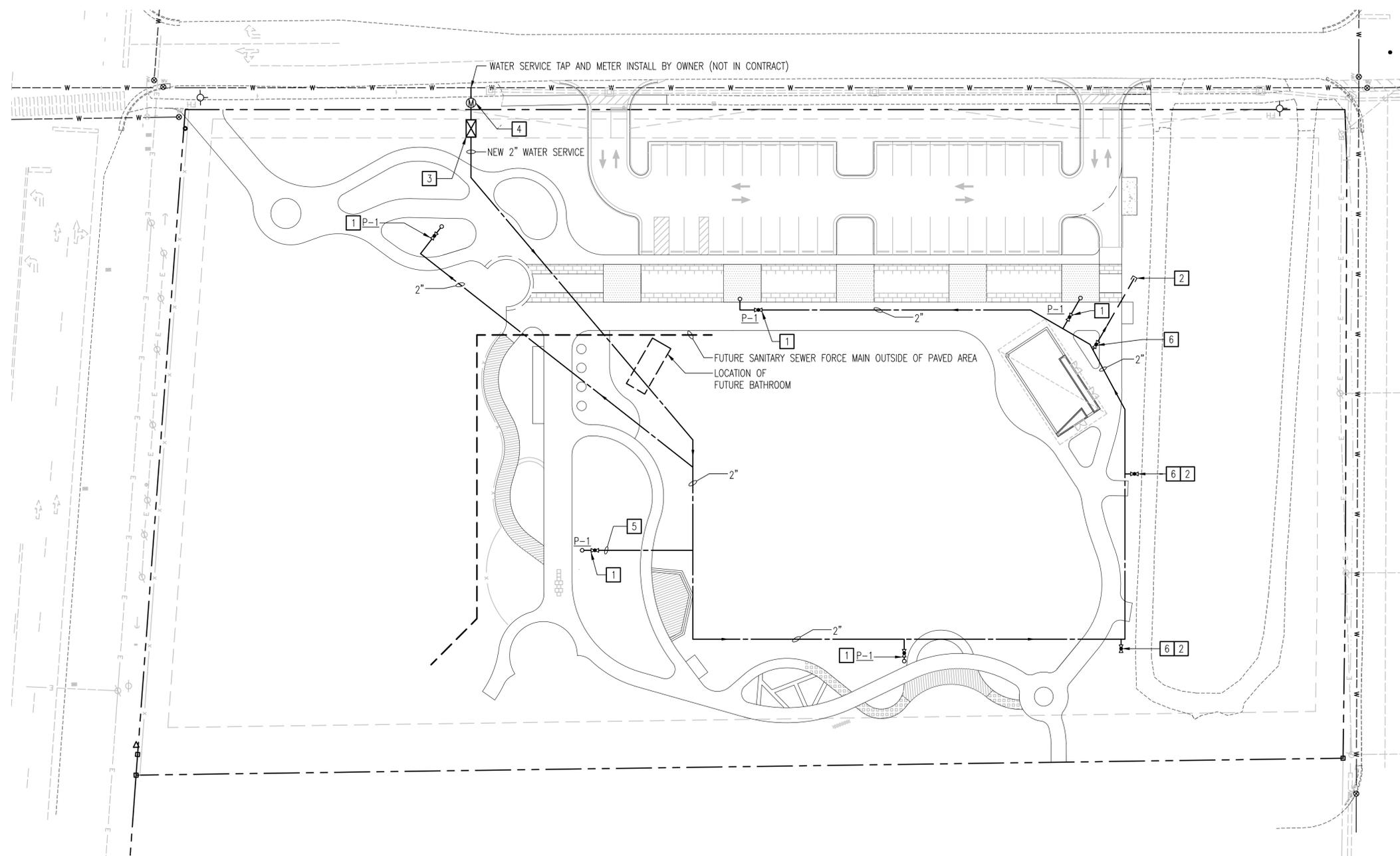
REVISIONS	NO.	DATE	DESCRIPTION
	1		

DESIGNED BY: RTW  
DRAWN BY: JTS  
DATE: JUNE-2016  
PROJECT NO: 16-115  
FILE:

GENERAL NOTES,  
LEGEND, AND  
ABBREVIATIONS

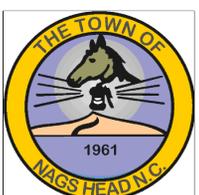
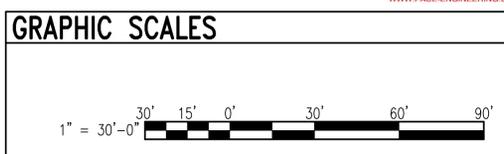
P-0.1





**SITE PLAN**  
SCALE: 1" = 30'-0"

- NOTES THIS SHEET**
- 1 PROVIDE 1" IPS ISOLATION VALVE IN VALVE BOX AND CONNECT TO NEW GROUND HYDRANT.
  - 2 PROVIDE 1" CAPPED PIPE FOR FUTURE GROUND HYDRANT.
  - 3 PROVIDE NEW 2" RBPB IN HOT BOX.
  - 4 PROVIDE A 2" PVC WATER SERVICE LINE FROM WATER METER TO RBPB AND ROUTE PIPE AS SHOWN TO EACH HYDRANT LOCATION.
  - 5 ALL BRANCH LINES ARE 1" PVC TYPICAL, OR AS OTHERWISE INDICATED.
  - 6 PROVIDE VALVE BOX WITH 1" FULL PORT VALVE. (TYPICAL)



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**CLH DESIGN**  
CLH Design, PA  
400 Regency Forest Dr.  
Suite 120  
Cary, NC 27518  
Phone: 919.319.6716  
Fax: 919.319.7516  
LA: C-106 PE: C-1595



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REVISIONS	NO.	DATE	DESCRIPTION
	1		

DESIGNED BY: RTW  
DRAWN BY: JTS  
DATE: JUNE-2016  
PROJECT NO: 16-115  
FILE:

SITE PLAN  
P-1.0



## GENERAL ELECTRICAL NOTES

**GENERAL:** UNLESS SPECIFICALLY INDICATED OTHERWISE, ALL WORK SHOWN ON ELECTRICAL DRAWINGS IS NEW WORK TO BE PROVIDED UNDER THIS CONTRACT.

**COORDINATION:** COORDINATE AND COOPERATE WITH ALL TRADES ON THE PROJECT. THE CONTRACTOR SHALL REVIEW ALL CONTRACT DOCUMENTS INCLUDING CIVIL, STRUCTURAL, ARCHITECTURAL, AND LANDSCAPE DRAWINGS AND SPECIFICATIONS. CONTRACTOR SHALL COORDINATE AND ADJUST ACCORDINGLY AS DIRECTED BY THE ENGINEER.

**AS-BUILT DRAWINGS:** SECURE AN EXTRA SET OF ELECTRICAL DRAWINGS TO BE KEPT ON SITE AND MARK, DAILY, THE DRAWINGS IN RED AS THE PROJECT PROGRESSES IN ORDER TO KEEP AN ACCURATE RECORD OF ALL DEVIATIONS BETWEEN THE WORK SHOWN ON THE DRAWINGS AND THE WORK WHICH IS ACTUALLY INSTALLED. THESE MARKED DRAWINGS SHALL REFLECT ANY AND ALL CHANGES AND REVISIONS TO THE ORIGINAL DESIGN WHICH EXISTS IN THE COMPLETED WORK. DELIVER THE MARKED DRAWINGS TO THE ENGINEER AT PROJECT CLOSE-OUT.

**TESTS:** TEST ALL WIRING FOR CONTINUITY AND GROUNDS BEFORE CONNECTING ANY FIXTURES OR DEVICES. PERFORM INSULATION RESISTANCE TESTS ON ALL WIRING #6 OR LARGER TO INSURE THAT ALL PORTIONS ARE FREE FROM SHORT-CIRCUITS AND GROUNDS.

**INSPECTIONS:** ARRANGE ALL NECESSARY INSPECTIONS. DELIVER ALL REQUIRED INSPECTION CERTIFICATES TO THE OWNER.

**ELECTRICAL SERVICE:** PROVIDE THE ELECTRICAL SERVICE. COMMUNICATE WITH THE LOCAL POWER COMPANY, VERIFY ALL REQUIREMENTS, AND COORDINATE ALL EFFORTS.

**GROUNDING:** PROVIDE GROUNDING IN ACCORDANCE WITH THE NEC FOR THE ENTIRE ELECTRICAL SYSTEM INCLUDING EQUIPMENT FRAMES, CONDUITS, SWITCHES, CONTROLLERS, WIRE-WAYS, NEUTRAL CONDUCTORS, AND OTHER EQUIPMENT. PROVIDE A GROUNDING CONDUCTOR IN ALL POWER CONDUITS.

**LABELS:** PROVIDE LABELS FOR ALL PANELBOARDS, CABINETS, SAFETY SWITCHES, AND MOTOR-DISCONNECT SWITCHES. LABELS SHALL BE MACHINE ENGRAVED, LAMINATED PLASTIC, PERMANENTLY ATTACHED WITH SELF-TAPPING SCREWS OR RIVETS. DO NOT USE SELF-ADHESIVE LABELS. LABEL SHALL INDICATE EQUIPMENT DESIGNATION AND ASSOCIATED PANEL AND CIRCUIT THAT SERVES IT.

**J-BOX LABELING:** LABEL ALL JUNCTION BOXES WITH PERMANENT MARKER IDENTIFYING CIRCUIT NUMBER AND PANELBOARD OF CIRCUITS WITHIN.

**WIRING DEVICES:** LABEL ALL WIRING DEVICES WITH PANELBOARD AND CIRCUIT DESIGNATION PERMANENTLY ATTACHED WITH BLACK TYPED DESIGNATION ON CLEAR TAPE.

**PANEL DIRECTORY:** PROVIDE TYPEWRITTEN PANELBOARD DIRECTORY CARD IN EACH PANELBOARD WITH CIRCUIT LOAD INFORMATION CLEARLY IDENTIFIED.

**CONDUCTORS:** IN SITUATIONS WHERE CONDUCTOR SIZES AND/OR QUANTITIES OF PARALLEL SETS HAVE BEEN INCREASED DUE TO VOLTAGE DROP OR FOR OTHER REASONS, CONTRACTOR SHALL PROVIDE THE APPROPRIATE LUG SIZES/QUANTITIES WITHIN THE EQUIPMENT CONNECTED (PANELBOARD, DISCONNECT SWITCH, LUMINAIRE, ETC.) TO PERMIT SATISFACTORY CONNECTION OF THE INDICATED CONDUCTORS. WHERE SUFFICIENT LUG SIZES AND/OR QUANTITIES CANNOT BE PROVIDED TO ACCOMMODATE THE CONDUCTORS INDICATED, THEN PROVIDE REDUCING ADAPTERS, PIN TERMINALS, OR A JUNCTION BOX TO SPLICE LARGER CONDUCTORS TO APPROPRIATELY SIZED SMALLER CONDUCTORS TO FIT INTO THE LUGS PROVIDED. ALL CONDUCTORS SHALL BE SIZED IN ACCORDANCE WITH THE NEC.

**CONNECTION DETAILS:** SECURE APPROVED SHOP DRAWINGS SHOWING WIRING DIAGRAMS, ROUGH-IN AND HOOK UP DETAILS FROM OTHER INVOLVED CONTRACTORS FOR EQUIPMENT WHICH MUST BE CONNECTED ELECTRICALLY.

**WORKING CLEARANCE:** COORDINATE FINAL LOCATIONS OF ELECTRICAL EQUIPMENT WITH PIPING ETC. AND ASSURE WORKING CLEARANCE REQUIRED BY NEC WILL BE MET. SUFFICIENT ACCESS AND WORKING SPACE SHALL BE PROVIDED AND MAINTAINED AROUND ELECTRICAL EQUIPMENT AS REQUIRED BY THE NATIONAL ELECTRICAL CODE. CONTRACTOR SHALL COORDINATE FINAL LOCATION OF EQUIPMENT PROVIDED AND INSTALLED BY OTHER TRADES.

**MATERIAL COORDINATION:** VERIFY CEILING AND WALL CONSTRUCTION AND MATERIAL PRIOR TO ORDERING LIGHT FIXTURES OR OTHER DEVICES TO INSURE PROPER FIXTURE OR DEVICE IS FURNISHED TO MATCH CONSTRUCTION.

**MOUNTING HEIGHTS:** MOUNTING HEIGHTS INDICATED ARE FROM THE FINISHED FLOOR TO THE CENTERLINE OF THE WIRING DEVICE UNLESS OTHERWISE NOTED. MOUNTING HEIGHTS OF LIGHTING FIXTURES ARE TO THE BOTTOM OF THE FIXTURE UNLESS OTHERWISE NOTED.

**DEVICE LOCATIONS:** COORDINATE LOCATIONS OF SWITCHES AND RECEPTACLES WITH OTHER WALL MOUNTED DEVICES.

**BARRIERS:** WHERE A MULTIPLE-GANG BOX HAS CIRCUITS OF DIFFERENT VOLTAGES OR SYSTEMS WHICH ARE REQUIRED TO BE SEPARATED, PROVIDE THE CODE-REQUIRED SEPARATION USING A FULL HEIGHT AND DEPTH BARRIER PLATE.

**CLEAN UP:** ON PROJECT CLOSE-OUT CLEAN ALL ELECTRICAL DEVICES, LIGHTING FIXTURES, LAMPS AND LENSES, AND REMOVE ALL PAINT SPATTERS FROM DEVICES, FIXTURES AND PLATES. REPLACE ALL INOPERATIVE LAMPS.

## ELECTRICAL LEGEND

### LIGHTING

	FLUORESCENT OR LED LIGHTING FIXTURE
	DOWNLIGHT OR PENDANT MOUNTED FIXTURE
	AREA SITE LIGHTING FIXTURE
	FLOOD LIGHTING FIXTURE
	BOLLARD LIGHTING FIXTURE
	LIGHTING FIXTURE TYPE SYMBOL. SEE LIGHTING FIXTURE DETAILS.
	SINGLE POLE SWITCH, 20A, 120/277V, 46" AFF UON
	DIMMER SWITCH, 46" AFF UON. FOR INCANDESCENT FIXTURES, PROVIDE 1500W, 120V SWITCH. FOR FLUORESCENT OR L.E.D. FIXTURES, COORDINATE VOLTAGE AND RATINGS OF SWITCH WITH TYPE AND QUANTITY OF BALLASTS OR DRIVERS TO BE CONTROLLED.
	LIGHTING CONTACTOR
	TIME CLOCK
	PHOTOCELL, 1500W, 120V SPST, MOUNT ON ROOF, AIM NORTH

### POWER

RECEPTACLES SHALL BE TAMPER RESISTANT, (TYP. UON). THE FOLLOWING SUBSCRIPTS SHALL APPLY TO RECEPTACLES WHERE USED:

- GFI: GROUND FAULT INTERRUPTING TYPE RECEPTACLE
- WP: WEATHER RESISTANT GFI RECEPTACLE WITH WEATHERPROOF WHILE-IN-USE COVER.

	DUPLEX CONVENIENCE RECEPTACLE 20A, 120V, 18" AFF, UON
	SPECIAL RECEPTACLE, AS NOTED ON PLANS
	HEAT TAPE CONNECTION, CLASS B GFI DEVICE WITH PUSH TO TEST AND RESET BUTTONS WITH WEATHER PROOF COVER. CONNECT AHEAD OF HEAT TRACE THERMOSTAT.
	EQUIPMENT CONNECTION
	JUNCTION BOX
	ELECTRICAL PANELBOARD
	MOTOR CONNECTION
	SAFETY SWITCH, 60A-3P, FU @ 30A, 3R

SWITCH RATING  
NUMBER OF POLES  
FUSE RATING (NF INDICATES NON-FUSED)  
NEMA ENCLOSURE IF OTHER THAN NEMA 1

ELECTRICAL CIRCUIT RUN IN CONDUIT AND CIRCUIT HOMERUN TO PANELBOARD (PANEL AND CIRCUIT DESIGNATION AS INDICATED). AS A MINIMUM CONDITION, EACH SINGLE PHASE CIRCUIT SHALL HAVE 1 #12 PHASE CONDUCTOR, 1 #12 NEUTRAL CONDUCTOR AND 1 #12 GROUNDING CONDUCTOR IN 3/4" CONDUIT. PROVIDE ADDITIONAL PHASE CONDUCTORS AS REQUIRED FOR "MULTIPLE PHASED" ELECTRICAL LOADS. PROVIDE NEUTRAL CONDUCTOR TO ALL WALL SWITCH OUTLET BOXES WHETHER REQUIRED OR NOT. PROVIDE ADDITIONAL "SWITCH LEG" CONDUCTORS TO PROVIDE THE LIGHT FIXTURE CONTROL INDICATED. MULTIPLE SINGLE PHASE CONDUCTORS MAY BE GROUPED TOGETHER IN A COMMON CONDUIT IN ACCORDANCE WITH THE NEC AND AT THE CONTRACTOR'S DISCRETION. GROUNDING CONDUCTORS MAY BE SHARED AS ALLOWED BY THE NEC. NEUTRAL CONDUCTORS SHALL NOT BE SHARED. MULTI-POLE BREAKERS SHALL BE PROVIDED IN ACCORDANCE WITH THE NEC SHOULD MULTI-WIRE BRANCH CIRCUITS BE INSTALLED. CONDUIT LARGER THAN 3/4" AND CONDUCTORS LARGER THAN #12 SHALL BE AS INDICATED.

  HANDHOLE - SEE COMPOSITE/FIBERGLASS HANDHOLE DETAIL ON SHEET E-0.2 FOR REQUIREMENTS

 IN GROUND WEATHERPROOF OUTLET FOR KIOSK - REFER TO DETAIL SHEET E-0.2

### GENERAL

	ENLARGED PLAN NOTATION
	ENUMERATION: # = ENLARGED PLAN
	SHEET WHERE PLAN IS SHOWN
	NEW WORK NOTE SYMBOL

## ABBREVIATIONS

A	AMPERE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMPERE INTERRUPTING CAPACITY
AV	AUDIO VISUAL
BFG	BELOW FINISHED GRADE
C	CONDUIT
CFL	COMPACT FLUORESCENT LAMP
CKT	CIRCUIT
CB	CIRCUIT BREAKER
CBCP	CENTER BEAM CANDLE POWER
DNCP	DOMINION NORTH CAROLINA POWER
EBU	EMERGENCY BATTERY UNIT
EC	EMPTY CONDUIT
ECB	ENCLOSED CIRCUIT BREAKER
EF	EXHAUST FAN
ETR	EXISTING TO REMAIN
EWC	ELECTRIC WATER COOLER
FHP	FRACTIONAL AC HORSEPOWER
FLA	FULL LOAD AMPS
GFI	GROUND FAULT INTERRUPTER
GND	GROUND
HID	HIGH INTENSITY DISCHARGE
HP	HORSE POWER/HEAT PUMP
KAIC	THOUSAND AMPERE INTERRUPTING CAPACITY
KVA	KILO-VOLT-AMPERES
KW	KILO-WATTS
LTG	LIGHTING
MCA	MINIMUM CIRCUIT AMPS
MCB	MAIN CIRCUIT BREAKER
MFR	MANUFACTURER
MLO	MAIN LUGS ONLY
MTD	MOUNTED
NEC	NATIONAL ELECTRICAL CODE
NF	NON-FUSED
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER
OFCL	OWNER FURNISHED, CONTRACTOR INSTALLED
P	POLE
PCP	PUMP CONTROL PANEL
PF	POWER FACTOR
Ø	PHASE
PRI	PRIMARY
SE	SERVICE ENTRANCE
SEC	SECONDARY
TBB	TELEPHONE BACKBOARD
TRT	TRIPLE TUBE FLUORESCENT LAMP
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
V	VOLT(S)
W	WATTS/WIRE
WG	WIREGUARD
WP	WEATHERPROOF



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CLH Design, PA  
400 Regency Forest Dr.  
Suite 120  
Cary, NC 27518  
Phone: 919.319.6716  
Fax: 919.319.7516  
LA: C-106 PE: C-1595



06-02-2016

DOWDY PARK - PHASE 1  
SITE DEVELOPMENT PLAN  
TOWN OF NAGS HEAD, NC  
3005 SOUTH CROATAN HIGHWAY

REVISIONS	NO.	DATE	DESCRIPTION
	1		
	1		
	1		

DESIGNED BY: RTW  
DRAWN BY: JTS  
DATE: JUNE-2016  
PROJECT NO: 16-115  
FILE:

GENERAL NOTES,  
LEGEND, AND  
ABBREVIATIONS

E-0.1

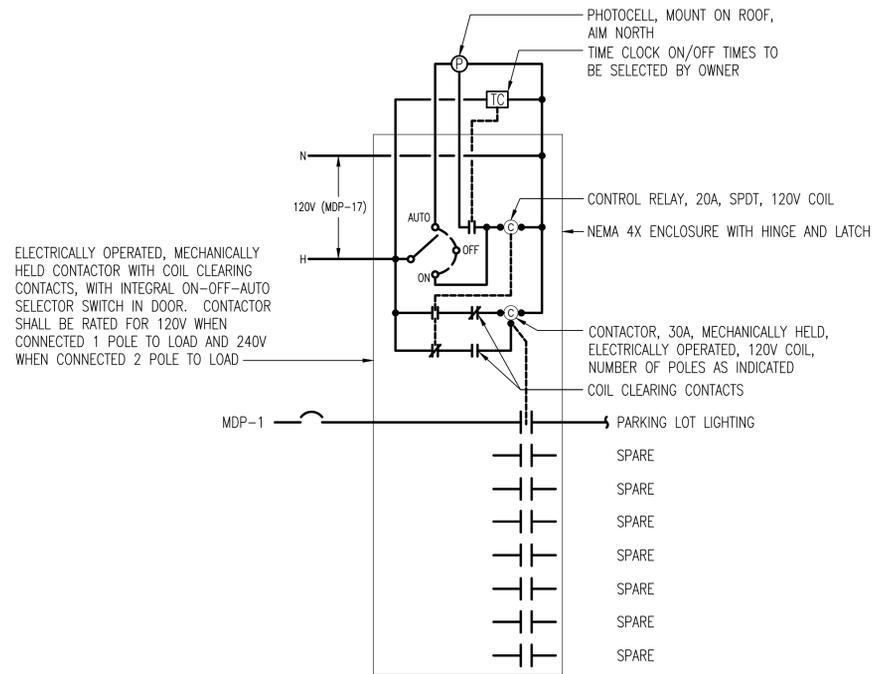


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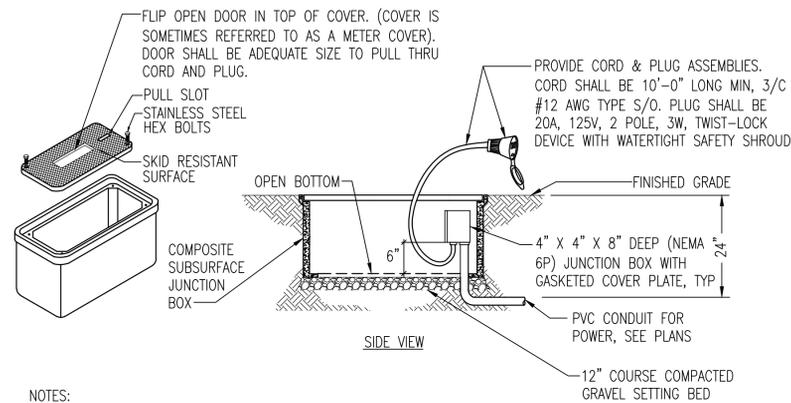
PANELBOARD MDP SCHEDULE											
SEE POWER RISER DIAGRAM FOR RATINGS											
LOAD SERVED	LOAD (AMPS)		BKR TRIP	CKT NO.	PHASE		CKT NO.	BKR TRIP		LOAD (AMPS)	LOAD SERVED
	A	B			A	B		A	B		
PARKING LOT LIGHTING	3.5		20/1P	1			2	20/1P	3.0		STAGE RECEPTACLES
EXTERIOR LIGHTING		7.1	20/1P	3			4	20/1P		3.0	STAGE RECEPTACLES
LIGHTING	1.5		20/1P	5			6	20/1P	3.0		STAGE RECEPTACLES
HOT BOX		1.0	20/1P	7			8	20/1P		3.0	STAGE RECEPTACLES
KIOSK HANDHOLE*	3.0		20/1P	9			10	20/1P	3.0		STAGE RECEPTACLES
KIOSK HANDHOLE*		3.0	20/1P	11			12	20/1P		3.0	STAGE RECEPTACLES
KIOSK HANDHOLE*	3.0		20/1P	13			14	20/1P	3.0		STAGE RECEPTACLES
KIOSK HANDHOLE*		3.0	20/1P	15			16	20/1P		4.5	RECEPTACLES
LIGHTING CONTROLS	1.0		20/1P	17			18	20/1P			SPARE
SPARE			20/1P	19			20	20/1P			SPARE
SPARE			20/1P	21			22	20/1P			SPARE
SPARE			20/1P	23			24	20/1P			SPARE
SPARE			20/1P	25			26	20/1P			SPARE
SPARE			20/1P	27			28	20/1P			SPARE
SPARE			20/1P	29			30	20/1P			SPARE
SPARE			20/2P	31			32	50/2P		20.0	BAND BOX
SPARE										20.0	BAND BOX
SPARE			20/2P	35			36	50/2P		20.0	BAND BOX
IRRIGATION PUMP		17.0	30/2P	39			40	50/2P		20.0	BAND BOX
		17.0								20.0	
<b>TOTAL</b>	<b>29.0</b>	<b>31.1</b>							<b>72.0</b>	<b>73.5</b>	<b>TOTAL</b>
<b>TOTAL CONNECTED AMPS</b>			<b>A: 101.0</b>	<b>B: 104.6</b>							

\*PROVIDE GFI-TYPE CIRCUIT BREAKER.

ELECTRICAL LOAD SUMMARY			
LOAD DESCRIPTION	CONNECTED LOAD	DEMAND FACTOR	DEMAND LOAD
LIGHTING	0.2 KVA	125%	0.2 KVA
EXTERIOR LIGHTING	1.3 KVA	100%	1.3 KVA
RECEPTACLES	16.5 KVA	100%	16.5 KVA
MISCELLANEOUS	2.3 KVA	125%	2.9 KVA
<b>TOTAL</b>	<b>20.2 KVA</b>		<b>20.8 KVA</b>



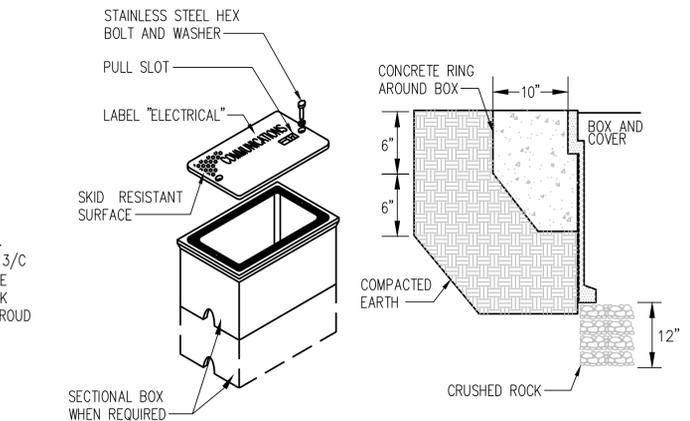
**EXTERIOR LIGHTING CONTACTOR DETAIL - "LC-P"**  
NO SCALE



**NOTES:**

- NOMINAL INSIDE DIMENSIONS: 24"W X 24"L X 18"D MINIMUM (BOX EXTENSIONS ARE ACCEPTABLE AS NECESSARY TO OBTAIN REQUIRED DEPTH)
- CONSTRUCTED OF POLYMER CONCRETE OR REINFORCED FIBERGLASS
- LOAD DESIGN: 8000 LB LOAD OVER A 10" SQUARE
- DETAIL BASED ON HUBBELL/QUAZITE.

**IN GROUND WEATHERPROOF OUTLET FOR KIOSK (KH)**  
NO SCALE



**HANDHOLE REQUIREMENTS**

- HOUSING SHALL BE A POLYMER CONCRETE REINFORCED WITH A HEAVY WEAVE FIBERGLASS REINFORCING WITH COMPRESSIVE STRENGTH OF NO LESS THAN 10,000 PSI.
- COVER SHALL WITHSTAND A SERVICE LOAD OF NO LESS THAN 15,000 LBS OVER A 10" x 10" AREA FOR HEAVY DUTY, H2O LOADING.
- PROVIDE STAINLESS STEEL BOLTS AND INSERTS.
- PROVIDE WITH (2) 2 1/2" MOUSEHOLES.
- HH1 HANDHOLE SHALL BE 12" X 24" X 24" DEEP.  
HH2 HANDHOLE SHALL BE 36" X 36" X 36" DEEP.

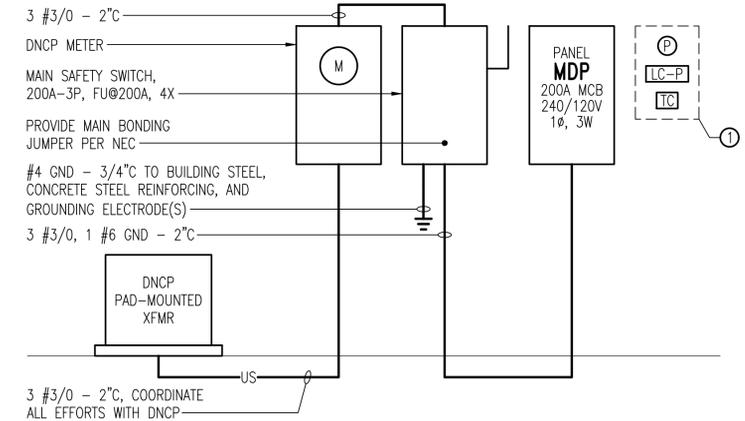
**COMPOSITE/FIBERGLASS HANDHOLE DETAIL (HH1/HH2)**  
NO SCALE

**FAULT CURRENT NOTE:**

PROVIDE 240/120V EQUIPMENT WITH A SHORT CIRCUIT RATING OF 22 KAIC, UON. CONTACT THE LOCAL POWER COMPANY PRIOR TO SUBMITTING SHOP DRAWINGS AND IF THE AVAILABLE FAULT CURRENT IS LESS THAN OR MORE THAN THIS AMOUNT, THEN NOTIFY THE OWNER IN WRITING AND PROVIDE APPROPRIATE POWER EQUIPMENT.

**ONE-LINE DIAGRAM NOTES**

- REFER TO LIGHTING CONTACTOR DETAIL THIS SHEET FOR ADDITIONAL INFORMATION.



**ELECTRICAL ONE-LINE DIAGRAM**  
NO SCALE

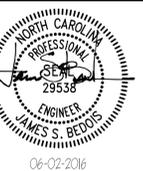


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Cary, NC 27518  
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06-02-2016

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SITE DEVELOPMENT PLAN  
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3005 SOUTH CROATAN HIGHWAY

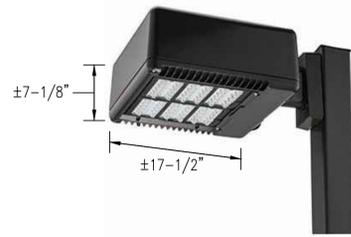
REVISIONS	NO.	DATE	DESCRIPTION
	1		
	1		
	1		

DESIGNED BY: RTW  
DRAWN BY: JTS  
DATE: JUNE-2016  
PROJECT NO: 16-115  
FILE:

ONE-LINE  
DIAGRAM AND  
DETAILS

E-0.2





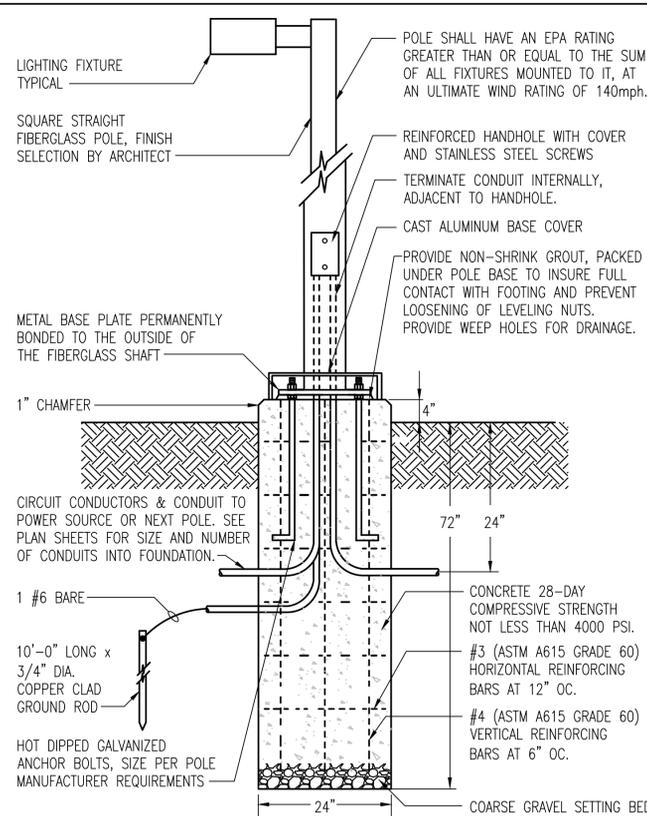
**LUMINAIRE REQUIREMENTS**

- HOUSING: SINGLE PIECE DIE-CAST ALUMINUM, FULLY GASKETED.
- DRIVER: 700mA, POWER FACTOR >90% AND THD <20%.
- LEDS: HIGH-EFFICACY, MOUNTED TO A METAL-CORE CIRCUIT BOARD AND ALUMINUM HEAT SINK, 70 CRI MINIMUM.
- OPTICS: PRECISION-MOLDED ACRYLIC LENSES. PROVIDE IES TYPE-IV DISTRIBUTION.
- FINISH: THERMOSET POWDER COATING FOR RESISTANCE TO CORROSION AND WEATHERING. FINISH SELECTION SHALL BE BY ARCHITECT/TOWN ENGINEER.
- RATINGS: UL LISTED FOR WET LOCATIONS. ENCLOSURE CLASSIFIED IP66 PER IEC 529 AND TESTED IN ACCORDANCE WITH IESNA LM-79 AND LM-80 STANDARDS.
- PROVIDE MOUNTING HARDWARE AS REQUIRED.

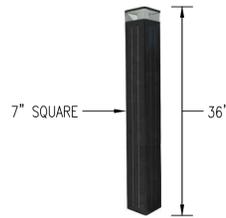
DETAIL BASED ON LITHONIA LIGHTING, "KAD LED" SERIES

TYPE	LUMENS	LAMP TYPE	INPUT WATTS	VOLTAGE	MOUNTING
▲	8370	4000K LED	(2) AT 69	MULTI 120-277	POLE MOUNT, ±25'-0" AFG - SEE POLE AND CONCRETE BASE DETAIL THIS SHEET

**LED AREA LUMINAIRE**



**POLE AND CONCRETE BASE DETAIL**



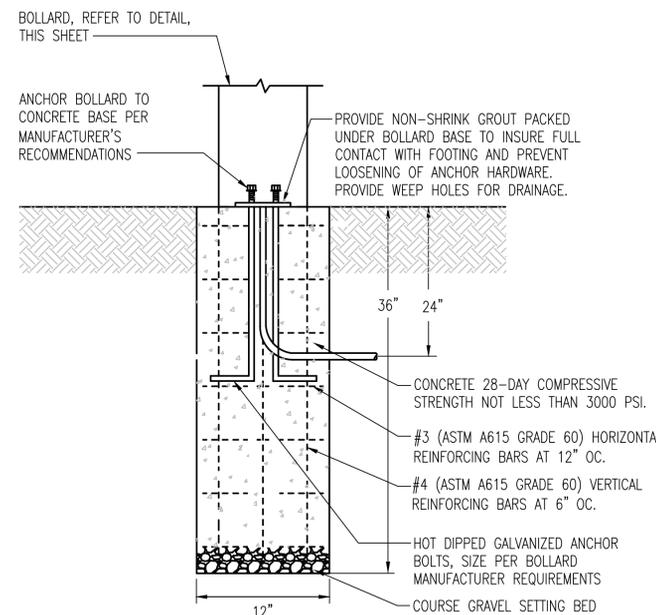
**LUMINAIRE DESCRIPTION:**

- MATERIAL: ANODIZED ALUMINUM SUITABLE FOR MARINE ENVIRONMENTS, DESIGNED TO BE CORROSION AND VANDAL RESISTANT.
- CONSTRUCTION: UTILIZE 316-SS HARDWARE FOR ALL CONNECTION POINTS. BATTERY TERMINALS SHALL BE COATED IN SILICONE. PROVIDE GLASS-LESS SOLAR PANEL RESIN TO RESIST UV DEGRADATION AND YELLOWING.
- OPTICS: 270-DEGREE DISTRIBUTION.
- RUNTIME: 4-HOURS AT 100%, 8-HOURS OFF, 2-HOURS AT 100%. COORDINATE FINAL RUNTIMES WITH OWNER PRIOR TO RELEASE OF LUMINAIRES FOR PRODUCTION. BASE BID SHALL ACCOMMODATE ANY OF THE STANDARD RUNTIMES OFFERED BY THE MANUFACTURER.
- FINISH: COORDINATE SELECTION WITH ARCHITECT/TOWN ENGINEER.
- UL LISTED FOR WET LOCATIONS. BOLLARD HEAD SHALL BE IP66 RATED.

DETAIL BASED ON EMBER LED (VALEN LIGHT), "VERTAIC BOLLARD" SERIES

TYPE	LUMENS	LAMP TYPE	INPUT WATTS	VOLTAGE	MOUNTING
▲	1100	4000K LED	15.4	-	SURFACE MOUNT ON CONCRETE BASE - SEE DETAIL THIS SHEET. ORIENT BOLLARD TO MAXIMIZE ILLUMINANCE OF PATHWAYS

**EXTERIOR SOLAR POWERED LED BOLLARD**



**CONCRETE BOLLARD BASE DETAIL**

**ALTERNATE #4**



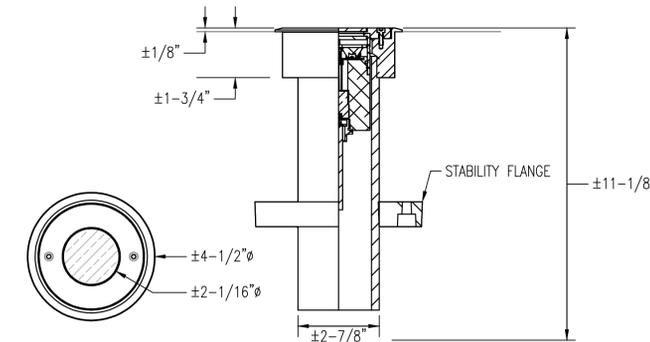
**LUMINAIRE DESCRIPTION:**

- MATERIAL: CAST ALUMINUM, CLEAR GLASS.
- OPTICS: 11"x11" SEALED BASE OPTIC.
  - PROVIDE OPTIONAL FULL SHIELDING VISOR, FINISH TO MATCH LUMINAIRE.
  - PROVIDE (1) 10"x60" AND (1) 40"x40" LIGHT SHAPING DIFFUSER FOR EACH LUMINAIRE.
- FINISH: COORDINATE SELECTION WITH ARCHITECT/TOWN ENGINEER.
- INTEGRAL STANDARD DIMMING LED DRIVER.
- UL LISTED FOR WET LOCATIONS.
- ADJUSTABLE UP TO 190° VERTICAL AND 358° HORIZONTAL.

DETAIL BASED ON ECOSENSE LIGHTING, "ECOSPEC FLOODLIGHT WASH" SERIES

TYPE	LUMENS	LAMP TYPE	INPUT WATTS	VOLTAGE	MOUNTING
▲	2653	4000K LED	50	120	SURFACE, ROOF - AIM TO MAXIMIZE ILLUMINANCE OF PAVILION AREA

**EXTERIOR LED INDIRECT LUMINAIRE**



**LUMINAIRE DESCRIPTION:**

- MATERIAL: STAINLESS STEEL COVER, SCHEDULE-80 PVC HOUSING SUITABLE FOR DIRECT BURIAL IN SOIL OR CONCRETE.
- OPTICS: WIDE FLOOD. PROVIDE SHOCK RESISTANT, TEMPERED GLASS LENS.
- FINISH: BLACK.
- PROVIDE REMOTE DIMMING LED DRIVER(S) AS REQUIRED IN MINIMUM NEMA 3R ENCLOSURE.
- UL LISTED FOR WET LOCATIONS.
- UTILIZE WATERTIGHT CONNECTORS PER MANUFACTURER'S RECOMMENDATIONS.

DETAIL BASED ON BK LIGHTING, "ARTISTAR RECESSED UPLIGHT" SERIES

TYPE	LUMENS	LAMP TYPE	INPUT WATTS	VOLTAGE	MOUNTING
▲	1300 CBCP	4000K LED	7	120	SURFACE MOUNT IN TOP OF COLUMN, COORD. WITH ARCH PLANS/ELEVATIONS

**EXTERIOR RECESSED LED LUMINAIRE**

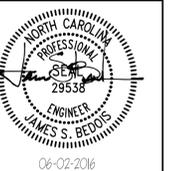


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**CLH DESIGN**

CLH Design, PA  
400 Regency Forest Dr.  
Suite 120  
Cary, NC 27518  
Phone: 919.319.6716  
Fax: 919.319.7516  
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06-02-2016

DOWDY PARK - PHASE 1  
SITE DEVELOPMENT PLAN  
TOWN OF NAGS HEAD, NC  
3005 SOUTH CROATAN HIGHWAY

REVISIONS	NO.	DATE	DESCRIPTION
	1		
	1		
	1		

DESIGNED BY: RTW  
DRAWN BY: JTS  
DATE: JUNE-2016  
PROJECT NO: 16-115  
FILE:

**LIGHTING DETAILS**

E-0.3





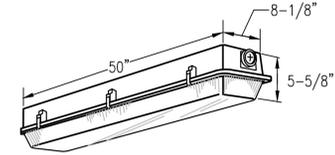
LUMINAIRE DESCRIPTION:

1. FLEXIBLE FLAT CONDUCTOR STRIP ENCASED IN RECTANGULAR IP65 MOLDED JACKET.
2. LEDS SHALL BE 4000K, 80 CRI MINIMUM.
3. PROVIDE MOUNTING HARDWARE, SILICONE SEALANT, AND END CAPS AS REQUIRED.
4. PROVIDE COMPATIBLE 120VAC-12VDC ELECTRONIC POWER SUPPLIES, SPLITTERS, AND DIMMING MODULES IN NEMA 3R ENCLOSURES (QUANTITIES AS REQUIRED FOR A COMPLETE AND FUNCTIONING SYSTEM).
5. UL LISTED FOR WET LOCATIONS.

DETAIL BASED ON CONTECH LIGHTING, "TLT012V2 16CR" SERIES

TYPE	LUMENS	LAMP TYPE	INPUT WATTS	VOLTAGE	MOUNTING
	109/FT	4000K LED	1.8W/FT	120/12	MOUNT USING MANUFACTURER'S SUPPLIED HARDWARE, AIM TO WASH WALLS BELOW

**EXTERIOR LED TAPE LIGHT STRIP**



LUMINAIRE DESCRIPTION:

1. HOUSING SHALL BE FORMED FROM HIGH IMPACT RESISTANT, UV STABILIZED REINFORCED POLYESTER FIBERGLASS. PROVIDE AN INTERNALLY MOUNTED STEEL CHANNEL TO HOUSE THE BALLAST AND TO MOUNT LAMP SOCKETS. STEEL SHALL BE 0.026" THICK (MINIMUM), CHEMICALLY TREATED FOR RUST PREVENTION, AND PAINTED WITH A BAKED WHITE ENAMEL FINISH.
2. FIXTURE SHALL BE FULLY GASKETED AND UL APPROVED FOR WET LOCATIONS.
3. FIXTURE SHALL BE CAPABLE OF CONTINUOUS ROW AND SINGLE UNIT PLACEMENT WITH PENDANT OR SURFACE MOUNTING.
4. LENS SHALL BE A HIGH IMPACT ACRYLIC DIFFUSER WITH STAINLESS STEEL CAPTIVE LATCHES TO SECURE THE DIFFUSER TO THE HOUSING.
5. BALLAST SHALL BE ELECTRONIC, HIGH POWER FACTOR ( $\geq .90$ ), WITH A THD  $<20\%$ , AND DESIGNED FOR LOW TEMPERATURE STARTING.

DETAIL BASED ON LITHONIA LIGHTING, "DMW" SERIES

TYPE	LAMP #	LAMP TYPE	INPUT WATTS	VOLTAGE	MOUNTING
	2	F32W T8	60	120	SURFACE, CEILING

**WET LOCATION FLUORESCENT**

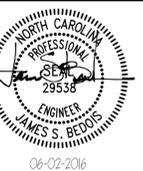


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**CLH  
DESIGN**

CLH Design, PA  
400 Regency Forest Dr.  
Suite 120  
Cary, NC 27518  
Phone: 919.319.6716  
Fax: 919.319.7516  
LA: C-106 PE: C-1593



06-02-2016

**DOWDY PARK - PHASE 1**  
SITE DEVELOPMENT PLAN

TOWN OF NAGS HEAD, NC  
3005 SOUTH CROATAN HIGHWAY

REVISIONS	NO.	DATE	DESCRIPTION
	1		

DESIGNED BY: RTW  
DRAWN BY: JTS  
DATE: JUNE-2016  
PROJECT NO: 16-115  
FILE:

LIGHTING DETAILS

E-0.4



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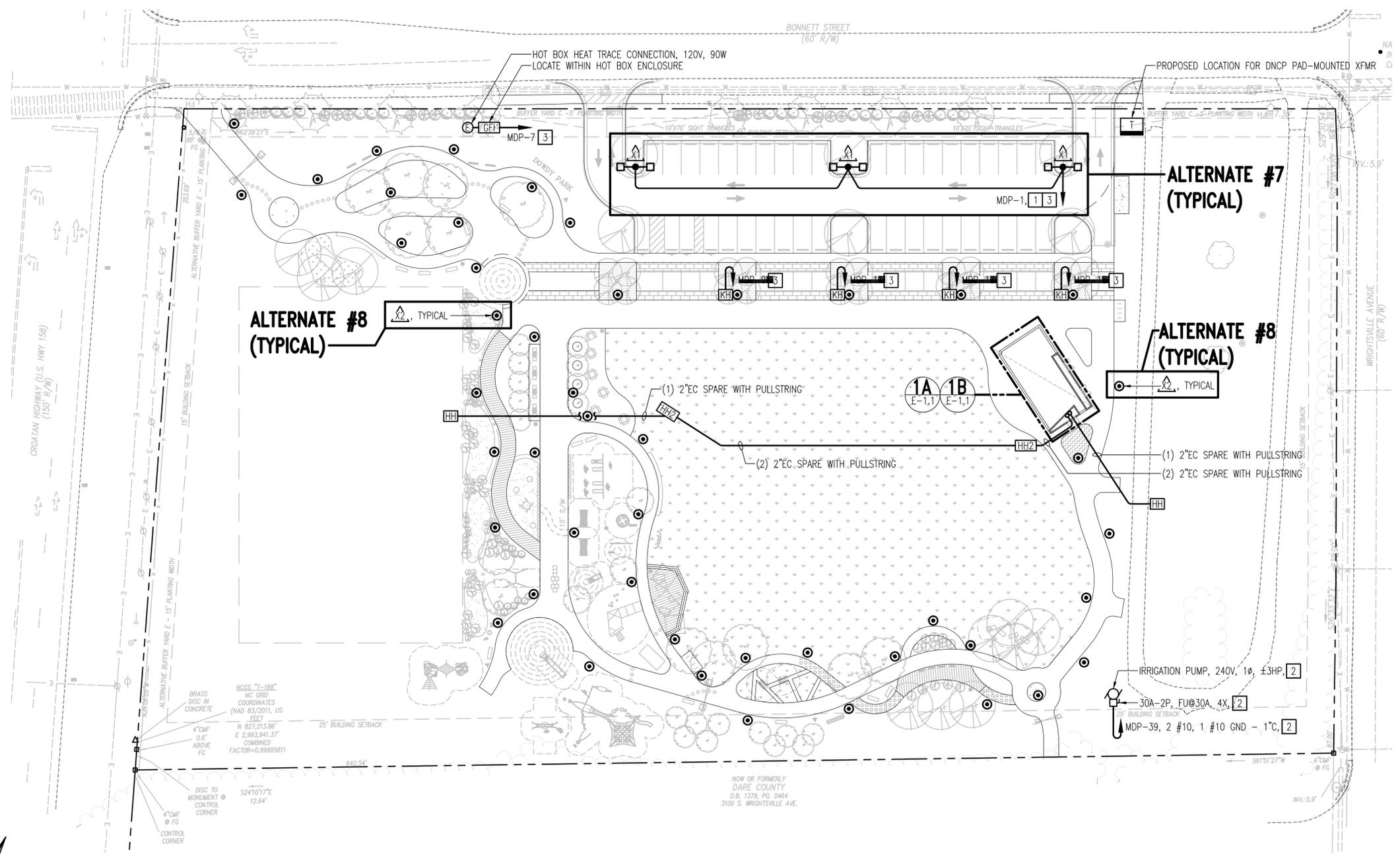


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DESIGN**

CLH Design, PA  
400 Regency Forest Dr.  
Suite 120  
Cary, NC 27518  
Phone: 919.319.6716  
Fax: 919.319.7516  
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**DOWDY PARK - PHASE 1**  
SITE DEVELOPMENT PLAN  
TOWN OF NAGS HEAD, NC  
3005 SOUTH CROATAN HIGHWAY



**SITE PLAN**  
SCALE: 1" = 30'-0"

**NOTES THIS SHEET**

- 1 ROUTE CIRCUIT VIA LIGHTING CONTACTOR "LC-P".
- 2 COORDINATE EXACT CONNECTION REQUIREMENTS WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN OR ORDERING OF EQUIPMENT.
- 3 2 #10, 1 #10 GND - 3/4".



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**GRAPHIC SCALES**



SITE PLAN  
E-1.0

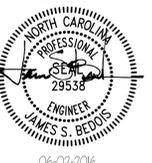


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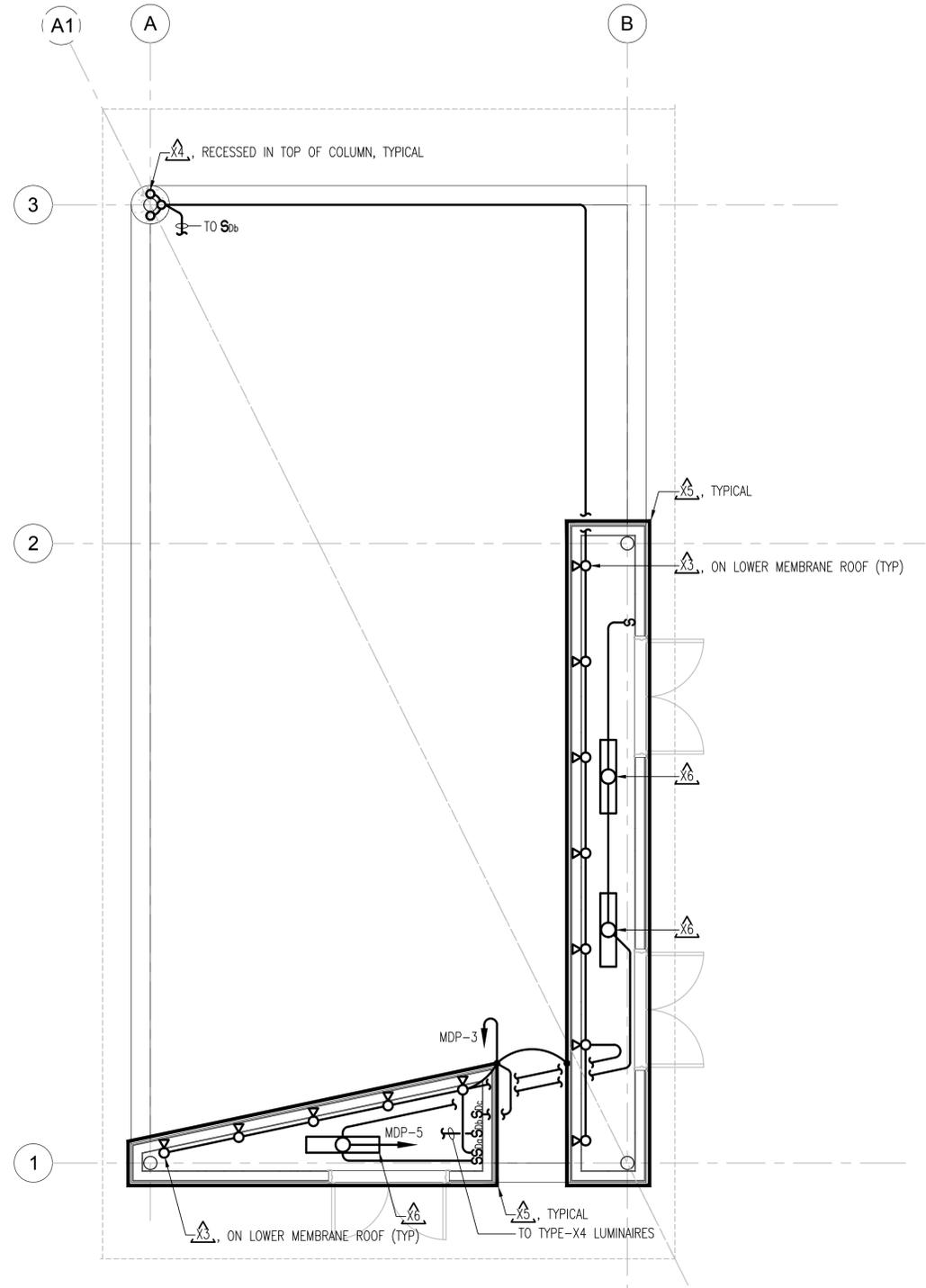


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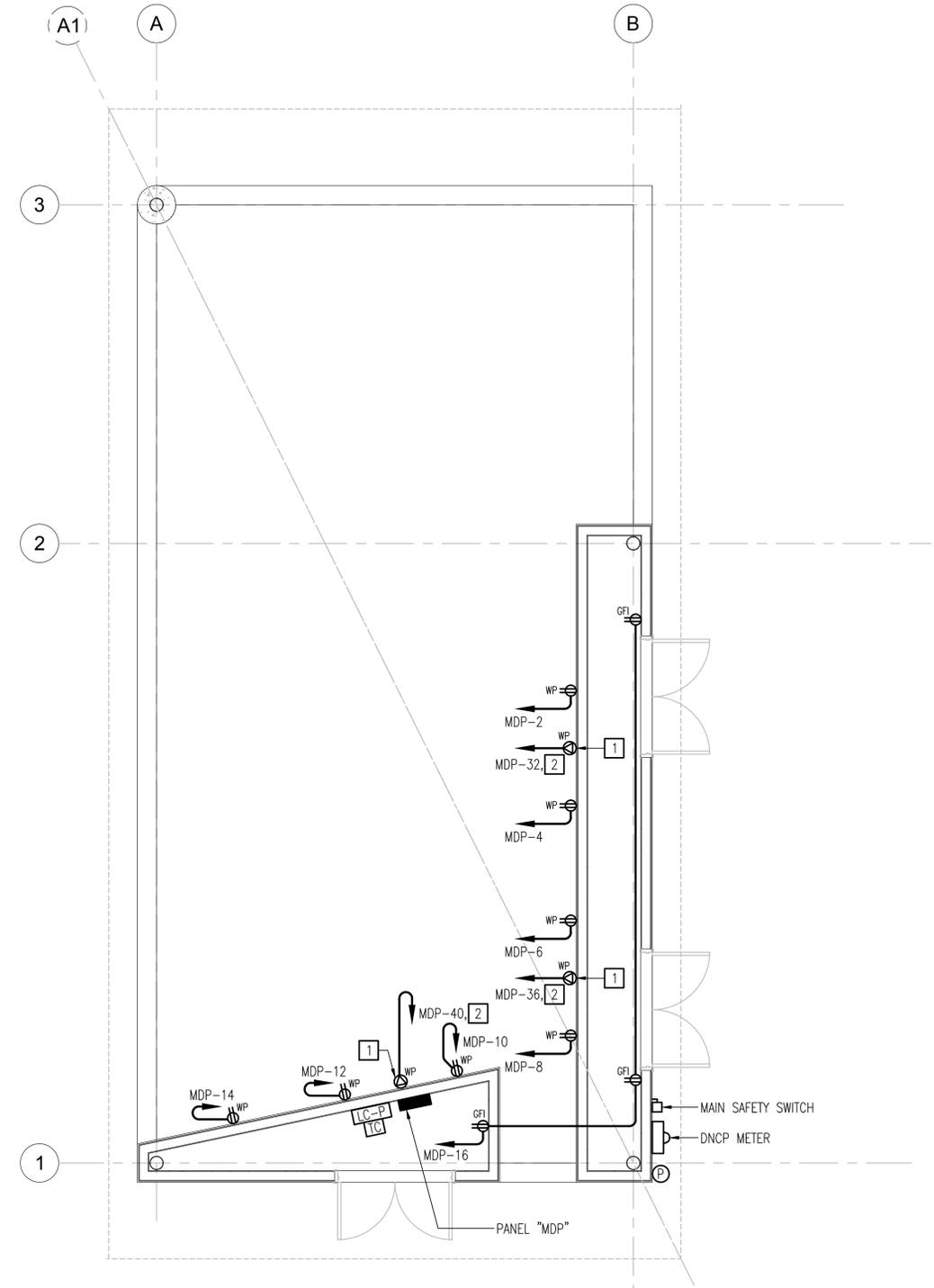
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**DOWDY PARK - PHASE 1**  
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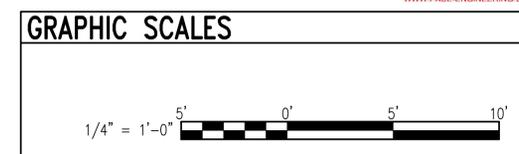
**PAVILION PLAN - LIGHTING**  
SCALE: 1/4" = 1'-0"



**PAVILION PLAN - POWER**  
SCALE: 1/4" = 1'-0"

**GENERAL NOTE:**  
TO THE EXTENT POSSIBLE, ALL FEEDER AND BRANCH CIRCUIT CONDUITS SHALL BE RUN UNDER SLAB. EXPOSED CONDUITS WITHIN THE PAVILION AREAS SHALL BE AVOIDED WHEREVER POSSIBLE.

- NOTES THIS SHEET**
- 1 NEMA 14-50R RECEPTACLE WITH WEATHERPROOF WHILE-IN-USE COVER.
  - 2 3 #8, 1 #10 GND - 3/4".



REVISIONS	NO.	DATE	DESCRIPTION
	1		
	2		

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PAVILION PLANS

E-1.1

