AUGUSTA, GA 535 TELFAIR STREET, AUGUSTA, GA 30901 FIRE STATION #3 2649 GORDON HWY, AUGUSTA, GA 30909 **GENERAL NOTES: PROJECT LOCATION MAP JOBSITE SIGN** 4'-0" CONTRACTOR AND HIS SUB-CONTRACTORS SHALL BE REQUIRE PREMISES TO INSPECT EXISTING CONDITIONS. BECOME FAMILIAR WITH LOCAL CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED AND CORRELATE PE JIREMENTS OF THE DRAWIN FORMED SHALL BE IN STRICT COMPLIANCE WITH COUNTY REGULATIONS AN CODES, O.S.H.A. STANDARDS, THE CODE STANDARDS LISTED, EXECUTED IN ACCORDANCE WITH ACCEPTED INDUSTRY STANDARDS, AND CONFORM TO SPECIFIC REGULATIONS AS AND APPLICARIE CITY/COUNTY PERMITS, INSPECTIONS AND APPROVA MENCEMENT OF ANY WORK AND CERTIFICATE OF OCCUPANCY UPON COMPLETION OF PROJECT. CONTRACTOR SHALL FURNISH COPIES OF PERMITS. INSPECTION hnson, Laschober & Associates, P.0 AND CERTIFICATES TO OWNER UPON REQUEST chitects.Engineers.Landscape Architect PERIMETER OF SIGN CONTRACTOR SHALL BE REQUIRED TO COORDINATE WORK SCHEDULE TO MINIMIZE DISRUPTION OF NORMAL ACTIVITIES AND TO AVOID INTERFERENCE WITH ADJACENT 1296 Broad Stree OPERATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING ADEQUATE PRECAUTIONS TO PROTECT SURROUNDINGS, MATERIALS AND EXISTING FINISHES 706.724.5756 www.theJLAgroup.com THROUGHOUT ALL PHASES OF CONSTRUCTION AREAS AND OCCUPIED OR PUBLIC AREAS TO BE MAINTAINED BY CONTRACTOR. DAMAGE TO EXISTING-TO-REMAIN CONSTRUCTION. GENERAL CONTRACTOR: MATERIALS OR EQUIPMENT TO BE RESTORED TO ORIGINAL CONDITION. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF TRASH AND DEBRIS FROM JOB SITE ON A DAILY BASIS. FINAL CLEAN-UP WITHIN SCOPE OF WORK: GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF ALL RELATED TRADES AND VENDORS NECESSARY TO THE COMPLETION OF THE JOB ON A TIMELY BASIS. BELOW GRADE DO NOT SCALE DRAWINGS. USE WRITTEN DIMENSIONS ONLY. SUBMIT TO ARCHITECT ANY DISCREPANCIES FOR CLARIFICATION ALL WORK SHALL BE IN COMPLIANCE WITH THE INTERNATIONAL BUILDING CODE. GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION, CURRENT EDITION OF NATIONAL ELECTRIC CODE, INTERNATIONAL PLUMBING, AND MECHANICAL CODE, RECOGNIZED **GRAPHIC SYMBOLS** PROJECT TEAM INDUSTRY STANDARDS. CRAFTSMANSHIP STANDARDS IN THE AREA, ALL MANUFACTURERS RECOMMENDATIONS, AND ALL OTHER APPLICABLE CODES. THE DESIGN PROFESSIONAL DOES NOT GUARANTEE THE PERFORMANCE OF THE PROJECT IN **REVISION INDICATION** ANY RESPECT OTHER THAN THAT OUR PROFESSIONAL WORK AND JUDGEMENT RENDERED CENTERLINE MEET THE STANDARDS OF CARE OF OUR PROFESSION. THE LOCATION OF THE EXISTING UTILITIES AND STRUCTURES SHOWN HEREON ARE OWNER STRUCTURAL ENGINEER AREA REVISED COLUMN GRID REFERENCE APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND ACTUAL LOCATION OF SUCH, WHETHER SHOWN HEREON OR NOT. PRIOR TO AUGUSTA FIRE DEPARTMENT JOHNSON, LASCHOBER AND ASSOCIATES, P.C. ANY EXCAVATION ANY DAMAGES SHALL BE REPAIRED AT THE EXPENSE OF THE ANTONIO BURDEN, FIRE CHIEF MARK LORAH, P.E. CONTRACTOR. 3117 DEANS BRIDGE ROAD 1296 BROAD STREET AUGUSTA, GA 30906 AUGUSTA, GEORGIA 30901 THE FLOOR ON BOTH SIDES OF A DOOR SHALL BE LEVEL AND SHALL HAVE THE SAME DRAWING LOCATION ON SHEET GRID DOOR NUMBER PHONE: 706-821-2909 PHONE: 706-724-5756 ELEVATION ON BOTH SIDES OF THE DOOR, FOR A DISTANCE ON EACH SIDE EQUAL TO THE DRAWING NAME EMAIL: mlorah@theJLAgroup.com (101) WIDTH OF THE WIDEST SINGLE DOOR. Viéw Name **OWNER'S POINT OF CONTACT** MECHANICAL ENGINEER FIRE EXTINGUISHERS SHALL BE LOCATED PER THE REQUIREMENTS OF NFPA 10. THE SIZE A101 SCALE: 1/8" = 1'-0" JOHNSON, LASCHOBER AND ASSOCIATES, P.C. JOHNSON, LASCHOBER AND ASSOCIATES, P.C. SHALL BE A MINIMUM OF 2A 10 BC AND SHALL BE INSTALLED AT A MAXIMUM OF 48" A.F.F. TO GLASS TYPE WALL TYPE WATSON LEE DORN III, NCARB, AIA MICHAEL N. BOOKER, P.E. DRAWING SCALE THE TOP OF THE HANDLE. SHEET IDENTIFIER FOR 1296 BROAD STREET 1296 BROAD STREET $\langle \mathsf{A} \rangle$ LOCATION OF DETAIL AUGUSTA, GEORGIA 30901 AUGUSTA, GEORGIA 30901 PROVIDE CONT. SOLID BLOCKING, AS REQUIRED, IN WALLS TO RECEIVE ACCESSORY ITEMS PHONE: 706-724-5756 PHONE: 706-724-5756 INCLUDING BUT NOT LIMITED TO THE FOLLOWING: DETAIL/PLAN KEY SECTION KEYS EMAIL: Idorn@thejlagroup.com EMAIL: nbooker@thejlagroup.com HANDRAILS DETAIL LOCATION ON SHEET GRID TOILET ROOM ACCESSORIES SECTION ARCHITECT FIRE PROTECTION ENGINEER TERMINATION OF SECTION GRAB BARS JOHNSON, LASCHOBER AND ASSOCIATES, P.C. JOHNSON, LASCHOBER AND ASSOCIATES, P.C. FIRE EXTINGUISHER CABINETS & BRACKETS CURTIS WILLIAMSON, P.E. CABINETS AND SHELVES WATSON LEE DORN III, NCARB, AIA A1 \ 1296 BROAD STREET 1296 BROAD STREET \A-101 CLEAN WALLS, DOORS, DOOR FRAMES, HANDRAILS, GUARDRAILS, ETC, PER AUGUSTA, GEORGIA 30901 AUGUSTA, GEORGIA 30901 \A-101/ MANUFACTURERS RECOMMENDATIONS PRIOR TO SEALING AND PAINTING. SHEET IDENTIFIER FOR PHONE: 706-724-5756 PHONE: 706-724-5756 LOCATION OF DETAIL EMAIL: Idorn@thejlagroup.com EMAIL: cwilliamson@thejlagroup.com REFER TO THE STRUCTURAL DRAWINGS FOR INFORMATION ON CONSTRUCTION AND CONTROL JOINTS IN CONCRETE SLABS AND CONCRETE AND MASONRY WALLS. SLAB JOINTS ELECTRICAL ENGINEER **CIVIL ENGINEER** ARE SPECIFIED AND LOCATED ON THE STRUCTURAL DRAWINGS. ENLARGED DETAIL INDICATOR JOHNSON, LASCHOBER AND ASSOCIATES, P.C. JOHNSON, LASCHOBER AND ASSOCIATES, P.C. DETAIL LOCATION ON SHEET GRID WILLIAM BUCHANAN, P.E. JOSEPH PEARSON, P.E. TEMPORARY SIGNS: PROVIDE SIGNS AS REQUIRED TO INFORM PUBLIC AND INDIVIDUALS 🥍 А1 1296 BROAD STREET 1296 BROAD STREET SEEKING ENTRANCE TO PROJECT. PROVIDE TEMPORARY, DIRECTIONAL SIGNS FOR CONSTRUCTION PERSONNEL AND VISITORS. AUGUSTA, GEORGIA 30901 AUGUSTA, GEORGIA 30901 A-201 \A-101 MAINTAIN AND TOUCHUP SIGNS SO THEY ARE LEGIBLE AT ALL TIMES. PHONE: 706-724-5756 PHONE: 706-724-5756 EMAIL: wbuchanan@thejlagroup.com EMAIL: jpearson@thejlagroup.com SHEET IDENTIFIER FOR LOCATION OF DETAIL BUILDING ELEVATION KEY INTERIOR ELEVATION KEY ELEVATION LOCATION ON SHEET GRID



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	1. 2.	THE CON	VATIONS NTRACTO JIRED BY	R WILL BE RE	ESPONSIBLE FOR ACQUIRI	NG ALL ONSTR	PERMITS AND LIC	CENSES				
	3.	ALL DRA RIPRAPF	INAGE EA PED AS RE	ASEMENTS AN EQUIRED TO (ND DISTURBED AREAS MU	ST BE (GRASSED AND/OR	2			POWELL ROAD	Roma
F	4.	ALL CON AUGUST	ISTRUCTI A, GEOR(ON WITHIN TI GIA STANDAR	HE CITY OF AUGUSTA RIG DS AND SPECIFICATIONS.	HTS-OF	-WAY SHALL CON	FORM TO				Rd
	5.	ALL SILT SHALL B	BARRIEF E DONE L	RS MUST BE F JNTIL SILT BA	PLACED IMMEDIATELY FOL RRIERS INSTALLATION IS	LOWIN COMPL	G CLEARING. NO (.ETED.	GRADING				~~
	6.	CONTRA DEPARTI PHONE N	CTOR SH MENT AT NUMBER I	IALL CONTAC LEAST 48 HO FOR THIS OFF	T THE INSPECTION DIVISIO URS PRIOR TO STARTING FICE IS	on of ⁻ Work	THE PUBLIC WORK ON THE PROJECT	ks T. The	E	GORDON HWY.		
-	7.	THERE A GRAVE S MUST BE	RE NO KI SITES OR SUBMIT	NOWN GRAVE CEMETERIES TED TO THE F	E SITES OR CEMETERIES L S ARE DISCOVERED DURIN PLANNING COMMISSION IM	OCATE G CON	ED ON THE PROPE ISTRUCTION, INFC TELY.	RTY. IF RMATION	(78)			
	8.	A PRE C HIS DESI SHALL B NOTIFIC/	ONSTRUC GNATED E SCHED ATION OF	CTION CONFE REPRESENTA ULED WITH TI WORK COMM	RENCE SHALL BE HELD W ATIVE PRIOR TO BEGINNIN HE ENGINEERING DEPART MENCEMENT IS GIVEN.	ITH TH G CON MENT	E COUNTY ENGIN STRUCTION. THIS AT THE TIME THE	EER OR MEETING			Ē	senhower Army 🔞 Medical Center 🖗
	9.	ALL BOX SHALL B	ES HAVIN E LOCATI	IG A DEPTH C ED SUCH THA	DF 4'-0" OR GREATER SHAL T STEPS CAN BE READILY	L HAVE	E STEPS. MANHOL SSIBLE.	E COVER	Ć.			
E	10.	NO MARO RIGHT-O GRADE E	QUEE, ISL F-WAY. T ELEVATIO	ANDS, OR SF HE CONTRAC	PRINKLER SYSTEM TO BE I TOR SHALL VERIFY I.E. OF ING ROADS BEFORE BEGII	LOCATI FALL E NNING	ED WITHIN THE XIST. PIPES AND F CONSTRUCTION.	ROAD		Chamberlain Ave CHAMBER	PLAIN AVENUE	hamberlain Ave
	11.	NOTIFY ⁻ POURING	THE CITY	ENGINEER'S OPS, DUMPIN	OFFICE 48 HRS. PRIOR TO G BASE OR PAVING.	STAR	TING CONSTRUCT	ION,	This document is the	e property of Johnson		N
	12.	APPROV RESPON & CITY M SITE.	al of th Sibility (Iaintaine	IESE PLANS D OF ADHERING ED ROADS FO	OOES NOT RELIEVE THE CO G TO THE WEIGHT LIMITS F OR HAULING EQUIPMENT O	ONTRA PRESCI R MATI	CTOR OF THE RIBED ON STATE, ERIALS TO & FRO	COUNTY M THIS	Laschober & Ass unauthorized repro otherwise use of this prohibited and a thereupon may be su	ociates, P.C. The duction, copying or s document is strictly any infringement ubject to legal action.		
	13.	THE CON ANY OTH PRIVATE OF THE A	NTRACTO IER TYPE PONDS (ABOVE MI	R IS RESPON OF DEBRIS 1 OR A COUNTY ENTIONED ITE	SIBLE TO REMOVE OR CLE THAT COMES OFF THE SIT OWNED POND. THEY ARE EMS THAT COME OFF THE	EAN OL E AND I E RESP SITE C	JT ANY SILT, DIRT, FINDS ITS WAY IN ONSIBLE TO REMO NTO PRIVATE, CC	MUD OR TO OVE ANY DUNTY OR			DRAV	VING
	14.	A CAD FI	WNED PF	ROPERTIES TO	O INCLUDE RIGHTS-OF-WA	AY. AKING.			CG001	CIVIL COVER	SHEET	
	15.	UTILITY	CONTACT	INFORMATIC	ON (CONTRACTOR TO VER	IFY PRI	IOR TO CONSTRU	CTION):	C-101	LAYOUT & ST	AKING PLA	AND DEI AN
D		WATEF NATUR ELECTI COMMI	R & SEWE AL GAS: RICITY: JNICATIO	R AUG GEC GEC	GUSTA UTILITY DEPART. ORGIA NATURAL GAS ORGIA POWER CO. —		(706) 842-3060 1 (877)427-4321 1-888-891-0938 		C-201 C-301 C-401 C-500	GRADING ANI UTILITY PLAN MISCELLANE E.S.P.C. CHEC	D DRAINAG OUS PROF CKLIST	GE PLAN ILES
ŀ		STO	RM	WATE		/ FI	EATURE	ES	C-501 C-502	E.S.P.C. PHAS E.S.P.C. PHAS	SE 1 - INITI SE 2 - INTE	AL SEDIN RMEDIA ⁻
	BASIN NO.	SWQ NO.	SHEET NO.	LOCATION	TYPE	MANI & MO	JFACTURER DEL NO.	FLOW CAPACITY	C-503 C-504 C-505	E.S.P.C. PHAS E.S.P.C. NOTE	SE 3 - FINA ES & DETA	L STABIL ILS SHT. ILS SHT
	1	1	C-201	STR. A-1		ADS	FRAME: 62XLHD	(CFS) 7.2	C-506	E.S.P.C. NOTE	ES & DETA	ILS SHT. ILS SHT.
	1	2	C-201	STR. A-2	FLEXSTORM PURE	ADS	FRAME: 62XLHD	7.2	C-507 C-508	E.S.P.C. NOTE E.S.P.C. NOTE	ES & DETA ES & DETA	ILS SHT. ILS SHT.
	1	3	C-201	STR. A-2.1	FLEXSTORM PURE	ADS	FRAME: 62XLHD BAG: PC	7.2	C-509	E.S.P.C. NOTE	ES & DETA	ILS SHT.
С	1	4	C-201	STR. A-4	FLEXSTORM PURE	ADS	FRAME: 62XLHD BAG: PC	7.2	C-601 C-602	SITE DETAILS	5 SHT. 1 OF 5 SHT. 2 OF	= 5 = 5
	1	5	C-201	STR. B-1	FLEXSTORM PURE	ADS	FRAME: 62XLHD BAG: PC	7.2	C-603	SITE DETAILS	SHT. 3 OF	5
	1	6	C-201	STR. B-2	FLEXSTORM PURE	ADS	FRAME: 62XLHD BAG: PC	7.2	C-604 C-605	SITE DETAILS	SHT. 4 OF	= 5 = 5
	1	7	C-201	STR. B-3	FLEXSTORM PURE	ADS	FRAME: 62XLHD BAG: PC	7.2	L-101	LANDSCAPE	PLAN	0
	1	8	C-201	STR. B-4	FLEXSTORM PURE	ADS	FRAME: 62XLHD BAG: PC	7.2	L-201	LANDSCAPE I	NOTES & E	DETAILS
	1	9	C-201	POND	DRY DETENTION POND		N/A	N/A				
	1	10	C-201	STR. A-2A	FLEXSTORM PURE	ADS	FRAME: 62XLHD BAG: PC	7.2				
	1	11	C-201	STR. A-3	FLEXSTORM PURE INLET FILTER	ADS	FRAME: 62XLHD BAG: PC	7.2				





- 1. EXISTING CONTOURS ON THE SITE REFLECT THE DESIGN CONTOURS FROM
- THE EARLY SITE PACKAGE WORK. 2. ALL STORM AND SANITARY SEWER INFRASTRUCTURE INSTALLED AS A PART OF THE EARLY SITE PACKAGE WORK IS SHOWN AS EXISTING AND SHALL BE PROTECTED AND MAINTAINED DURING THIS CONSTRUCTION PROJECT.

DEMOLITION LEGEND:



PROTECT & MAINTAIN

- # RELOCATE
- LIMITS OF DISTURBANCE
- 1. ASPHALT
- 2. STORM DRAIN
- 3. WATER
- 4. ELECTRICAL/POWER
- 5. TELEPHONE/COMMUNICATION/FIBER OPTIC
- 8. SANITARY SEWER

DEMOLITION NOTES:

- 1. ITEMS TO BE DEMOLISHED ARE DOUBLE HATCHED; ITEMS TO BE ABANDONED
- (IF ANY) ARE SINGLE HATCHED; AND BOTH SHOWN DOTTED. 2. UNDERGROUND LOCATIONS ARE APPROXIMATE AND SUPPLIED BY VARIOUS UTILITY COMPANIES. NOTIFY THE OWNER IMMEDIATELY IN WRITING OF ANY
- CONFLICTS OR DISCREPANCIES. 3. CONTRACTOR TO VERIFY ALL EXISTING FIELD CONDITIONS PRIOR TO DEMOLITION & CONSTRUCTION WORK INCLUDING FIELD VERIFY ALL UTILITY LOCATIONS AND HAVE APPROPRIATE UTILITY COMPANY MARK THEIR LOCATION BEFORE DIGGING OR TRENCHING. THIS SHALL INCLUDE BUT IS NOT LIMITED TO THE USE OF SONIC, ELECTRONIC OR MAGNETIC DETECTION DEVICES, BY NOTING PULL BOX AND UTILITY BOX LOCATIONS AT THE SURFACE, AND BY POTHOLING. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY UTILITIES DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
- 4. UNLESS OTHERWISE NOTED: DEMOLISHED ITEMS TO BE REMOVED IN ITS ENTIRETY FROM SITE & DISPOSED OF IN LEGAL MANNER OR UPON OWNER'S DISCRETION
- 5. CONTRACTOR TO PROTECT BENCHMARKS SET BY THE SURVEYOR. PRESERVE BENCHMARKS LOCATED WITHIN THE CONSTRUCTION LIMITS UNTIL NEW BENCHMARK IS RE-ESTABLISHED.
- 6. THE CONTRACTOR IS REQUIRED TO CONTACT 811 THREE (3) DAYS PRIOR TO ANY DIGGING OR COMMENCING OF CONSTRUCTION.

SCALE: 1" = 30'







ROADWAY SIGNING & MARKING LEGEND

SWL	SOLID WHITE LINE	(
SK1W	SKIPPED 1 WHITE LINE	(
DSYL	DOUBLE SOLID YELLOW LINE	(
24SB	24" STOP BAR	
TP1	THRU-LANE USE	

7

1 2 3 HDCP PARKING SIGN W/ VAN ACCESSIBLE

STOP SIGN R1-1 24" (36" WITHIN R/W)

SCALE: 1" = 30'

DO NOT ENTER SIGN R5-1

NOTE: SEE DETAILS & SPECS. FOR PAVEMENT MARKING.

NOTES:

- 1. BUILDING COORDINATES ARE APPROXIMATE. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL BUILDING INFORMATION, DIMENSIONS AND SIDEWALK LOCATIONS.
- 2. BUILDING AND PARKING LOT ACCESS SHALL BE CONSTRUCTED IN COMPLIANCE WITH ALL 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN, OR MOST CURRENT EDITION.
- 3. ALL DIMENSIONS AND/OR COORDINATES (IF ANY) ARE FROM FACE OF
- CURB, EDGE OF CONCRETE/PAVEMENT AND OR FACE OF BUILDING. 4. COORDINATE ALL CONCRETE JOINTS, SCORING PATTERNS, TEXTURE &
- COLOR WITH ARCHITECT. 5. THE CONTRACTOR SHALL NOTIFY AND RECEIVE APPROVAL FOR THE METHOD, SPACING REQUIREMENTS, AND SCHEDULING OF CONSTRUCTION FROM THE OWNER PRIOR TO COMMENCEMENT OF
- CONSTRUCTION. 6. THE CONTRACTOR SHALL REPAIR OR REPLACE AT NO COST TO THE OWNER ANY DAMAGE INCURRED TO ABOVE OR BELOW GROUND UTILITY SERVICES OR ANY EXISTING STRUCTURES.
- 7. EXCESS EARTH MAYBE STOCKPILED ONSITE AS DIRECTED BY THE OWNER. STOCKPILE SHOULD NOT OBSTRUCT NATURAL DRAINAGE OR CAUSE OFFSITE ENVIRONMENTAL DAMAGE.





4	5	6	

	STORM SEWER STRUCTURES				
STRUCTURE NO.	TYPE	RIM/GRATE ELEV.	INV(IN). ELEV.	INV.(OUT) ELEV.	REMARKS
B-2	HOODED BACK TRAP	293.25	288.73(N)	288.53	PER GDOT DET. 1019A "PRECAST" "E"
B-3	GRATE INLET (TRAFFIC)	293.20	289.56(N)	289.36	PER DET. A1/C-603
B-4	HOODED BACK TRAP	293.68		290.21	PER GDOT DET. 1019A "PRECAST" "E"





- 1. AN AUD INSPECTOR SHALL BE PRESENT OR SECTION LEFT UNCOVERED UNTIL INSPECTED BY THE INSPECTOR WHEN A TAP, TIE-IN OCCURS, RESTRAINED JOINTS ARE INSTALLED, BENDS, FITTINGS, FIRE HYDRANTS, VALVES AND PRESSURE TESTING. CONTRACTOR IS TO PROVIDE AT LEAST 48 HOUR NOTICE (TWO WORKING DAYS) IN ADVANCE DURING REGULAR WORKING HOURS (8:30 AM
- ALL PVC WATER LINES SHALL BE A MINIMUM DR-18 PVC MEETING AWWA C-900 AND/OR C-905, UNLESS OTHERWISE
- ALL DIP WATER LINES SHALL BE CLASS 350 FOR LINES 16" DIAMETER AND SMALLER, AND CLASS 300 FOR LINES 18" DIAMETER THROUGH 24" DIAMETER, UNLESS OTHERWISE
- ALL NEW WATER LINES SHALL BE INSTALLED PER
- ALL WATER LINES SHALL BE TESTED, CHLORINATED, AND CHECKED FOR BACTERIA PER AUD'S WATER & SANITARY SEWER SYSTEMS-DESIGN STANDARDS, CONSTRUCTION
- COPPER WIRE (12-GAUGE, INSULATED, SINGLE STRAND) SHALL BE ATTACHED ALONG TOP OF ALL BURIED WATER LINES, WRAPPED AROUND SERVICE CORPORATIONS AND BROUGHT UP ON THE OUTSIDE OF ALL VALVE BOXES, STUBBING OUT AT THE TOP TO FACILITATE TRACEABILITY. THIS WIRE SHALL BE PROPERLY SPLICED WITH A WATER PROOF CONNECTOR FOR ELECTRICAL CONNECTIVITY,
- AND THEN INSULATED TO PROTECT AGAINST CORROSION (REFERENCE AUD DETAILS WHEN APPLICABLE). DETECTOR TAPE SHALL BE 4 INCHES WIDE AND PLACED 2
- FEET ABOVE PIPE. ADD SIMILAR DEVICE TO CONDUIT PER
- ALL WATER VALVES ON THE MAIN LINES, INCLUDING HYDRANT LATERALS, SHALL BE OPEN-LEFT IF INSTALLED SOUTH OF GORDON HIGHWAY (S.R. 10), OR OPEN-RIGHT IF INSTALLED NORTH OF GORDON HIGHWAY.
- THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN A METER BOX AT THE TERMINATION POINT OF ALL WATER SERVICES. METER BOXES WILL IN NO WAY BE PLACED UNDER DRIVEWAYS. METER BOXES WILL
- PREFERABLY BE LOCATED IN THE CENTER OF THE LOT AND WITHIN 1' INSIDE OF THE R/W, AND MAINTAINED BY THE CONTRACTOR UNTIL SUCH TIME THE METER IS
- WATER SERVICES SHALL HAVE MINIMUM DIAMETER OF 1 INCH (REFERENCE AUD DETAILS WHEN APPLICABLE).
- 11. ANY EXISTING WATER SERVICE LINES WHICH ARE
 - EXTENSIONS OFF AN EXISTING WATER MAIN TO BE ABANDONED DISCOVERED DURING CONSTRUCTION
- SHALL BE REPLACED. THESE NEW SERVICE LINES ARE TO TIE INTO THE NEW WATER MAIN AND BE RECONNECTED
- 12. ALL EXISTING WATER SERVICES SHALL BE EXTENDED AND METER BOXES RELOCATED AS REQUIRED BEYOND THE LIMITS OF CONSTRUCTION. THE SERVICES SHALL BE CONNECTED TO THE NEW WATER MAIN AFTER SAID MAIN HAS BEEN STERILIZED, PRESSURE TESTED AND PUT INTO SERVICE. IN THE EVENT THAT THE SERVICE LINE IS NOT ACTIVE, A NEW WATER SERVICE WILL BE REQUIRED TO BE

- 13. ALL WATER METERS SHALL BE PURCHASED FROM AUD CONSTRUCTION AND MAINTENANCE DIVISION.
- THE DEVELOPER/CONTRACTOR SHALL LOCATE WATER SERVICES AND VALVES BY ETCHING A "W" FOR THE WATER SERVICE AND A "V" FOR A VALVE IN THE CURB OR IN THE PAVEMENT IF NO CURB IS AVAILABLE, AND HIGHLIGHT THE ETCHING WITH BLUE PAINT PER THE APWA UNIFORM COLOR CODE. IN THE EVENT THAT THE VALVE IS LOCATED BEHIND THE CURB OR PAVEMENT. INVERT THE "V" MARKING SO THAT IT POINTS TO THE
- 15. FIRE HYDRANTS ARE TO BE LOCATED A MINIMUM OF ONE FOOT INSIDE EXISTING RIGHT-OF-WAY WITH A 3 FOOT
- 16. EXISTING FIRE HYDRANTS AND METERS THAT ARE REMOVED SHALL BE TURNED OVER TO AUD. PER AUD'S WATER & SANITARY SEWER SYSTEMS-DESIGN
 - STANDARDS, CONSTRUCTION SPECIFICATIONS AND
 - NON-RESIDENTIAL DEVELOPMENT, A MINIMUM "DOUBLE-CHECK" BACKFLOW-PREVENTION DEVICE SHALL BE INSTALLED ON THE CUSTOMER'S SIDE OF
 - b. FIRE LINES REQUIRE A MINIMUM "DOUBLE DETECTOR"
 - c. FOR BACKFLOW INSTALLATIONS FOR RESIDENTIAL DEVELOPMENTS, A "DUAL CHECK" BACKFLOW DEVICE SHALL BE INSTALLED ON THE CUSTOMER'S SIDE OF THE SERVICE LINE AT THE POINT OF TIE-IN TO THE
 - d. FOR SOME MEDIUM HAZARD TO HIGH HAZARD LOCATIONS, A REDUCED PRESSURE ZONE (RPZ)
- BACKFLOW DEVICES SHALL BE TESTED BY A CERTIFIED PERSON WITHIN FIVE (5) WORKING DAYS OF INSTALLATION AND THE RESULTS FURNISHED TO THE AUD BACK FLOW INSPECTOR WITHIN 10 WORKING DAYS OF INSTALLATION PRIOR TO ANY WATER USE. AUD SHALL BE
- NOTIFIED PRIOR TO TESTING CONTACT THE AUGUSTA UTILITIES BACK FLOW INSPECTOR AT 706-722-1639.

GENERAL AUD NOTES

- ALL CONSTRUCTION OF WATER DISTRIBUTION SYSTEMS AND WASTEWATER COLLECTION SYSTEM LINES SHALL BE IN ACCORDANCE WITH AUGUSTA UTILITIES DEPARTMENT (AUD) WATER & SANITARY SEWER SYSTEMS-DESIGN STANDARDS, CONSTRUCTION SPECIFICATIONS AND DETAILS (LATEST PUBLICATION).
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT LOCATION, SIZE, AND MATERIAL OF ANY EXISTING WATER OR SANITARY SEWER UTILITY PROPOSED FOR CONNECTION OR USE BY THE PROJECT.
- CONTRACTOR SHALL CONTACT THE UTILITIES PROTECTION INC. "CALL BEFORE YOU DIG" SERVICE (811) IN ORDER TO LOCATE UTILITIES PRIOR TO STARTING ANY EXCAVATION OR CONSTRUCTION. THE LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN ON PLANS ARE APPROXIMATE AS DETERMINED FROM EXISTING RECORDS.
- THE CONTRACTOR SHALL COORDINATE THE WORK OF THE UTILITY COMPANIES.
- THE AUGUSTA ENGINEERING DEPARTMENT (AED) SHALL BE NOTIFIED AT LEAST 48 HOURS (TWO WORKING DAYS) IN ADVANCE DURING REGULAR WORKING HOURS (8:30AM TO 5:00PM, MONDAY-FRIDAY, EXCLUDING AUGUSTA, GEORGIA HOLIDAYS) PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY WITHIN AUGUSTA, GEORGIA RIGHT-OF-WAY. CONTACT AED AT (706-821-1706).
- THE AUD ENGINEERING DIVISION SHALL BE NOTIFIED AT LEAST 48 HOURS (TWO WORKING DAYS) IN ADVANCE DURING REGULAR WORKING HOURS (8:30 AM TO 5:00 PM MONDAYERIDAY EXCLUDING AUGUSTA, GEORGIA HOLIDAYS) PRIOR TO ANY CONSTRUCTION, TIE-INS, OR TESTING OF WATER OR WASTEWATER UTILITIES. NO WORK SHALL COMMENCE UNTIL CONTACT IS MADE WITH THE PROJECT'S AUD INSPECTIONS REPRESENTATIVE
- DISTURBANCE OF ANY SURVEY MARKERS OR MONUMENTS REQUIRES RE-ESTABLISHMENT BY A PROFESSIONAL LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE, DOCUMENTATION OF THE WORK MUST BE PRESENTED TO THE AUD ENGINEERING DIVISION BEFORE THE PROJECT IS COMPLETED.
- ANY DISCREPANCIES, ERRORS, OR OMISSIONS DISCOVERED ON PLANS OR IN THE SPECIFICATIONS SHOULD BE NOTED ON THE CONTRACT PROPOSAL AND DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY TO CORRECT THE SAME. ALL CONCRETE SHALL AND HAVE MINIMUM 28-DAY STRENGTH OF
- 3.000 PSI IF A CONFLICT ARISES BETWEEN THE NEW WORK AND THE
- 10 EXISTING WATER AND SEWER UTILITIES DURING THE COURSE OF CONSTRUCTION, IT WILL BE THE RESPONSIBILITY OF THE OWNER/DEVELOPER/CONTRACTOR, AT THEIR EXPENSE AND NOT AUD'S, TO CORRECT THE DISCREPANCY AS DIRECTED BY A REPRESENTATIVE OF AUD.
- 11. ALL EXISTING AUGUSTA ROAD STRUCTURES SUCH AS STORM MANHOLES, INLET BOXES, ETC., SHALL BE MAINTAINED AND OR ADJUSTED AS IS APPROPRIATE TO ENSURE PROPER USE.
- ALL MATERIALS DEEMED SALVAGEABLE BY AUD ARE THE 12 PROPERTY OF AUGUSTA, GEORGIA AND WILL BE REMOVED AND STORED ON SITE IN A SECURED AREA DETERMINED DURING CONSTRUCTION BY THE CONTRACTOR, AND AUGUSTA UTILITIES DEPARTMENT.
- FOR PRIVATE DEVELOPMENTS, AUD SHALL NOT BE RESPONSIBLE FOR PAVEMENT PATCHING AND/OR REPLACEMENT AND THE SITE RESTORATION WHENEVER AUD PERFORMS REPAIR. REPLACEMENT OR INSTALLATION WORK.
- IF AUD MUST REPAIR OR REPLACE UTILITIES ON THE WORK SITE. THEN THE RESPONSIBLE PARTY SHALL ARRANGE FOR ACCESS B AUD AS REQUIRED TO REPAIR OR REPLACE THE UTILITY.
- A MINIMUM (20') UTILITY EASEMENT CENTERED OVER ALL WATER LINES AND A MINIMUM 20' UTILITY EASEMENT CENTERED OVER ALL WASTEWATER LINES SHALL BE DEEDED TO AUGUSTA, GEORGIA AT COMPLETION AND ACCEPTANCE OF SAID LINES. EASEMENTS CONTAINING BOTH WATER AND SEWER SHALL BE FROM THE CENTER OF THE UTILITY TO OUTSIDE OF THE EASEMENT, WHILE MAINTAINING MINIMUM SEPARATION REQUIREMENTS AS LISTED IN AUD'S WATER AND SANITARY SEWER SYSTEMS-DESIGN STANDARDS, CONSTRUCTION SPECIFICATIONS, AND DETAILS.
- A RIGHT-OF-WAY ENCROACHMENT PERMIT SHALL BE OBTAINED FROM AED PRIOR TO COMMENCING ANY WORK WITHIN AN AUGUSTA, GEORGIA RIGHT-OF-WAY. THE UTILITIES
- ENCROACHMENT PERMIT MUST BE APPLIED FOR THROUGH AUD "A GEORGIA DOT RIGHT-OF-WAY ENCROACHMENT PERMIT MAY BI REQUIRED FOR WORK ON TEMPORARY OR PERMANENT STATE ROUTES. CONTACT AUD ENGINEERING DIVISION TO DETERMINE I A PERMIT IS REQUIRED. THE UTILITIES ENCROACHMENT PERMIT MUST BE APPLIED FOR THROUGH AUD. CONDITIONS OF THE PERMIT MUST BE COMPLIED WITH FULLY. THE PERMIT MUST BE IN HAND A MINIMUM 24 HOURS NOTICE GIVEN TO GDOT PRIOR TO BEGINNING ANY WORK IN THE GDOT RIGHT-OF-WAY."
- TRAFFIC CONTROL DEVICES SHALL MEET AND BE INSTALLED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALSO, A TRAFFIC CONTROL/DETOUR PLAN SHALL BE SUBMITTED TO THE CITY ENGINEER FOR APPROVAL AS NOTED IN THE AUGUSTARICHMOND COUNTY,
- GEORGIA-RIGHTS OF WAY ENCROACHMENT GUIDELINES. THE CONTRACTOR AND THE AUD REPRESENTATIVE SHALL HAVE A COPY OF THE AUGUSTARICHMOND COUNTY, GEORGIA-RIGHTS OF WAY ENCROACHMENT GUIDELINES DEVELOPMENT DOCUMENT #15, ADOPTED JUNE 1999, AMENDED AUGUST 2000, AMENDED JUNE 2021. THE REQUIREMENTS SET FORTH IN THIS DOCUMENT SHALL BE ADHERED TO AT ALL TIMES.
- CLEARING AND GRUBBING SHALL BE AT THE CONTRACTOR'S 20 DISCRETION, SUBJECT TO AUD APPROVAL, TO FACILITATE CONSTRUCTION.
- THE IMPLEMENTATION OF BEST MANAGEMENT PRACTICES (BMP'S) FOR EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA SHALL BE INSTALLED AND MAINTAINED AT ALL TIMES.



SCALE:

1" = 30'



MISCELLANEOUS PROFILES SCALE: 1"=30'



GEORGIA UNIFORM CODING SYSTEM FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Cd (Type)	CHECKDAM Cd-S (Stone) Cd-Hb (Haybale) Cd-L (Sediment Log)		J.	A SMALL TEMPORARY BARRIER DAM CONSTRUCTED ACCROSS A SWALE, DRAIN- AGE DITCH OR AREA OF CONCENTRATED FLOW.
Co (Size)	CONSTRUCTION EXIT		(LABEL)	A CRUSHED STONE PAD LOCATED AT THE CONSTRUCTION SITE EXIT TO PROVIDE A PLACE FOR REMOVING MUD FROM TIRES THEREBY PROTECTING PUBLIC STREETS.
Cr	ROAD CONSTRUCTION STABILIZATION		Cr	A TRAVELWAY CONSTRUCTED AS PART OF A CONSTRUCTION PLAN INCLUDING ACCESS ROADS, SUBDIVISION ROADS, PARKING AREAS AND OTHER ON-SITE VEHICLE TRANSPORTATION ROUTES.
Di	DIVERSION			AN EARTH CHANNEL WITH OR WITHOUT A SUPPORTING RIDGE ON THE LOWER SIDE LOCATED ABOVE, BELOW, OR ACROSS A SLOPE TO DIVERT RUNOFF. THIS MAY BE A TEMPORARY OR PERMANENT STRUCTURE.
Dn1	TEMPORARY DOWNDRAIN STRUCTURE		(LABEL)	A FLEXIBLE CONDUIT OF HEAVY-DUTY FABRIC OR OTHER MATERIAL DESIGNED TO SAFLEY CONDUCT SURFACE RUNOFF DOWN A SLOPE THIS IS TEMPORARY AND INEXPENSIVE.
Fr	FILTER RING		Fr	A TEMPORARY STONE BARRIER CONSTRUCT AT STORM DRAIN INLETS AND POND OUTLE
Lv	LEVEL SPREADER			A STRUCTURE TO CONVERT CONCENTRATED FLOW OF WATER INTO LESS EROSIVE SHEET FLOW. THIS SHOULD BE CONSTRUCTED ONLY ON UNDISTURBED SOILS.
Sd1	SEDIMENT BARRIER Sd1-NS (Non-Sensitive) Type "A" & Type "B" Silt Fences Sd1-S (Sensitive) Type "C" Silt Fence; Other Practices: Sd1-S Sandbags Sd1-B Haybales Sd1-Hb Haybales Sd1-Bb Brush Barrier Sd1-M Mulch		(INDICATE TYPE)	A BARRIER TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. IT MAY BE SANDBAGS, BALES OF STRAW OR HAY, BRUSH, LOGS AND POLES, GRAVEL, OR A SEDIMENT FENCE. THE BARRIERS ARE USUALLY TEMPORARY AND INEXPENSIVE.
Sd2	SEDIMENT TRAP, INLET Sd2-F Filter Fabric & Frame Sd2-B Baffle Box Sd2-GB Gravel Bags Inlet Protection Sd2-G Gravel Drop Inlet Protection Sd2-S Sod Inlet Protection Sd2-P Pigs-in-blanket Sd2-SS Silt Saver EXCAV. Excavated Inlet Sediment Trap			AN IMPOUNDING AREA CREATED BY EXCAVATING AROUND A STORM DRAIN DROP INLET. THE EXCAVATED AREA WILL BE FILLED AND STABILIZED ON COMPLETION OF CONSTRUCTION ACTIVITES.
Sd3	TEMPORARY SEDIMENT BASIN		Sd3 (LABEL)	A BASIN CREATED BY EXCAVATION OR A DAM ACROSS A WATERWAY. THE SURFACE WATER RUNOFF IS TEMPORARILY STORED ALLOWING THE BULK OF THE SEDIMENT TO DROP OUT.
Sd4	TEMPORARY SEDIMENT TRAP Sd4-A Overflow Sd4-B Straw Bale and Silt Fence Sd4-C Rock Outlet			A SMALL TEMPORARY POND THAT DRAINS A DISTURBED AREA SO THAT SEDİMENT CAN SETTLE OUT. THE PRINCIPLE FEATURE DISTINGUISHING A TEMPORARY SEDIMENT TRAP FROM A TEMPORARY SEDIMENT BASIN IS THE LACK OF A PIPE OR RISER.
St	STORM DRAIN OUTLET PROTECTION		St	A PAVED OR SHORT SECTION OF RIPRAP CHANNEL AT THE OUTLET OF A STORM DRAIN SYSTEM PREVENTING EROSION FROM THE CONCENTRATED RUNOFF.
Su	SURFACE ROUGHENING		Su-	A ROUGH SOIL SURFACE WITH HORIZONTAL DEPRESSIONS ON A CONTOUR OR SLOPES LEFT IN A ROUGHENED CONDITION AFTER GRADING.
(Size)	TOPSOILING		(SHOW STRIPING & STORAGE AREAS)	THE PRACTICE OF STRIPPING OFF THE MORE FERTILE TOP SOIL, STORING IT, THEN SPREADING IT OVER THE DISTURBED AREA AFTER THE COMPLETION OF CONSTRUCTION ACTIVITIES.
Tr	TREE PROTECTION	\bigcirc	(DENOTE TREE CENTERS)	TO PROTECT DESIRABLE TREES FROM INJURY DURING CONSTRUCTION ACTIVITY.

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STRUCTU

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Wt	VEGETATED WATERWAY OR STORMWATER CONVEYANCE CHANNEL		+	PAVED OR VEGETATIVE WATER OUTLETS FOR DIVERSIONS, TERRACES, BERMS, DIKES OR SIMILAR STRUCTURES.

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Bf (Dist.)	BUFFER ZONE		Bf (LABEL)	STRIP OF UNDISTURBED ORIGINAL VEGETATION, ENHANCED OR RESTORED EXISTING VEGETATION OR THE REESTABLISHMENT OF VEGETATION SURROUNDING AN AREA OF DISTURBANCE OR BORDERING STREAMS.
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)		Ds1	ESTABLISHING TEMPORARY PROTECTION FOR DISTURBED AREAS WHERE SEEDINGS MAY NOT HAVE A SUITABLE GROWING SEASON TO PRODUCE AN EROSION RETARDING COVER.
Ds2	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)		Ds2	ESTABLISHING A TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDINGS ON DISTURBED AREAS.
Ds3	DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)		Ds3	ESTABLISHING PERMANENT VEGETATIVE COVER SUCH AS TREES, SHRUBS, VINES, GRASSES, SOD, OR LEGUMES ON DISTURBED AREAS.
Ds4	DISTURBED AREA STABILIZATION (WITH SODDING)		Ds4	A PERMANENT VEGETATION USING SODS ON HIGHLY ERODIBLE OR CRITICALLY ERODED LANDS.
Du	DUST CONTROL ON DISTURBED AREAS		Du	CONTROLLING SURFACE AND AIR MOVEMENT DUST ON CONSTRUCTION SITES, ROADWAYS AND SIMILAR SITES.
Ss	SLOPE STABILIZATION		Ss	A PROTECTIVE COVERING USED TO PREVENT EROSION AND ESTABLISH TEMPORARY OR PERMANENT VEGETATION ON STEEP SLOPES, SHORE LINES, OR CHANNELS.

STANDARDS & SPECIFICATIONS:

CWM	CONCRETE WASTE MANAGEMENT	(INDICATE TYPE)	PREVENT OR REDUCE THE DISCHARGE OF POLLUTANTS TO STORMWATER FROM CONCRETE WASTE BY CONDUCTING WASHOUT OFFSITE, PERFORMING ONSITE WASHOUT IN A DESIGNATED AREA AND TRAINING EMPLOYEES AND SUBCONTRACTORS.
MDS	MATERIAL DELIVERY & STORAGE		PROCEDURES AND PRACTICES FOR THE PROPER HANDLING AND STORAGE OF MATERIALS IN A MANNER THAT MINIMIZES OR ELIMINATES THE DISCHARGE OF THESE MATERIALS TO THE STORM DRAIN SYSTEM OR TO WATERCOURSES.

STANDARDS & SPECIFICATIONS: ALL DESIGNS WILL CONFORM TO AND ALL WORK WILL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE "GREEN BOOK" ALSO KNOWN AS THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA", LATEST EDITION.

PROJECT

OWNER/PRIMARY AUGUSTA RIC POC: CHIEF A (706) 821-4230 ABURDEN@A

PROJECT ADDRES 2649 GORDO AUGUSTA, C

24-HOUR CONTACT WILLIAM BUG (706) 550-712

DISTURBED AREA: 2.10 ACRES

IMPERVIOUS AREA PRE-DEVELC POST-DEVEL

RECEIVING WATER TRIBUTARY

PROPERTY COORE 33.4424 ° N -82.1260° W

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IRAL	PRACTICES	

VEGETATIVE PRACTICES

ALL DESIGNS WILL CONFORM TO AND ALL WORK WILL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE "GREEN BOOK" ALSO KNOWN AS THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA", LATEST EDITION.

SUPPLEMENTAL PRACTICES

DATA

PERMITTEE/MS4 OPERATOR: RICHMOND COUNTY ANTONIO BURDEN 30 AUGUSTAGA.GOV
SS: ON HWY. GA 30909
CT FOR ESPC: JCHANAN 24
A:
A: OPED: 0.0 ACRES LOPED: 1.0 ACRES
R: TO BUTLER CREEK
RDINATES:

4

	ame: <u>FIF</u>	RE S	TATION #3 Address: 2649
City/Coun	ty: <u>AUG</u>	UST	A / RICHMOND Date on Plans: (
Name & e	mail of per	son	filling out checklist: <u>WILLIAM T. BUCHANAN</u> <u>WBUCHAN</u>
Plan Page #	Included Y/N		TO BE SHOWN ON ES
			The applicable Erosion, Sedimentation and Pollution Control Plan Checklist e
C-500	Y	1	in which the land-disturbing activity was permitted. (The completed Checklist not be reviewed. Permit IV.D.1. pg 27)
	v	2	Level II certification number issued by the Commission, signature and seal of
ALL DVVGS.	ř	2	issued to the Design Professional, after completion of a GSWCC approved or
N1/A		2	Limits of disturbance shall be less than 50 acres at any one time without prior GAEPD approves the request to disturb 50 acres or more at any one time, the
N/A		3	completed Appendix 1 of this checklist with at least 4 of the chosen BMP's.* (attached to the Plan for the Plan to be reviewed. Permit IV.D.3. pg 28
CG001 &	Y	4	The name and phone number of the 24-hour local contact responsible for erc
CG001 &	Y	5	Provide the name, address, email address , and phone number of Primary Po
CG001 &	Y	6	Note total and disturbed acreage of the project or phase under construction.
CG001 &	Y	7	Provide the GPS location of the construction exit for the site. Give the Latitud
ALL	Y	8	Initial date of the Plan and the dates of any revisions made to the Plan includ
C-509	Y	9	Description of the nature of construction activity and existing site conditions.
CG001	Y	10	Provide vicinity map showing site's relation to surrounding areas. Include des
CG001 & C-500	Y	11	Identify the project receiving waters and describe all sensitive adjacent areas marshlands, etc. which may be affected.
C-509	Y	12	Design professional's certification statement and signature that the site was v on Part IV page 20 of the permit.
C-509	Y	13	Design professional's certification statement and signature that the permittee'
			Clearly note the statement that "The design professional who prepared the E
CG001	Y	14	initial sediment storage requirements and perimeter control BMPs within 7 da 25 of the permit.*
			Clearly note the statement that "Non-exempt activities shall not be conducted
CG001	Y	15	measured from the point of wrested vegetation or within 25-feet of the coasta Determination Line without first acquiring the necessary variances and permit
N/A	N	16	Provide a description of any buffer encroachments and indicate whether a bu
CG001	Y	17	Clearly note the statement that "Amendments/revisions to the ES&PC Plan w component must be certified by the design professional."*
CG001	Y	18	Clearly note the statement that "Waste materials shall not be discharged to w
CG001	v	10	Clearly note statement that "The escape of sediment from the site shall be pr
0001	T	19	measures and practices prior to land disturbing activities." Clearly note statement that "Frosion control measures will be maintained at a
CG001	Y	20	not provide for effective erosion control, additional erosion and sediment cont sediment source."
CG001	v	21	Clearly note the statement "Any disturbed area left exposed for a period grea
	•	21	temporary seeding. Any construction activity which discharges storm water into an Biota Impaired
CG001 &	Y	22	within the same watershed as, any portion of an Biota Impaired Stream Segn
0.001			discharge to the Impaired Stream Segment.*
C-507	Y	23	If a TMDL Implementation Plan for sediment has been finalized for the Impair six months prior to submittal of NOI, the ES&PC Plan must address any site-
			Implementation Plan.*
C-505	Y	24	the drum at the construction site is prohibited.*
C-504	Y	25	Provide BMPs for the remediation of all petroleum spills and leaks.
C-507	Y	26	construction operations have been completed.*
C-507	Y	27	Description of practices to provide cover for building materials and building pr
C-507	Y	28	Description and chart or timeline of the intended sequence of major activities
C-506	Y	29	initial perimeter and sediment storage BMPs, clearing and grubbing activities. stabilization).
C-508	Y	30	Provide complete requirements of <u>Inspections</u> and record keeping by the Prir
C-508	Y	31	Provide complete requirements of <u>Sampling Frequency</u> and <u>Reporting</u> of sam
C-508	Y	32	Provide complete details for <u>Retention of Records</u> as per Part IV.F. of the per
C-508	Y	33	Appendix B rationale for NTU values at all outfall sampling points where appl
C-508	T V	34	Delineate all sampling locations, perennial and intermittent streams and other
C-503	•		A description of appropriate controls and measures that will be implemented
C-501 TO	Y	36	storage requirements and perimeter control BMPs, (2) intermediate grading a sites where there will be no mass grading and the initial sediment storage re
0-000			intermediate grading and drainage BMPs, and final BMPs are the same, the F
C-501 TO C-503	Y	37	Graphic scale and North arrow.
			Existing and proposed contour lines with contour lines drawn at an interval in Map Scale Ground Slope Contour Intervals ft
C-501 TO C-503	Y	38	1 inch = 100ft or Flat 0 - 2% 0.5 or 1
			Steep 8% + 2, 5 or 10
N/A	N	39	Use of alternative BMPs whose performance has been documented to be equiply a Design Professional (unless disapproved by EPD or the Georgia Soil an
	· ·		Alternative BMP Guidance Document found at www.gaswcc.georgia.gov.
N/A	N	40	in Georgia 2016 Edition.*
N/A		41	Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent t Local Issuing Authority. Clearly note and delineate all areas of impact.
N/A	N	42	Delineation of on-site wetlands and all state waters located on and within 200
H&H RPT.	Y	43	Delineation and acreage of contributing drainage basins on the project site.
H&H RPT.	Y	44	Provide nydrology study and maps of drainage basins for both the pre- and p An estimate of the runoff coefficient or neak discharge flow of the site prior to
?	?	45	farm projects, post-construction impervious area shall be calculated as 70%
?	?	46	Storm-drain pipe and weir velocities with appropriate outlet protection to according all storm water discharge points.
C-509	Y	47	Soil series for the project site and their delineation.
0-505	Y	48	The limits of disturbance for each phase of construction.
C-501 TO C-503			Provide a minimum of 67 cubic yards of sediment storage per acre drained u pond, and/or excavated inlet sediment traps for each common drainage locat
C-501 TO C-503			and during all land disturbance activities until final stabilization of the site has
C-501 TO C-503			decision to use equivalent controls when a sediment basin is not attainable t
C-503 C-501 TO C-503 ?	?	49	decision to use equivalent controls when a sediment basin is not attainable r location in which a sediment basin is not provided. A written justification as to be given. Workshoots from the Manuel institute of for starting in 19112
C-503 C-501 TO C-503 ?	?	49	decision to use equivalent controls when a sediment basin is not attainable r location in which a sediment basin is not provided. A written justification as to be given. Worksheets from the Manual included for structural BMPs and all obtain the required sediment when using equivalent controls. When discharg
C-501 TO C-503 ?	?	49	decision to use equivalent controls when a sediment basin is not attainable is location in which a sediment basin is not provided. A written justification as to be given. Worksheets from the Manual included for structural BMPs and all obtain the required sediment when using equivalent controls. When discharg are required to utilize outlet structures that withdraw water from the surface, from the surface are not feasible, a written justification explaining this decision
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C-501 TO C-503 ? C-501 TO C-503 C-504 TO C-506 C-501 TO C-503, L-101	? Y Y Y	49 50 51 52	decision to use equivalent controls when a sediment basin is not attainable i location in which a sediment basin is not provided. A written justification as to be given. Worksheets from the Manual included for structural BMPs and all o obtain the required sediment when using equivalent controls. When discharg are required to utilize outlet structures that withdraw water from the surface, if from the surface are not feasible, a written justification explaining this decision Location of Best Management Practices that are consistent with and no less Control in Georgia. Use uniform coding symbols from the Manual Chapter 6, Provide detailed drawings for all structural practices. Specifications must, at for Erosion and Sediment Control in Georgia. Provide vegetative plan, noting all temporary and permanent vegetative prace fertilizer, lime and mulching rates. Vegetative plan shall be site specific for a for the appropriate geographic region of Georgia. *If using this checklist for a project that is less than 1 acre and not part of a co- stream the * checklist items would be N/A.

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Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following: <u>Map Scale</u> <u>1 inch = 100ft or</u> <u>Iarger scale</u> <u>1 larger scale</u> <u>1 larger scale</u> <u>Sciep 8%</u> + 2, 5 or 10 38 Use of alternative BMPs whose performance has been documented to be equivalent to or superior to conventional by a Design Professional (unless disapproved by EPD or the Georgia Soil and Water Conservation Commission). Alternative BMP Guidance Document found at www.gaswcc.georgia.gov. 40 Use of alternative BMP for application to the Equivalent BMP List. Refer to Appendix A-2 of the Manual for Erosion in Georgia 2016 Edition.* 41 Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to state waters and any additional buffer Local Issuing Authority. Clearly note and delineate all areas of impact. 42 Delineation of on-site wetlands and all state waters located on and within 200 feet of the project site. 43 Delineation and acreage of contributing drainage basins for both the pre- and post-developed conditions.* 44 Provide hydrology study and maps of drainage basins for both the site prior to and after construction activities are or farm projects, post-construction impervious area shall be calculated as 70% of total solar panel square footage. 45 Soil series for the project site and their delineation. 46 The limits of disturbance for each	ntrol BMP's, into a single phase.*
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be given. Worksheets from the Manual included for structural BMPs and all calculations used by thestorage design obtain the required sediment when using equivalent controls. When discharging from sediment basins and impound are required to utilize outlet structures that withdraw water from the surface, unloss infeasible. If suffect structures that	ch common drainage not attainable must also sign professional to pundments, permittees s that withdraw water
from the surface are not feasible, a written justification explaining this decision must be included in the Plan.	on and Sediment
 ⁵⁰ Control in Georgia. Use uniform coding symbols from the Manual Chapter 6, with legend. ⁵¹ Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set for Erosion and Sediment Control in Georgia. 	et forth in the Manual
 Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of the year that seeding 	ites and seeding, ding will take place and
for the appropriate geographic region of Georgia. *If using this checklist for a project that is less than 1 acre and not part of a common development but within 200 ft stream the * checklist items would be N/A.) ft of a perennial fective January 1. 2025

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WILLIAM T. BUCHANAN Level II Certified Design Professional

Certification Number ____0000065516

ISSUED: 1/25/2021 Expires: 1/25/2027





EROSION, SEDIMENTATION **& POLLUTION CONTROL** LEGEND



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SEDIMENT BARRIER Sd1-S, Type "C"

SEDIMENT BARRIER Sd2-F

DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)

DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)

DUST CONTROL ON DISTURBED AREA

SAMPLING LOCATION

LOD LIMITS OF DISTURBANCE





C-502 ISSUED FOR BID / PERMIT

1" = 30'

SCALE:

SCALE: 1" = 30'

AWING NO









1" = 30'

3042.2403

CRE WTB

04/03/2024

FINAL

STABILIZATION

SITE CONSTRUCTION POLLUTION NOTES

- 1. CONSTRUCTION WASTES INCLUDES DEMOLITION RUBBLE PACKAGING MATERIALS, SCRAP BUILDING SUPPLIES, ETC. CONTRACTOR SHALL SELECT A DESIGNATED WASTE COLLECTION AREA AND PROVIDE IDS FOR WASTE CONTAINERS. CONSTRUCTION WASTES SHALL BE REMOVED ON A CONSISTENT SCHEDULE.
- 2. PESTICIDES SHALL BE STORED IN A DRY, COVERED AREA CONTRACTOR SHALL PROVIDE CURBS, DIKES, OR BERMS SURROUNDING STORAGE AREAS. APPLICATION RATES SHALL **BE FOLLOWED STRICTLY.**
- 3. FERTILIZER AND DETERGENT APPLICATIONS ARE TO BE LIMITED TO THE MINIMUM NEEDED. CONTRACTOR SHALL NOT DISCHARGE WASH WATER INTO THE STORM WATER SYSTEM.
- 4. PETROLEUM PRODUCTS INCLUDE OIL, GASOLINE, LUBRICANTS, AND ASPHALTIC SUBSTANCES AND SHALL BE STORED IN COVERED AREAS PROTECTED BY DIKES. CONTRACTOR SHALL HAVE EQUIPMENT TO CONTAIN AND CLEAN UP PETROLEUM SPILLS IN FUEL STORAGE AREAS OR MAINTENANCE AND FUELING VEHICLES.
- 5. SANITARY AND SEPTIC WASTES INCLUDE ON-SITE SANITARY FACILITIES. LOCATION OF THESE FACILITIES SHALL BE OUT OF HIGH FLOW AREAS. REGULAR SERVICING BY A QUALIFIED DOMESTIC WASTE HAULER IS REQUIRED. PROPOSED SANITARY SEWER WILL TIE INTO AN EXISTING COUNTY SYSTEM.
- 6. CONTRACTOR SHALL STORE AND HANDLE MATERIALS TO PREVENT SPILLS. IF A SPILL OCCURS, CONTACT TO STORM WATER SHALL BE MINIMIZED.
- 7. PRIOR TO MOBILIZATION, THE CONTRACTOR SHALL SUBMIT PROPOSED LOCATIONS OF ANY POTENTIAL POLLUTANT TO THE ENGINEER FOR APPROVAL.
- 8. WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.

SITE MAINTENANCE NOTES:

- 1. THE DESIGN PROFESSIONAL WHO PREPARED E.S. & P.C. PLAN SHALL INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMP'S WITHIN 7 DAYS AFTER INSTALLATION.
- 2. ANY AMENDMENTS AND/OR REVISIONS TO THE E.S. & P.C. PLANS WHICH WILL HAVE A SIGNIFICANT EFFECT ON BMP'S WITH HYDRAULIC COMPONENTS MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.
- 3. WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.
- 4. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH LAND-DISTURBING ACTIVITIES.
- 5. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT SEDIMENT SOURCE.
- 6. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
- 7. DEVELOPERS AND/OR CONTRACTORS ARE RESPONSIBLE TO REMOVE OR CLEAN OUT ANY SILT, DIRT, MUD OR ANY OTHER TYPE OF DEBRIS THAT COMES OFF THEIR SITE AND FINDS ITS WAY INTO A PRIVATE POND, ONTO PRIVATE PROPERTY, INTO A COUNTY OWNED POND OR COUNTY OWNED PROPERTY TO INCLUDE RIGHTS-OF-WAY.
- 8. THE CONTRACTOR SHALL COMPLY WITH THE "GEORGIA MANUAL FOR ON-SITE SEWAGE MANAGEMENT SYSTEMS" FOR WASTE DISPOSAL, SANITARY SEWER AND/OR SEPTIC TANK INCLUDING ALL TEMPORARY MEASURES DURING CONSTRUCTION AND AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.

FUGITIVE DUST CONTROL NOTES

GA. RULE [391-3-1-.02] - (N) - FUGITIVE DUST CONTROL

1. ALL PERSONS RESPONSIBLE FOR ANY OPERATION, PROCESS, HANDLING, TRANSPORTATION OR STORAGE FACILITY WHICH MAY RESULT IN FUGITIVE DUST SHALL TAKE ALL REASONABLE PRECAUTIONS TO PREVENT SUCH DUST FROM BECOMING AIRBORNE. SOME REASONABLE PRECAUTIONS WHICH COULD BE TAKEN TO PREVENT DUST FROM BECOMING AIRBORNE INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:

(I) USE, WHERE POSSIBLE, OF WATER OR CHEMICALS FOR CONTROL OF DUST IN THE DEMOLITION OF EXISTING BUILDINGS OR STRUCTURES, CONSTRUCTION OPERATIONS, THE GRADING OF ROADS OR THE CLEARING OF LAND;

II)APPLICATION OF ASPHALT, OIL, WATER, OR SUITABLE CHEMICALS ON DIRT ROADS, MATERIALS, STOCKPILES, AND OTHER SURFACES WHICH CAN GIVE RISE TO AIRBORNE DUSTS;

- (III) INSTALLATION AND USE OF HOODS, FANS, AND FABRIC FILTERS TO ENCLOSE AND VENT THE HANDLING OF DUSTY MATERIALS. ADEQUATE CONTAINMENT METHODS CAN BE EMPLOYED DURING
- SANDBLASTING OR OTHER SIMILAR OPERATIONS; (IV) COVERING, AT ALL TIMES WHEN IN MOTION, OPEN BODIED TRUCKS, TRANSPORTING MATERIALS LIKELY TO GIVE RISE TO AIRBORNE DUSTS;
- (V) THE PROMPT REMOVAL OF EARTH OR OTHER MATERIAL FROM PAVED STREETS ONTO WHICH EARTH OR OTHER MATERIAL HAS BEEN DEPOSITED.
- 2. THE PERCENT OPACITY FROM ANY FUGITIVE DUST SOURCE LISTED IN PARAGRAPH (2)(N)1. ABOVE SHALL NOT EQUAL OR EXCEED 20 PERCENT.

LAND GRADING FOR MINIMIZING EROSION

- 1. ONLY DISTURB, CLEAR, OR GRADE AREAS NECESSARY FOR CONSTRUCTION. FLAG OR OTHERWISE DELINEATE AREAS NOT TO BE DISTURBED. EXCLUDE VEHICLES AND CONSTRUCTION EQUIPMENT FROM THESE AREAS TO PRESERVE
- 2. ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN UNTIL THEY ARE PERMANENTLY STABILIZED.
- ALL SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND 3 MAINTAINED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND ACCORDING TO THE STANDARDS AND SPECIFICATIONS FOR THE APPROPRIATE EROSION CONTROL PRACTICES.
- IF TOPSOIL IS REQUIRED FOR THE ESTABLISHMENT OF VEGETATION, IT SHALL BE STOCKPILED IN THE AMOUNT NECESSARY TO COMPLETE FINISHED GRADING AND PROTECTED FROM EROSION DURING THE INTERIM.
- AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL, AND STRIPPED OF TOPSOIL.
- AREAS TO RECEIVE TOPSOIL SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 INCHES (76 MM) PRIOR TO PLACEMENT OF TOPSOIL.
- 7. ALL FILLS SHALL BE COMPACTED AS REQUIRED BY BUILDING STANDARDS TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE AND OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES, CONDUITS, ETC., SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
- 8. THE OUTER FACE OF THE FILL SLOPE SHOULD BE ALLOWED TO STAY LOOSE, NOT ROLLED, COMPACTED, OR BLADED SMOOTH. A BULLDOZER MAY RUN UP AND DOWN THE FILL SLOPE SO THE DOZER TREADS (CLEAT TRACKS) CREATE GROOVES PERPENDICULAR TO THE SLOPE. IF THE SOIL IS NOT TOO MOIST, EXCESSIVE COMPACTION WILL NOT OCCUR.
- 9. ALL FILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED 8 INCHES (0.2 M) PER LIFT.
- 10. USE SLOPE BREAKS, SUCH AS DIVERSIONS, BENCHES, OR CONTOUR FURROWS AS APPROPRIATE, TO REDUCE THE LENGTH OF CUT-AND-FILL SLOPES TO LIMIT SHEET AND RILL EROSION AND PREVENT GULLY EROSION.
- 11. THE FINISHED CUT-AND-FILL SLOPES, WHICH ARE TO BE VEGETATED WITH GRASS AND LEGUMES, SHOULD NOT BE STEEPER THAN 2:1.
- 12. SLOPES TO BE MAINTAINED BY TRACTOR OR OTHER EQUIPMENT SHOULD NOT BE STEEPER THAN 3:1.
- 13. SLOPES IN EXCESS OF 2:1 MAY REQUIRE HYDROSEEDING, HYDROMULCHING, TACTIFYING, AND/OR "PUNCHING-IN" STRAW, BIOENGINEERING TECHNIQUES, OR RETAINING WALLS.
- 14. ROUGHEN THE SURFACE OF ALL SLOPES DURING THE CONSTRUCTION OPERATION TO RETAIN WATER, INCREASE INFILTRATION, AND FACILITATE VEGETATION ESTABLISHMENT.
- 15. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH APPROVED METHODS.
- 16. STABILIZE ALL GRADED AREAS WITH VEGETATION, CRUSHED STONE, RIPRAP, OR OTHER GROUND COVER AS SOON AS GRADING IS COMPLETED OR IF WORK IS INTERRUPTED FOR 21 WORKING DAYS OR MORE.
- 17. USE MULCH TO STABILIZE AREAS TEMPORARILY WHERE FINAL GRADING MUST BE DELAYED.
- 18. STOCKPILES, BORROW AREAS AND SPOIL AREAS SHALL BE SHOWN ON THE PLANS AND SHALL BE STABILIZED TO PREVENT EROSION AND SEDIMENTATION.

SPILL RESPONSE PLAN

THE GOAL OF THE SPILL RESPONSE PLAN IS TO REDUCE SAFETY, HEALTH, AND ENVIRONMENTAL RISKS ASSOCIATED WITH A HAZARDOUS SUBSTANCE INCIDENT IN THE EVENT OF A SPILL, THE FOLLOWING ACTIONS SHOULD BE IMPLEMENTED: 1. SECURE AND EVACUATE THE AREA - KEEP UNAUTHORIZED PERSONS OUT

- OF THE AREA.
- REPORT THE SPILL -2.
- ALL SPILLS >5 GALLONS MUST BE IMMEDIATELY REPORTED TO THE FIRE DEPARTMENT AT 911.
- SPILLS THAT ARE ≤5 GALLONS MUST BE REPORTED IF THE SPILL ENTERS A Β. STORM DRAIN, CREEK, LAKE, OR OTHER BODY OF WATER, OR CANNOT BE SAFELY CONTAINED AND CLEANED UP BY ORGANIZATION PERSONNEL. PROVIDE ANY PERTINENT INFORMATION, INCLUDING:
- a. SUBSTANCE SPILLED
- LOCATION OF SPILL b.
- NATURE AND EXTENT OF INJURIES
- d. EXTENT TO WHICH SPILL TRAVELED
- ESTIMATED AMOUNT SPILLED e. f. TIME SPILL OCCURRED
- PROTECT YOURSELF EXTINGUISH SMOKING MATERIAL AND IGNITION SOURCES. IDENTIFY THE SUBSTANCE SPILLED AND OBTAIN APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT, SUCH AS:
- a. PROTECTIVE GOGGLES
- b. PROTECTIVE APRON
- RUBBER OVERBOOTS d. COMPATIBLE RUBBER GLOVES
- RESPIRATORS
- 4. STOP THE FLOW STOP OR SLOW FLOW OF HAZARDOUS SUBSTANCE IF IT CAN BE DONE SAFELY.
- a. PLUG OR PATCH PUNCTURED CONTAINER(S)
- b. UPRIGHT OVERTURNED OR TIPPED CONTAINER(S)
- CLOSE APPROPRIATE VALVE(S) 5. CONTAIN THE SPILL - THE SPILLED SUBSTANCE SHOULD BE CONTAINED WITHIN THE IMMEDIATE AREA. PREVENT FLOW TODRAINS, DRAINAGE DITCHES, AND SEWER SYSTEMS IF IT CAN BE DONE SAFELY.
- a. PLACE NONREACTIVE ABSORBENT MATERIAL SUCH AS SAND, EARTH, STRAW, VERMICULITE, ABSORBENT PILLOWS OR BOOMS ON THE SPILL.
- b. BLOCK THE SPILL FROM ENTERING STORM DRAINS OR SEWERS BY CONSTRUCTING A DIKE AROUND ALL POINTS OF ENTRY.
- c. IF THE SPILL IS ON THE GROUND, CLEAN IT UP IMMEDIATELY BY DIGGING UP THE CONTAMINATED SOIL, PLACING IT IN PROPER CONTAINERS, AND DISPOSING OF IT PROPERLY.

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CAPABLE OF ACCESSING ALL WORK AREAS. 4. THE CONTRACTOR SHALL IMPLEMENT STRICT DUST CONTROL MEASURES DURING ACTIVE CONSTRUCTION PERIODS ON-SITE. THESE CONTROL MEASURES WILL GENERALLY CONSIST OF WATER APPLICATIONS THAT SHALL BE APPLIED A MINIMUM OF ONCE PER DAY DURING DRY WEATHER OR MORE OFTEN AS REQUIRED TO PREVENT DUST EMISSIONS.

5. FOR WATER APPLICATION TO UNDISTURBED OIL SURFACES, THE CONTRACTOR SHALL:

DUST CONTROL BY IRRIGATION

1. THE CONTRACTOR SHALL CONDUCT OPERATIONS AND MAINTAIN

THE PROJECT SITE SO AS TO MINIMIZE THE CREATION AND

DISPERSION OF DUST. DUST CONTROL SHALL BE USED

2. THE CONTRACTOR MUST PROVIDE CLEAN WATER, FREE FROM

3. THE CONTRACTOR SHALL SUPPLY WATER SPRAYING EQUIPMENT

SALT, OIL AND OTHER DELETERIOUS MATERIALS TO BE USED FOR

THROUGHOUT THE WORK AT THE SITE.

ON-SITE DUST CONTROL.

A. APPLY WATER WITH EQUIPMENT CONSISTING OF TANK, SPRAY BAR, PUMP DISCHARGE PRESSURE GAUGE.

- B. ARRANGE SPRAY BAR HEIGHT, NOZZLE SPACING AND SPRAY PATTERN TO PROVIDE COMPLETE COVERAGE OF GROUND
- WATER C. DISPERSE WATER THROUGH NOZZLES ON SPRAY BAR AT 20 PSI MINIMUM, KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING.
- 6. FOR WATER APPLICATION TO SOIL SURFACES DURING DEMOLITION AND/OR EXCAVATION, THE CONTRACTOR SHALL:
- A. APPLY WATER WITH EQUIPMENT CONSISTING OF A TANK, PUMP WITH DISCHARGE GAUGE, HOSES AND MIST NOZZLES.
- B. LOCATE TANK AND SPRAYING EQUIPMENT SO THAT THE ENTIRE EXCAVATION AREA CAN BE MISTED WITHOUT INTERFERING WITH DEMOLITION AND/OR EXCAVATION EQUIPMENT OR OPERATIONS. C. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS
- SUCH AS PONDING. D. APPLY WATER SPRAY IN A MANNER TO PREVENT MOVEMENT OF SPRAY BEYOND CONSTRUCTION BOUNDARIES.
- 7. CONTRACTOR SHALL REFER TO "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" LATEST EDITION FOR ADDITIONAL INFORMATION ON TEMPORARY AND PERMANENT DUST CONTROL BMP'S.



- . AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS. 2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
- 3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
- 4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6". 5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
- 6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2% ...
- 7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES. 8. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).
- 9. WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL SUITABLE FOR TRUCK TRAFFIC THAT REMOVE MUD AND DIRT.
- 10.MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

CRUSHED STONE CONSTRUCTION EXIT NO SCALE



30" MIN.

18" MIN.

30" MINK

SIDE VIEW

FRONT VIEW

6' MAX. O.C.

4' MAX. O.C.

FABRIC

(Sd1-NS)

(Sd1-S

TRENCH



ISSUED FOR BID / PERMIT

Species

Barlev

riticale

Ryegrass, Annual

Rye Grain (alone)

Rye Grain (in mixtures)

Lespedeza, Annual

Weeping Lovegrass

Types of Species

Cool season grasses

Cool season grasses &

Temporary cover crops

Warm season grasses

egumes

seeded alone

. Reduce seeding rates by 50% when drilled.

. Unusual site conditions may require heavier seeding rates.

Sudangrass

Millet, Pearl

Vheat

Millet. Browntop

Plants, Planting Rates, And Planting Dates For Temporary Cover Or Companion Crops

Rates per

3 bu. 4 bu.

3 bu.

40 lbs.

3.0 bu.

0.5 bu.

40 lbs.

4 lbs.

60 lbs.

40 lbs.

50 lbs.

3 bu.

Planting Year

Second

First

Second

First

First

C represents the Southern Coastal Plain; Sand Hills; Black Lands; and Atlantic Coast Flatwoods MLRAs

Second

Maintenance

M-L represents the Mountain; Blue Ridge; and Ridges and Valleys MLRAs

P represents the Southern Piedmont Region MLRA

Ds2

Maintenance

Maintenance

Seeding rates may need to be altered to fit temperature variations and local conditions.

Temporary cover crops are very competitive and will crown out perennials if seeded too heavily.

Acre

Rates per

1,000 sq. ft.

3.3 lb.

2.9 lbs.

3.3 lbs.

0.9 lb.

3.9 lb.

0.6 lb.

0.9 lb.

0.1 lb.

1.4 lb.

0.9 lbs.

1.1 lbs.

4.1 lbs.

Fertilizer Requirements for Temporary Vegetation

Fertilizer

(N-P-K)

6-12-12

6-12-12

10-10-10

6-12-12

0-10-10

10/10/10

6-12-12

6-12-12

10-10-10

TEMPORARY GRASSING

0-10-10

Planting Dates by Region

8/15-11/15 8/15-12/15

Р

9/1-11/30

8/1-4/15

8/15-12/31

8/15-12/31

2/15-4/30

3/15-6/15

4/1-8/31

4/1-7/15

4/15-8/31

9/1-12/31

9/1-12/31

4/1-8/31

9/15-1/31

N Top Dressing

Rate (lbs./acre)

50-100

30

0-50

30

50-100

50-100

30

M-L

9/1-11/30

8/1-4/30

7/15-11/30

7/15-11/30

2/1-4/30

3/15-6/15

4/1-8/31

4/1-6/30

5/1-7/31

9/1-12/31

Rate

(lbs./acre)

1500

1000

400

1500

1000

400

500

1500

800

400

1. ALL SEEDED AREAS WILL BE MULCHED WITH HAY OR STRAW AT A

GRASSING IS OBTAINED AND WEEDS ARE NOT DOMINANT.

RATE OF 2-2 1/2 TONS PER ACRE WITHIN 24 HRS. AFTER SEEDING.

USE OF A TACKIFIER IS REQUIRED ON ALL SLOPES EXCEEDING 3:1.

GRASSING WILL BE ACCEPTED WHEN A 95% COVER BY PERMANENT

GRASSING OF DISTURBED AREAS WILL COMMENCE AT COMPLETION

OF EACH PHASE OF CONSTRUCTION OR IN THE SEQUENCE AS IN-DICATED. IN ANY CASE, GRASSING OF ANY DISTURBED AREA WILL

|--|

Species	Rate	Rates per	Planti	ing Dates by Reo	gion	Remarks
Species	Acre	1,000 sq. ft.	M-L	Р	С	
Bermuda, Common (Hulled seed) Alone With Perennials	10 lbs. 6 lbs.	0.2 lb. 0.1 lb.		3/1-6/30	2/15-6/30	Quick cover; low growing; sod forming; needs full sun.
Bermuda, Common (Unhulled seed) With temporary cover With other perennials	10 lbs. 6 lbs.	0.2 lb. 0.1 lb.		10/1-2/28	11/1-1/31	Plant with Winter annuals.
Bermuda Sprigs With temporary cover	40cu.ft.	0.9cu.ft.	3/15-7/15	3/15-7/31	1/1-12/31	1 cu. ft. = 650 sprigs;

Fertilizer Re	equirements for Perm					
Types of Species	Planting Year	Fertilizer (N-P-K)	Rate (lbs./acre)	N Top Dressing Rate (Ibs./acre)		
Cool season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 1000 400	50-100 30		
Cool season grasses & legumes	First Second Maintenance	6-12-12 0-10-10 0-10-10	1500 1000 400	0-50 		
Ground covers	First Second Maintenance	10-10-10 10-10-10 10-10-10	1300 1300 1100		* APPLY AGRICULTURAL L PRESCRIBED BY SOIL TES RATE OF 1 TO 2 TONS PEF	ME AS TS OR AT A
Pine seedlings	First	20-10-5	one 21-gram pellet per seedling placed in the closing hole			
Shrub Lespedeza	First Maintenance	0-10-10	700		Material	Depth
	Maintenance				Dry Straw Or Hay	2" To 4"
Temporary cover crops seeded alone	First	10-10-10	500	30	Wood Waste (sawdust, Bark, Chips)	2" To 3"
Warm season grasses	First Second	6-12-12 6-12-12	1500 800	50-100 50-100	Cutback Asphalt (slow Curing)	1200 Gal./acre (1/4 Gal./sq.yd.)
Warm season grasses & legumes	Maintenance First Second Maintenance	10-10-10 6-12-12 0-10-10 0-10-10	400 1500 1000 400	<u> </u>	Black Polyethylene Film	Completely Cover Area; Hold In Place With Soil On Outer Edge

PERMANENT GRASSING Ds3

- RUNOFF. 5.
- PERMANENT GRASSING SHALL BE IRRIGATED AND MAINTAINED. 6. 4 TO 6 INCHES OF TOP GROWTH.

10' MIN.

TARGETED POLLUTANTS: CONCRETE WASTE

CONSTRUCTION GUIDELINES:

- 1. AVOID MIXING EXCESS AMOUNTS OF FRESH CONCRETE OR CEMENT ON SITE.
- 2. PERFORM WASHOUT OF CONCRETE TRUCKS OFF SITE OR IN DESIGNATED AREAS ONLY.
- 3. DO NOT WASH OUT CONCRETE TRUCKS INTO STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS.
- 4. AVOID DUMPING EXCESS CONCRETE IN NON-DESIGNATED DUMPING AREAS.

FOR ON-SITE WASHOUT:

- 1. LOCATE WASHOUT AREA AT LEAST 50 FT FROM STORM DRAINS, OPEN DITCHES, OR WATER BODIES. CONSTRUCT A TEMPORARY PIT OR BERMED/DIKED AREA WITH A PAVED OR GRAVEL APPROACH TO CAPTURE LIQUID AND SOLID WASTE.
- 2. WASH OUT WASTES INTO THE TEMPORARY PIT WHERE THE CONCRETE CAN SET BE BROKEN UP, AND THEN DISPOSED OF PROPERLY.
- 3. WHEN WASHING CONCRETE TO REMOVE FINE PARTICLES AND EXPOSE THE AGGREGATE, DRAIN THE WATER TO A BERMED, DIKED OR LEVEL AREA.
- 4. AVOID WASHING SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE INTO THE STREET OR STORM DRAIN. COLLECT AND RETURN SWEEPINGS TO AGGREGATE BASE STOCKPILE OR DISPOSE IN THE TRASH.
- 5. TRAIN EMPLOYEES AND SUBCONTRACTORS IN PROPER CONCRETE WASTE MANAGEMENT.

MAINTENANCE

- INSPECT SUBCONTRACTORS TO ENSURE THAT CONCRETE WASTES ARE BEING 1. PROPERLY MANAGED. TEMPORARY WASHOUT FACILITIES MUST BE CLEANED, OR NEW FACILITY MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL.
- 2. IF USING A TEMPORARY PIT, DISPOSE HARDENED CONCRETE ON A REGULAR BASIS. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT SHALL BE BACKFILLED AND REPAIRED.

- NO SCALE NOTES: 1. CONTRACTOR MUST PROVIDE A DESIGNATED AREA FOR CONCRETE WASHDOWN OF TOOLS, CONCRETE MIXER CHUTES, AND THE REAR OF THE VEHICLES. THIS AREA MUST
- HAVE A CONCRETE WASHOUT FACILITY AND SHALL BE CONSTRUCTED PER THE DETAIL SHOWN ABOVE.
- STORM DRAINS, OPEN DITCHES, OR WATER BODIES.
- 3. WASHOUT DISCHARGE FROM THE CLEANING OF CONCRETE TRUCKS, TOOLS AND OTHER
- 4. IT IS PROHIBITED TO WASH OUT THE MIXING DRUM OF CONCRETE TRUCKS ON-SITE.
- 5. ACTUAL LAYOUT CAN BE DETERMINED IN FIELD OR AS-SHOWN IN PLAN. 6. CONCRETE WASHOUT SIGN SHALL BE PROVIDED WITHIN 30' OF THE CONCRETE WASHOUT FACILITY.

CONCRETE WASTE MANAGEMENT CWM

NO SCALE

2

4. IRRIGATION WILL BE APPLIED AT A RATE THAT WILL NOT CAUSE

TOPDRESSING WILL BE APPLIED ON ALL TEMPORARY & PERMANENT SPECIES PLANTED ALONE OR IN MIXTURES WITH OTHER SPECIES. BERMUDA GRASS MAY BE MOWED AS DESIRED MAINTAINING AT LEAST

"ABOVE GRADE" TYPE

THE CONCRETE WASHOUT FACILITY SHALL BE LOCATED AT A MINIMUM OF 50 FEET FROM

EQUIPMENT SHALL BE TRANSPORTED OFF-SITE AND DISPOSED OF PROPERLY.

MULCHING Ds1

> 6" COMPACTED GRADED AGGREGATE COMPACTED TO 95% MAX. DRY DENSITY, MODIFIED PROCTOR. 62831 62831 62831 62831 62831 62831 62 MON-WOVEN FABRIC SEE "PAVEMENT DETAIL"

TOP 8" OF SUBGRADE TO BE DISC-HARROWED & COMPACTED TO 95% MAX. DRY DENSITY, MODIFIED PROCTOR

Table 6-6.1. Fertilizer Requirements forSoil Surface Application						
Fertilizer Type	Fertilizer Rate (Ibs/acre)	Fertilizer Rate (Ibs/sq ft)	Season			
10-10-10	1000	.025	Fall			

Table 6-6.3 Fertilizer Requirements for Sod							
Types of Species	Planting Year	Fertilizer (N-P-K)	Rate (Ibs./acre)	Nitrogen Top Dressing Rate (Ibs./acre)			
cool	first	6-12-12	1500	50-100			
season	second	6-12-12	1000	-			
grasses	maintenance	10-10-10	400	30			
warm	first	6-12-12	1500	50-100			
season	second	6-12-12	800	50-100			
grasses	maintenance	10-10-10	400	30			

Step

7

Table 6-6.2 Sod Planting Requirements Resource | Growing Grass Varieties Area Seaso Common M-L,P,C Tifway P,C warm Bermudagrass Tifgreen P,C weather P,C Tiflawn warm P,C Bahiagrass Pensacola weather warm P,C Centipede weather Commoi warm St. Augustine Bitterblue С weather Raleigh Emerald warm P,C Zoysia Myer weather cool Tall Fescue Kentucky M-L,P weather

SOD LAYOUT AND PREPARATION

LAY SOD IN A STAGGERED PATTERN. BUTT THE STRIPS TIGHTLY AGAINST EACH OTHER. DO NOT LEAVE SPACES AND DO NOT OVERLAP. A SHARPENED MASON'S TROWEL IS A HANDY TOOL FOR TUCKING DOWN THE ENDS AND TRIMMING PIECES.

BUTTING: ANGLED ENDS CAUSED BY THE AUTOMATIC SOD CUTTER MUST BE MATCHED CORRECTLY.

DIRECTIONS FOR INITIAL MAINTENANCE

ROLL SOD IMMEDIATELY TO ACHIEVE FIRM CONTACT WITH THE SOIL

 \bigcirc water to a depth of 4" as needed. Water well as soon as the sod

∠ MOW WHEN THE SOD IS ESTABLISHED -- IN 2-3 WEEKS. SET THE MOWER , HIGH (2"−3").

APPEARANCE OF GOOD SOD

SHOOTS OR GRASS BLADES: GRASS SHOULD BE GREEN AND HEALTHY, MOWED AT A 2"-3" CUTTING HEIGHT.

THATCH: GRASS CLIPPINGS AND DEAD LEAVES (UP TO 1/2" THICK).

ROOT ZONE: SOIL AND ROOTS. - SHOULD BE 1/2"-3/4" THICK WITH DENSE ROOT MAT FOR STRENGTH.

WILLIAM T. BUCHANAN

Level II Certified Design Professional

Certification Number 0000065516

ISSUED: <u>1/25/2021</u> EXPIRES: <u>1/25/2027</u>

SOD MAINTENANCE AND INSTALLATION

PERMANENT GRASSING - SOD

NO SCALE

C-505 **ISSUED FOR BID / PERMIT**

AS NOTED

SCALE:

RAWING NO.

FLEX FILTER INLET SEDIMENT TRAP (PERMANENT) Sd2-F NO SCALE

CONSTRUCTION SCHEDULE

CONSTRUCTION SPECIFICATIONS

-SHAPE THE BASIN AS SHOWN ON DRAWINGS. PREVENT THE SKIMMING DEVICE FROM SETTLING INTO THE MUD BY PROVIDING A LOW SUPPORT UNDER THE SKIMMER OF STONE OR TIMBER.

-ASSEMBLE THE SKIMMER ACCORDING TO MANUFACTURER'S INSTRUCTIONS,

-LAY THE ASSEMBLED SKIMMER ON THE BOTTOM OF THE BASIN WITH THE FLEXIBLE JOINT AT THE INLET OF THE 6" PVC OUTLET PIPE (SEE OUTLET CONTROL STRUCTURE DETAIL).

-ATTACH THE FLEXIBLE JOINT TO THE OUTLET PIPE AND POSITION THE SKIMMER OVER THE SUPPORT.

-ATTACH A ROPE TO THE SKIMMER AND ANCHOR IT TO THE SIDE OF THE BASIN OR THE OUTLET CONTROL STRUCTURE. THIS WILL BE USED TO PULL THE SKIMMER TO THE SIDE FOR MAINTENANCE.

-AFTER ALL THE SEDIMENT-PRODUCING AREAS HAVE BEEN PERMANENTLY STABILIZED, REMOVE THE STRUCTURE AND ALL THE UNSTABLE SEDIMENT. PLACE SEDIMENT ONSITE AND STABILIZE IN A MANNER SUCH THAT IT WILL NOT ERODE. SMOOTH ANY DISTURBED AREAS TO BLEND WITH THE ADJOINING AREAS AND STABILIZE PROPERLY.

-INSPECT SKIMMER SEDIMENT BASINS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (ONE-HALF INCH OR GREATER) RAINFALL EVENT AND REPAIR

-REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT ACCUMULATES TO 50 PERCENT OF STORAGE VOLUME OR TOP OF CLEANOUT STAKE. PULL THE SKIMMER TO ONE SIDE SO THAT THE SEDIMENT UNDERNEATH IT CAN BE EXCAVATED. EXCAVATE THE SEDIMENT FROM THE ENTIRE BASIN, NOT JUST AROUND THE SKIMMER OR THE FIRST CELL. MAKE SURE VEGETATION GROWING IN THE BOTTOM OF THE BASIN DOES NOT HOLD DOWN THE SKIMMER.

-IF THE SKIMMER IS CLOGGED WITH TRASH AND THERE IS WATER IN THE BASIN, USUALLY JERKING ON THE ROPE WILL MAKE THE SKIMMER BOB UP AND DOWN AND DISLODGE THE DEBRIS AND RESTORE FLOW. IF THIS DOES NOT WORK, PULL THE SKIMMER OVER TO THE SIDE OF THE BASIN AND REMOVE THE DEBRIS. ALSO, CHECK THE ORIFICE INSIDE THE SKIMMER TO

-IF THE SKIMMER ARM OR BARREL PIPE IS CLOGGED, THE ORIFICE CAN BE REMOVED AND THE OBSTRUCTION CLEARED WITH A PLUMBER'S SNAKE OR BY FLUSHING WITH WATER. BE SURE AND REPLACE THE ORIFICE BEFORE REPOSITIONING THE SKIMMER.

-CHECK THE FABRIC LINED SPILLWAY FOR DAMAGE AND MAKE ANY REQUIRED REPAIRS WITH FABRIC THAT SPANS THE FULL WIDTH OF THE SPILLWAY. CHECK THE EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. MAKE ALL NECESSARY REPAIRS IMMEDIATELY. REMOVE ALL TRASH AND OTHER DEBRIS FROM THE SKIMMER AND POOL AREAS.

-FREEZING WEATHER CAN RESULT IN ICE FORMING IN THE BASIN. SOME SPECIAL PRECAUTIONS SHOULD BE TAKEN IN THE WINTER TO PREVENT THE

	STAF 07/	T DAT 01/25	E									END DA 07/01/:
			MONTHS OF CONSTRUCTION ACTIVITY									
ITEM	DESCRIPTION	1	2	3	4	5	6	7	8	9	10 11	12
	PHASE 1 - INITIAL PERIMETER	CONT	ROL		1	1	1	1		1 1	I	
1	INSTITUTE AND MAINTAIN INSPECTION, MONITORING AND REPORTING PER NPDES REQUIREMENTS.					MAI	NTAIN	AS REO	QUIRED			
2	INSTALL INITIAL SEDIMENT CONTROL STRUCTURES											
3	CLEARING & GRUBBING											
	PHASE 2 - INTERMEDIATE	PHASE	=									
6	TOPSOIL STRIPPING & STOCKPILING											
7	INSTALL SEDIMENT & POLLUTION CONTROL STRUCTURES		MAINTAIN AS REQUIRED									
8	LAND GRADING											
9	CONSTRUCTION ROAD STABILIZATION											
10	STORM DRAINAGE											
11	UTILITIES											
12	MULCHING, TEMPORARY & PERMANENT GRASSING			MAINTAIN AS REQUIRED								
13	BUILDINGS											
14	CURB & GUTTER INSTALLATION											
15	BASE AND INITIAL PAVING											
PHASE 3 - FINAL STABILIZATION												
16	SIDEWALKS											
17	PAVING & STRIPING											
18	TOPSOILING, SLOPE STABILIZATION & MATTING											
19	PERMANENT VEGETATION											
20	REMOVAL OF TEMP. SEDIMENT CONTROL STRUCTURES											

NOTES:

1. OWNERS OR OPERATORS OR BOTH SHALL SUBMIT A NOTICE OF INTENT (NOI) IN ACCORDANCE WITH NPDES REQUIREMENTS AT LEAST 14 DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

- PRACTICES PRIOR TO, OR CONCURRENT WITH LAND-DISTURBING ACTIVITIES.
- 4. ACQUIRE NECESSARY PERMIT FOR ANY STATE WATERS & WETLANDS ENCROACHMENTS.

2. CONSTRUCTION SCHEDULE FOR CURB & GUTTER AND BASE & PAVEMENT MAY VARY. BUILDING CONSTRUCTION NOT ALLOWED UNTIL ALL SOIL EROSION & SEDIMENT CONTROL MEASURES ARE PROPERLY IN PLACE. 3. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES

5. DURING CONSTRUCTION, CONTRACTOR SHALL CLEAN AND MAINTAIN SEDIMENT TRAPS PERIODICALLY. ALL STORM DRAIN STRUCTURES SHALL BE FREE OF SEDIMENTS AND OTHER DELETERIOUS MATERIALS BEFORE SECURING TOPS & COVERS FOR FINAL GRADING.

WILLIAM T. BUCHANAN

Certification Number _____

Issued: 1/25/2021

Level II Certified Design Professional

0000065516

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I.C.1 CONSTRUCTION ACTIVITIES

CONSTRUCTION PROJECTS.

C. Eligibility.

- 1. Construction Activities. This permit authorizes, subject to the conditions of this permit: a. all discharges of stormwater associated with stand alone construction projects that will result in land disturbance equal to or greater than one (1) acre occurring on or before, and continuing after, the effective date of this permit, (henceforth referred to as existing stormwater discharges from construction activities) except for discharges identified underPart I.C.3.;
- b. all discharges of stormwater associated with stand alone construction projects that will result in land disturbance equal to or greater than one (1) acre occurring after the effective date of this permit. (henceforth referred to as stormwater discharges from construction activities); and
- c. coverage under this permit is not required for discharges of stormwater associated with minor land disturbing activities (such as home gardens and individual home landscaping, repairs, maintenance work, fences and other related activities which result in minor soil erosion) conducted outside of the 25 foot buffer along the banks of all State waters requiring a buffer and outside of the 50 foot buffer along the banks of all State waters classified as 'trout streams' requiring a buffer on individual residential lots sold to homeowners where all planned construction activities on that lot have been complete and have undergone final stabilization.
- 2. Mixed Stormwater Discharges. This permit may only authorize a stormwater discharge from a construction site or construction activities mixed with a stormwater discharge from an industrial source or activity other than construction where:
- a. the industrial source or activity other than construction is located on the same site as the construction activity and is an integral part of the construction activity;
- b. the stormwater discharges associated with industrial activity from the areas of the site where construction activities are occurring are in compliance with the terms of this permit; and
- c. stormwater discharges associated with industrial activity from the areas of the site where industrial activity other than construction are occurring are covered by a different NPDES general permit or individual permit authorizing such discharges and the discharges are in compliance with a different NPDES permit.
- 3. Limitations on Coverage. The following stormwater discharges from construction sites are not authorized by this permit: a. stormwater discharges associated with an industrial activity that originate from the site after
- construction activities have been completed and the site has undergone final stabilization; b. discharges that are mixed with sources of non-stormwater other than discharges which are identified
- in Part III.A.2. of this permit and which are in compliance with Part IV.D.7. (non-stormwater discharges) of this permit; c. stormwater discharges associated with industrial activity that are subject to an existing NPDES
- individual or general permit. Such discharges may be authorized under this permit after an existing permit expires provided the existing permit did not establish numeric limitations for such discharges; d. stormwater discharges from construction sites that the Director (EPD) has determined to be or may
- reasonably be expected to be contributing to a violation of a water quality standard. 4. Compliance with Water Quality Standards. No discharges authorized by this permit shall cause violations of Georgia's in-stream water quality standards as provided by the Rules and Regulations for Water Quality Control, Chapter 391-3-6-.03. D. Authorization

1. Any person desiring coverage under this permit must submit a Notice of Intent (NOI) to the EPD and the NOI must be received by the EPD in accordance with the requirements of Part II, using the electronic submittal service provided by the EPD, in order for stormwater discharges from construction sites to be authorized.

2. Unless notified by the Director to the contrary, a permittee who submits an NOI in accordance with the requirements of this permit is authorized to discharge stormwater from construction sites under the terms and conditions of this permit fourteen (14) days after the date that the NOI is submitted and confirmation of submittal is received. The Director may deny coverage under this permit and require submittal of an application for an individual NPDES permit or alternative general NPDES permit based on a review of the NOI or other information. Should the Director deny coverage under this permit, coverage under this permit is authorized until the date specified in the notice of denial by the Director. 3. Where a new permittee is to begin work on-site after an NOI for the facility/construction site has been submitted, that new permittee must submit a new NOI in accordance with Part II.

E. Continuing Obligations of Permittees. Unless and until responsibility for a site covered under this permit is properly terminated or ownership changes, according to the terms of the permit, the current permittee remains responsible for compliance with all applicable terms of the permit and for any violations of said terms.

Part II. NOTICE OF INTENT REQUIREMENTS

A. Deadlines for Notification

1. Except as provided in Part II.A.2., II.A.3. and II.A.5., Owners or Operators or both who intend to obtain coverage under this general permit for stormwater discharges from a construction site (where construction activities begin after issuance of this permit), shall submit a Notice of Intent (NOI) in accordance with the requirements of this Part at least fourteen (14) days prior to the commencement of construction activities.

2. For sites where construction activities, subject to this permit, are occurring on the effective date of this permit, the Owner or Operator or both shall submit a re-issuance NOI for an existing construction site in pents of this part no later than ninety (90) days after the effective date of this permit. Failure to comply with this requirement shall constitute a violation of the Georgia Water Quality Control Act for each day until the Owner or Operator or both submit an initial NOI for a new construction site in accordance with Part II.A.1., comply with the special conditions in Part III., prepare and submit a new Erosion, Sedimentation and Pollution Control Plan in accordance with Part IV., and pay all applicable fees in accordance with Part II.D.

3. A discharger is not precluded from submitting an NOI in accordance with the requirements of this part after the dates provided in Parts II.A.1. or II.A.2. of this permit. In such instances, EPD may bring an enforcement action for failure to submit an NOI in a timely manner or for any unauthorized discharges of stormwater associated with construction activity that have occurred on or after the dates specified in Part II.A.1. and II.A.2.

4. Where an Owner or an Operator or both changes after an NOI has been filed, the subsequent Owner or Operator or both must submit a modification NOI in accordance with this Part by the earlier to occur of (a) seven (7) days before beginning work at the facility/construction site or (b) thirty (30) days from acquiring legal title to the facility/construction site. In the event a lender or other secured creditor acquires legal title to the facility/construction site, such party must submit a modification NOI in accordance with this Part by the earlier to occur of (a) seven (7) days before beginning work at the facility/construction site; or (b) thirty (30) days from acquiring legal title to the facility/construction site. Stabilization and BMP installation and/or maintenance measures of a disturbed site, by the subsequent Owner or Operator, may occur in advance of filing a new NOI, without violation of this permit. Failure to comply with this requirement shall constitute a violation of the Georgia Water Quality Control Act for each day until the Owner or Operator or both submit an initial NOI for a new construction site in accordance with Part II.A.1. comply with the special conditions in Part III., prepare and submit a new Erosion, Sedimentation and Pollution Control Plan in accordance with Part IV., and pay all applicable fees in accordance with Part

5. For sites where construction activities will result in land disturbance equal to or greater than one (1) acre that are required as a result of storm- or emergency-related repair work, the Owner or Operator or both shall notify the appropriate EPD District Office within three (3) days of commencement of said construction activities. The Owner or Operator or both shall submit the NOI to the appropriate EPD district office as soon as possible after the storm- or emergency related event but no later than fourteen (14) days after the commencement of construction activities and shall submit the Plan in accordance with Part IV.A.6.

B. Notice of Intent Contents.

1. Primary Permittee. A single Notice of Intent for the primary permittee (i.e., one NOI signed by the Owner or the Operator or both) shall be signed in accordance with Part V.G.1. of this permit and shall include the following information:

- a. The project construction site name, GPS location (decimal degrees) of construction exit, construction site location (e.g., street address), city (if applicable) and county of the construction site for which the notification is submitted. The construction site location information must be sufficient to accurately locate the construction site:
- b. The Owner's legal name, address, telephone number and email address; and if available, the Operator's legal name, address, telephone number and email address; and if applicable, the Duly Authorized Representative's legal name and/or position name, telephone number and email address; c. The name, telephone number and email address of the individual to whom the permittee has assigned
- the responsibility for the daily operational control (i.e., construction superintendent, etc.) of the construction site; d. The name of the initial receiving water(s) or if unnamed the first named blue linestream indicated on
- the appropriate USGS Topographic map, and when the discharge is through a municipal separate storm sewer system (MS4), the name of the local government operating the municipal separate storm sewer system and the name of the receiving water(s) which receives the discharge from the MS4, and the permittee's determination of whether the receiving water(s) supports warm water fisheries or is a trout stream as indicated in the Rules and Regulations for Water Quality Control, Chapter 391-3-6;
- e. The name of the receiving water(s) located within one (1) linear mile upstream of and within the same watershed as, any portion of an Impaired Stream Segment identified as "not supporting" its designated use(s) shown on Georgia's most current "305(b)/303(d) List Documents (Approved)" for the criteria violated/cause, "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macroinvertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP"
- (nonpoint source) or "UR" (urban runoff); f. An estimate of project start date and completion date, a schedule for the timing of the various construction activities, the number of acres of the site on which soil will be disturbed, and the surface water drainage area (if applicable). For projects that began on or before the effective date of this

permit, the start date must be the actual start date of construction g. The following certification shall be signed in accordance with Part V.G.1. of this permit: "I certify that to the best of my knowledge and belief, that the Erosion, Sedimentation and Pollution Control Plan (Plan) was prepared by a designprofessional, as defined by this permit, that has certification course approved by the Georgia Soil and Water completed the appropriate Conservation Commission in accordance with the provisions of O.C.G.A. 12-7-19 and that I will adhere to the Plan and comply with all requirements of this permit. h. The type of construction activity category (from those listed on the NOI) conducted at the site;

- i. The location of the receiving water(s) or outfall(s) or a combination of receiving water(s) and outfall(s) to be sampled on a map or drawing of appropriate scale. When it is determined by the primary permittee that some or all of the outfall(s) will be sampled, the applicable nephelometric turbidity unit (NTU) selected from Appendix B (i.e., based upon the size of the construction site and the surface water drainage area) must be shown for each outfall to be sampled
- NOIs may be submitted for separate phases of projects with a total planned disturbance greater than 5.0 acres, provided that each phase shall not be less than 1.0 acre. Phased NOIs shall include all documentation required by this permit for each phase, includingfees; and
- k. Any other information specified on the NOI in effect at the time of submittal.

C. Notice of Intent Submittal. NOIs are to be submitted to EPD using the electronic submittal service provided by EPD and a copy to the Local Issuing Authority in jurisdictions authorized toissue a Land Disturbance Activity permit for the permittee's construction site pursuant to O.C.G.A. 12-7-1, et seq. The permittee shall retain a copy of the proof of submittal at the construction site or the proof of submittal shall be readily available at a designated alternative location from commencement of construction until such time as a Notice of Termination (NOT) is submitted in accordance with Part VI

P. Fees. Any applicable fees shall be submitted by the Primary Permittee in accordance with Rules and Regulations for Water Quality Control (Rules) promulgated by the Board of Natural Resources. By submitting an NOI for coverage under this permit the primary permittee agrees to pay any fees required. now or in the future, by such Rules authorized under O.C.G.A. Sectio 12-5-23(a)(5)(A), which allows the Board of Natural Resources to establish a fee system. Fees may be assessed on land disturbing activity proposed to occur on or after the effective date of this permit and shall be paid in accordance with such Rules.

Q. Renotification. Upon issuance of a new or different general permit for some or all of the stormwater discharges covered by this permit, the permittee is required to notify the EPD of their intent to be covered by the new or different general permit. The permittee must submit a renewal Notice of Intent in accordance with the notification requirements of the new or different general permit.

PART III. SPECIAL CONDITIONS, MANAGEMENT PRACTICES, PERMIT VIOLATIONS AND OTHER LIMITATIONS

A. Prohibition on Non-Stormwater Discharges.

1. Except as provided in Part I.C.2. and III.A.2., all discharges covered by this permit shall be composed entirely of stormwater. 2. The following non-stormwater discharges may be authorized by this permit provided the nonstormwater component of the discharge is explicitly listed in the Erosion, Sedimentation and Pollution Control Plan and is in compliance with Part IV.D.7.; discharges from fire fighting activities; fire hydrant flushing; potable water sources including water line flushing; irrigation drainage; air conditioning condensate; springs; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials or pollutants. 3. This permit does not authorize the discharge of soaps or solvents used in vehicle and equipment

4. This permit does not authorize the discharge of wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials.

B. Releases in Excess of Reportable Quantities.

1. The discharge of hazardous substances or oil in the stormwater discharge(s) from a site shall be prevented. This permit does not relieve the permittee of the reporting requirements of Georgia's Oil or Hazardous Material Spills or Releases Act (O.C.G.A. §§12-14-2, et seq.), 40 CFR Part 117 and 40 CFR Part 302. Where a release containing a hazardous substance in an amount equal to or in excess of a reporting quantity established under either Georgia's Oil orHazardous Material Spills or Releases Act (O.C.G.A. §§12-14-2, et seq.), 40 CFR 117 or 40 CFR 302 occurs during a 24 hour period, the permittee s required to notify EPD at (404) 656-4863 or (800) 241-4113 and the National Response Center (NRC) at (800) 424-8802 inaccordance with the requirements of Georgia's Oil or Hazardous Material Spills or Releases Act (O.C.G.A. §§12-14-2, et seq.), 40 CFR 117 and 40 CFR 302 as soon as he/she has knowledge of the discharge 2. This permit does not authorize the discharge of hazardous substances or oil resulting from anon-site

C. Discharges into, or within One Mile Upstream of and within the Same Watershed as, Any

Portion of a Biota Impaired Stream Segment. Any permittee who intends to obtain coverage under this permit for stormwater discharges associated with construction activity into an Impaired Stream Segment, or within one (1) linear mile upstream of and within the same watershed as, any portion of an Impaired Stream Segment identified as "not supporting" its designated use(s), as shown on Georgia's most current "305(b)/303(d) List Documents (Approved)" at the time of NOI submittal, must satisfy the requirements of Part III.C. of this permit if the Impaired Stream Segment has been listed for criteria violated/cause, "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macroinvertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff). Those discharges that are located within one (1) linear mile of an Impaired Stream Segment, but are not located within the watershed of any portion of that stream segment, are excluded from this requirement. Georgia's "305(b)/303(d) List Documents (Approved)" can be viewed on the EPD website.

1. If a Total Maximum Daily Load (TMDL) Implementation Plan for sediment has been finalized at least six (6) months prior to the permittee's submittal of the NOI, the Erosion, Sedimentation and Pollution Control Plan (Plan) must address any site-specific conditions or requirements included in the TMDL Implementation Plan that are applicable to the permittee'sdischarge(s) to the Impaired Stream Segment within the timeframe specified in the TMDL Implementation Plan. If the TMDL Implementation Plan establishes a specific numeric wasteload allocation that applies to a permittee's discharge(s) to the mpaired Stream Segment, then the permittee must incorporate that allocation into the Erosion, Sedimentation and Pollution Control Plan and implement all necessary measures to meet that allocation. A list of TMDL Implementation Plans can be viewed on the EPD website.

2. In order to ensure that the permittee's discharge(s) do not cause or contribute to a violation of State water quality standards, the Plan must include at least four (4) of the following best management practices (BMPs) for those areas of the site which discharge into or within one (1) linear mile upstream and within the same watershed as the Impaired Stream Segment: a. During all construction activities as defined in this permit, double the width of the 25 foot undisturbed

- vegetated buffer along all State waters requiring a buffer and the 50 foot undisturbed vegetated buffer along all State waters classified as "trout streams" requiring a buffer. During construction activities, EPD will not grant variances to any such buffers that are increased in width pursuant to this section. b. Increase all temporary sediment basins and retrofitted stormwater management basins to provide
- sediment storage of at least 3600 cubic feet (134 cubic yards) per acre drained. c. Use baffles in all temporary sediment basins and retrofitted stormwater management basins to at least double the conventional flow path length to the outlet structure.
- A large sign (minimum 4 feet x 8 feet) must be posted on site by the actual The sign must be visible from a public roadway. The sign must identify the following: (1) the construction site, (2) the permittee(s), (3) the contact person(s) along with their telephone number(s), and (4) the permittee-hosted website where the Plan can be viewed. The permittee-hosted website where the Plan can be viewed must be provided on the submitted NOI. The sign must remain on site and the Plan must be available on the provided website until a NOT has been submitted. e. Use tackifiers and/or mulch to stabilize all areas left disturbed for more than seven (7) calendar days
- in accordance with Part III.D.1. of this permit. f. Conduct turbidity sampling after every rain event of 0.5 inch or greater within any 24 hour period,
- recognizing the exceptions specified in Part IV.D.6.d. of this permit. g. Comply with the applicable end-of-pipe turbidity effluent limit, without the "BMP defense" as provided for in O.C.G.A. 12-7-6(a)(1).
- h. Reduce the total planned site disturbance to less than 50% impervious surfaces (excluding any State-mandated buffer areas from such calculations). All calculations must be included on the Plan. i. Limit the amount of area disturbed at any one time to no greater than 25 acres or 50% of the total
- planned site, whichever is less. All calculations must be included on the Plan. j. Use "Dirt II" techniques available on the EPD website, to model and manage all construction
- stormwater runoff (including sheet flow). All calculations must be included on the Plan. k. Conduct soil tests representative of conditions at the time of planting to identify and to implement site-specific fertilizer needs and/or add appropriate organic soil amendments (e.g., compost) and conduct pre- and post construction soil sampling to a depth of six (6) inches to document improved levels of soil carbon after final stabilization of the construction site. I. Use mulch filter berms, in addition to a silt fence, on the site perimeter wherever construction
- stormwater (including sheet flow) may be discharged. Mulch filter berms cannot be placed in waterways or areas of concentrated flow. m. Use appropriate erosion control slope stabilization instead of concrete in all construction stormwater
- ditches and storm drainages designed for a 25 year, 24 hour rainfall event. n. Use flocculants or coagulants under a passive dosing method (e.g., flocculant blocks)within all construction stormwater ditches and storm drainages that feed into temporary sediment basins and retrofitted management basins.
- o. Install sod for a minimum 20 foot width (in lieu of seeding) after final grade has been achieved, along the site perimeter wherever construction stormwater (including sheet flow)may be discharged. p. Conduct soil tests to identify and to implement site-specific fertilizer needs
- q. Certified personnel shall conduct inspections at least twice every seven (7) calendar days and within 24 hours of the end of the storm that is 0.5 inches rainfall or greater in accordance with Part IV.D.4.a.(3).(a)–(c) of this permit.
- . Apply the appropriate compost blankets (minimum depth 1.5 inches) to protect soil surfaces until vegetation is established during the final stabilization phase of the construction activity. s. Use alternative BMPs whose performance has been documented to be superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the Georgia Soil and
- Water Conservation Commission). t. Limit the total planned site disturbance to less than 15% impervious surfaces (excluding any State-mandated buffer areas from such calculations). All calculations must be included in the Plan.
- u. Conduct inspections during the intermediate grading and drainage BMP phase and during the final BMP phase of the project by the design professional who prepared the Plan in accordance with Part IV.A.5. of the permit. v. Install Post Construction BMPs (e.g., runoff reduction BMPs) which remove 80% TSS as outlined in
- the Georgia Stormwater Management Manual known as the Blue Book or an equivalent or more stringent design manual.

D. Management Practices and Permit Violations. 1. Best management practices, as set forth in this permit, are required for all construction activities, and

must be implemented in accordance with the design specifications contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the Georgia Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted to prevent or reduce the pollution of waters of Georgia. Proper design, installation, and maintenance of best management practices shall constitute a complete defense to any action by the Director or to any other

allegation of noncompliance with Part III.D.4. and Part III.D.5. 2. Except as required to install the initial sediment storage requirements and perimeter control BMPs as

described in Part IV.D.3., the initial sediment storage requirements and perimeter control BMPs must be installed and implemented prior to conducting any other construction activities (e.g., clearing, grubbing and grading) within the construction site or when applicable, within phased sub-parts or segments of the construction site. Failure to comply shall constitute a violation of this permit for each day on which construction activities occur. The design professional who prepared the Plan must inspect the initial sediment storage requirements and perimeter control BMPs in accordance with Part IV.A.5. within seven davs after installation.

3. Failure to properly design, install, or maintain best management practices shall constitute a violation of this permit for each day on which such failure occurs. BMP maintenance as a result of the permittee's routine inspections shall not be considered a violation for the purposes of this paragraph. If during the course of the permittees routine inspection BMP failures are observed which have resulted in sediment deposition into Waters of the State, the permittee shall correct the BMP failures and shall submit a summary of the violations to EPD in accordance with Part V.A.2. of this permit. 4. A discharge of stormwater runoff from disturbed areas where best management practices have not been properly designed, installed, and maintained shall constitute a separate violation for each day on

which such discharge results in the turbidity of receiving water(s) being increased by more than ten (10) nephelometric turbidity units for waters classified as trout streams or more than twenty-five (25) nephelometric turbidity units for waters supporting warm water fisheries, regardless of a permittee's certification under Part II.B.1.i. This paragraph shall not apply to any land disturbance associated with the

construction of single-family homes which are not part of a subdivision or planned common development unless five (5) acres or more will be disturbed 5. When the permittee has elected to sample outfall(s), the discharge of stormwater runoff from disturbed areas where best management practices have not been properly designed, installed, and

maintained shall constitute a separate violation for each day on which such condition results in the turbidity of the discharge exceeding the value selected from Appendix B applicable to the construction site. As set forth therein, the nephelometric turbidity unit (NTU) value shall be selected from Appendix B based upon the size of the construction site, the surface water drainage area and whether the receiving water(s) supports warm water fisheries or is a trout stream as indicated in the Rules and Regulations for Water Quality Control, Chapter 391-3-6. 6. Whenever a permittee finds that a BMP has failed or is deficient (beyond routine maintenance) and

has resulted in sediment deposition into waters of the State, the permittee shall immediately take all reasonable steps to address the condition, including cleaning up any contaminated surfaces so the material will not discharge in subsequent storm events. The permittee shall submit a summary of the violations to EPD in accordance with Part V.A.2. of this permit and shall correct such BMP as follows:

a. When the repair does not require a new or replacement BMP or significant repair, the BMP failure or deficiency must be repaired within two (2) business days from the time of discovery; b. When the repair requires a new or replacement BMP or significant repair, the installation of the new or modified BMP must be completed and the BMP must be operational by no later than seven (7)

days from the time of discovery. If it is infeasible to complete the installation or repair within seven (7) days, the permittee must document why it is infeasible to complete the installation or repair within the seven (7) day timeframe and document the schedule for installing or repairing the BMPs and making the BMPs operational as soon as feasible after the seven (7) day timeframe.

Part IV. EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN

A site-specific Erosion, Sedimentation and Pollution Control Plan (Plan) shall be designed, installed and maintained for the entire construction activity covered by this permit. The Erosion, Sedimentation and Pollution Control Plan must be prepared by a design professional as defined by this permit. All persons involved in Plan preparation shall have completed the appropriate certification course, pursuant to O.C.G.A. 12-7-19(b), approved by the Georgia Soil and Water

Conservation Commission. The design professional preparing the Plan must include and sign the following certification in the Plan: "I certify that the permittee's Erosion. Sedimentation and Pollution Control Plan provides for an appropriate and comprehensive system of best management practices required by the Georgia Water Quality Control Act and the document "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the Georgia Soil and Water

Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted. provides for the sampling of the receiving water(s) or the sampling of the stormwater outfalls and that the designed system of best management practices and sampling methods is expected to meet the requirements contained in the General NPDES Permit No. GAR100001." The Plan shall include any additional certifications regarding the design professional's site visit in accordance with the Rules for Erosion and Sedimentation Control promulgated by the Board of Natural

Resources: "I certify under penalty of law that this Plan was prepared after a site visit to the locations described herein by myself or my authorized agent, under my supervision." The Plan shall include, as a minimum, best management practices, including sound conservation and engineering practices to prevent and

minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the Georgia Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted and O.C.G.A. 12-7-6, as well as the following: (i). Except as provided in Part IV.(iii). below, no construction activities shall be conducted within a 25 foot buffer along the banks of all State waters, as measured horizontally from the point where vegetation has

been wrested by normal stream flow or wave action, except where the Director has determined to allow a variance that is at least as protective of natural resources and the environment in accordance with the provisions of O.C.G.A. 12-7-6, or where a drainage structure or a roadway drainage structure must be constructed, provided that adequate erosion control measures are incorporated in the project plans and specifications and are implemented, or along any ephemeral stream, or where bulkheads and seawalls must be constructed to prevent the erosion of the shoreline on Lake Oconee and Lake Sinclair. The buffer shall not apply to the following activities provided that adequate erosion control measures are incorporated into the project plans and specifications and are implemented public drinking water system reservoirs;

2) stream crossings for water lines and sewer lines, provided that the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, and native riparian vegetation is re-established in any bare or disturbed areas within the buffer;

(3) stream crossings for any utility lines of any electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in Code Section 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission or distribution of power, provided that: (a) the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer. (b) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (c) the entity is not a secondary permittee for a project located within a common development or sale under this permit; (4) buffer crossing for fences, provided that the crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, and native riparian vegetation is re-established in any bare or disturbed areas within the buffer;

(5) stream crossings for aerial utility lines, provided that: (a) the new utility line right-of-way width does not exceed 100 linear feet, (b) utility lines are routed and constructed so as to minimize the number of stream crossings and disturbances to the buffer, (c) only trees and tree debris are removed from within the buffer resulting in only minor soil erosion (i.e.,

disturbance to underlying vegetation is minimized), and (d) native riparian vegetation is re-established in any bare or disturbed areas within the buffer. The Plan shall include a description of the stream crossings with details of the buffer disturbance including area and length of buffer disturbance, estimated length of iustification

(6) right-of-way posts, guy-wires, anchors, survey markers and the replacement or maintenance of existing utility structures within the current right-of-way undertaken or financed in whole or in part by the Department of Transportation, the Georgia Highway Authority or the State Road and Tollway Authority or undertaken by any county or municipality, provided that: (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit;

(7) right-of-way posts, guy-wires, anchors, survey markers and the replacement or maintenance of existing utility structures within the current right-of-way by any electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in Code Section 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission or distribution of power, provided that: (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (d)

the entity is not a secondary permittee for a project located within a common development or sale under this permit; and (8) maintenance (excluding dredging), repair and/or upgrade of Soil and Water Conservation District watershed dams when under the technical supervision of the USDA Natural Resources Conservation

(ii). No construction activities shall be conducted within a 50 foot buffer, as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, along the banks of any State waters classified as "trout streams" except when approval is granted by the Director for alternate buffer requirements in accordance with the provisions of O.C.G.A. 12-7-6, or where a roadway drainage structure must be constructed; provided, however, that small springs and streams classified as "trout streams" which discharge an average annual flow of 25 gallons per minute or less shall have a 25 foot buffer or they may be piped, at the discretion of the permittee, pursuant to the terms of a rule providing for a general variance promulgated by the Board of Natural Resources including notification of such to EPD and the Local Issuing Authority of the location and extent of the piping and prescribed methodology for minimizing the impact of such piping and for measuring the volume of water discharged by the stream. Any such pipe must stop short of the downstream permittee's property, and the permittee must comply with the buffer requirement for any adjacent trout streams. The buffer shall no apply to the following activities provided that adequate erosion control measures are incorporated into the project plans and specifications and are implemented:

public drinking water system reservoirs: (2) stream crossings for water lines and sewer lines, provided that the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, and native riparian vegetation is re-established in any bare or disturbed areas within the

(3) stream crossings for any utility lines of any electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in Code Section 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission or distribution of power, provided that: (a) the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, (b) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (c) the entity is not a secondary permittee for a project located within a common development or sale under this permit; (4) buffer crossing for fences, provided that the crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, and native riparian vegetation is re-established in any bare or disturbed areas within the buffer;

(5) stream crossings for aerial utility lines, provided that: (a) the new utility line right-of-way width does not exceed 100 linear feet, (b) utility lines are routed and constructed so as to minimize the number of stream crossings and disturbances to the buffer, (c) only trees and tree debris are removed from within the buffer resulting in only minor soil erosion (i.e., disturbance to underlying vegetation is minimized), and (d) native riparian vegetation is re-established in any bare or disturbed areas within the buffer. The Plan shall include a description of the stream crossings with details of the buffer disturbance including area and length of buffer disturbance, estimated length of time of buffer disturbance, and justification; (6) right-of-way posts, guy-wires, anchors, survey markers and the replacement or maintenance of existing utility structures within the current right-of-way undertaken or financed in whole or in part by the Department of Transportation, the Georgia Highway Authority or the State Road and Tollway Authority or undertaken by any county or municipality, provided that: (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a

common development or sale under this permit; (7) right-of-way posts, guy-wires, anchors, survey markers and the replacement or maintenance of existing utility structures within the current right-of-way undertaken by any electric membership corporation or municipal electrical system or any public utility under the, provided that: (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary

permittee for a project located within a common development or sale under this permit; and (8) maintenance (excluding dredging), repair and/or upgrade of Soil and Water Conservation District watershed dams when under the technical supervision of the USDA NaturalResources Conservation

(iii). Except as provided in Part IV(iv) below, no construction activities shall be conducted within a 25 foot buffer along coastal marshlands, as measured horizontally from the coastal marshland-upland interface, as determined in accordance with Part 4 of Article 4 of Chapter 5 of Title 12, the Coastal Marshlands Protection Act of 1970, and the rules and regulations promulgated thereunder, except where the Director determines to allow a variance that is at least as protective of natural resources and the environment in accordance with the provisions of O.C.G.A. 12-7-6, or where otherwise allowed by the Director pursuant to Code Section 12-2-8.or where an alteration within the buffer area has been authorized pursuant to Code Section 12-5-286, or for maintenance of any currently serviceable structure, landscaping, or hardscaping, including bridges, roads, parking lots, golf courses, golf cart paths, retaining walls, bulkheads, and patios, provided that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented, or where a drainage structure or roadway drainage structure is constructed or maintained, provided that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented, or on the landward side of any currently serviceable shoreline stabilization structure, or for the maintenance of any manmade stormwater detention basin, golf course pond, or impoundment that is located entirely within the property of a single individual, partnership, or corporation, provided that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented. The buffer shall not apply to the following activities provided that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented:

 Public drinking water system reservoirs; (2) Crossings for utility lines that cause a width of disturbance of not more than 50 feet within the

(3) Any land-disturbing activity conducted pursuant to and in compliance with a valid and effective land-disturbing permit issued subsequent to April 22, 2014, and prior to December 31, 2015; (4) Any lot for which the preliminary plat has been approved prior to December 31, 2015 if roadways. bridges, or water and sewer lines have been extended to such lot prior to the effective date of this Act and if the requirement to maintain a 25 foot buffer would consume at least 18 percent of the high ground of the platted lot otherwise available for development:

(5) Buffer crossings for fences, provided that the crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the Jurisdictional Line and cause a width of disturbance of not more than 50 feet within the buffer, and vegetation is re-established in any bare or disturbed areas within the buffer:

(6) Crossings for aerial utility lines, provided that: (a) the new utility line right-of-way width does not exceed 100 linear feet, (b) utility lines are routed and constructed so as to minimize the number of crossings and disturbances to the buffer, (c) only trees and tree debris are removed from within the buffer resulting in only minor soil erosion (i.e., disturbance to underlying vegetation is minimized), and (d) vegetation is re-established in any bare or disturbed areas within the buffer. The Plan shall include a description of the crossings with details of the buffer disturbance including area and length of buffer disturbance, estimated length of time of buffer disturbance, and justification

(7) Right-of-way posts, guy wires, anchors, survey markers and the replacement or maintenance of existing utility structures within the current right-of-way undertaken or financed in whole or in part by the Department of Transportation, the Georgia Highway Authority or the State Road and Tollway Authority or undertaken by any county or municipality, provided that: (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1.000 square feet per structure. (c) vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit

(8) Right-of-way posts, guy wires, anchors, survey markers and the replacement or maintenance of existing utility structures within the current right-of-way by any electric membership corporation or municipal electrical system or any public utility under the regulator jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in Code Section 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission or distribution of power, provided that (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit; and (9) maintenance (excluding dredging), repair and/or upgrade of Soil and Water Conservation District watershed dams when under the technical supervision of the USDA Natural Resources Conservation

(iv). Except as provided above, for buffers required pursuant to Part IV.(i). and (ii) and (iii), no construction activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed, state of vegetation until all land-disturbing activities on the construction site are completed. During coverage under this permit, a buffer cannot be thinned or trimmed of vegetation and a protective vegetative cover must remain to protect water quality and aquatic habitat and a natural canopy must be left in sufficient quantity to keep shade on the stream bed or marsh. The Erosion, Sedimentation and Pollution Control Plan shall identify all potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharges from the construction site. In addition, the Plan shall describe and the applicable permittee shall ensure the implementation of practices which will be used to reduce the pollutants in stormwater discharges associated with construction activity at the site and to

assure compliance with the terms and conditions of this permit. The applicable permittee must implement and maintain the provisions of the Plan required under this part as a condition of this permit. Except as provided in Part IV.A.2., a single Erosion, Sedimentation and Pollution Control Plan must be prepared by the primary permittee for the stand alone construction project.

A. Deadlines for Plan Preparation and Compliance.

1. Except as provided in Part IV.A.2. and Part IV.A.6., the Erosion, Sedimentation and Pollution Control Plan shall be completed prior to submitting the NOI and prior to conducting any construction activity by any permittee. 2. For construction activities that began on or before the effective date of this permit and were subject to

3. For construction activities that begin after the effective date of this permit, the primary permittee shall be required to prepare the Plan for that phase of the stand alone development that corresponds with the NOI being submitted and the primary permittee(s) shall implement the Plan on or before the day construction activities begin.

4. Additional Plan Submittals For all projects identified under Part I.C.1.b., which begin after the effective date of this permit, in a jurisdiction where there is no certified Local Issuing Authority regulating that project, a single copy of the Plan must be submitted to the EPD Watershed Protection Branch and a second copy of the Plan must be submitted to the appropriate EPD District Office prior to or concurrent with the NOI submittal. The second copy of the Plan must be submitted electronically as a Portable Document Format (PDF) file through the electronic submittal method provided by EPD, or by return receipt certified mail or similar service as a PDF on CD-ROM or other storage device to the appropriate EPD District Office. The permittee shall retain a copy of the proof of the submittal at the construction site or the proof of submittal shall be readily available at a designated alternative location from commencement of construction until such a time as a Notice of Termination (NOT) is submitted in accordance with Part VI. The EPD Watershed Protection Branch will review Plans for deficiencies using the applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Georgia Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted. For all projects where the construction activity as indicated on the existing NOI has changed, the amended Plans must be submitted in accordance with Part IV.A.4.a. In addition, the permittee must submit a modification NOI in

accordance with Part II. 5. For stand alone projects that begin construction activity after the effective date of this permit, the primary permittee must retain the design professional who prepared the Erosion, Sedimentation and Pollution Control Plan, or an alternative design professional approved by EPD in writing, to inspect the installation of the initial sediment storage requirements and perimeter control BMPs which the design professional designed within seven (7) days after installation. The design professional shall determine if these BMPs have been installed and are being maintained as designed. The design professional shall report the results of the inspection to the primary permittee within seven (7) days and the permittee must correct all deficiencies within two (2) business days of receipt of the inspection report from the design professional unless weather related site conditions are such that additional time is required. 6. For storm- or emergency-related repair work, the permittee shall implement appropriate BMPs and certified personnel (provided by the primary permittee) shall inspect at least once every seven (7) calendar days and within 24 hours of the end of a storm that is 0.5 inches rainfall or greater. If the stormor emergency-related repair work will not be completed within sixty (60) days of commencement of construction activity, a single copy of the Plan shall be submitted to EPD and the permittee shall comply with all requirements of this permit on the sixty-first (61st) day.

B. Signature and Plan Review.

1. The Erosion, Sedimentation and Pollution Control Plan shall be signed in accordance with Part IV., and be retained on the site (or, if not possible, at a readily accessible location) which generates the stormwater discharge in accordance with Part IV.F. of this permit 2. The primary permittee shall make Plans available upon request to the EPD; to designated officials of the local government reviewing soil Erosion, Sedimentation and Pollution Control Plans, grading plans, or stormwater management plans; or in the case of a stormwater discharge associated with construction activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the local government operating the municipal separate storm sewer system 3. EPD may notify the primary permittee at any time that the Plan does not meet one or more of the minimum requirements of this Part. Within seven (7) days of such notification (or as otherwise provided by EPD), the primary permittee shall make the required changes to the Plan and shall submit to EPD either the amended Plan or a written certification that the requested changes have been made. C. Keeping Plans Current. The primary permittee(s) shall amend their Plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on BMPs with a hydraulic component (i.e., those BMPs where the design is based upon rainfall intensity, duration and return frequency of storms) or if the Plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under Part IV.D.3. Amendments to the Plan must be certified by a design professional as provided in this permit.

D. Contents of Plan. The Erosion, Sedimentation and Pollution Control Plan shall include, as a minimum, best management practices, including sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the Georgia Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted, as well as the following: **1.** Checklist. Each plan shall include a completed Erosion, Sedimentation and Pollution Control Plan Checklist established by the Georgia Soil and Water Conservation Commission (GSWCC) as of January 1 of the year in which the land-disturbing activity was permitted and amendments to the applicable Checklist as approved by the GSWCC up until the date of the NOI submittal. The applicable checklists are available on the GSWCC website.

2. Site description. Each site-specific Plan shall provide a description of pollutant sources andother information as indicated: a. A description of the nature of the construction activity;

b. A detailed description and chart or timeline of the intended sequence of major activities which disturb

soils for major portions of the site (i.e., initial sediment storage requirements and perimeter BMPs, clearing and grubbing activities, excavation activities, grading activities, infrastructure activities, immediate and final stabilization activities);

- excavation, grading, or other activities; d. An estimate of the runoff coefficient or peak discharge flow of the site prior to the construction activities and after construction activities are completed and existing data describing the soil or the quality of any discharge from the site:
- e. A site-specific map indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of soil disturbance, an outline of areas which are not to be disturbed, the location of major structural and nonstructural controls identified in the Plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands), and locations where stormwater is discharged to a surfacewater; and

f. Identify the receiving water(s) and areal extent of wetland acreage at the site: 3. Controls. Each Plan shall include a description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs. For construction sites where there will be no mass grading and the initial sediment storage requirements and perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the Plan may combine all of the BMPs into a single phase Plan. The Plan will include appropriate staging and access requirements for construction equipment. Plans submitted after the effective date of this permit shall limit the amount of disturbed area to no greater than 50 acres at any one time without prior written authorization from the appropriate EPD District Office according to the schedule in Appendix A of this permit EPD will approve or disapprove such requests within 35 days of receipt. Failure of EPD to act within 35 days shall be considered an approval of such requests. If the EPD District Office approves a request to disturb 50 acres or more at any one time, the Plan must include at least four (4) of the best management practices listed in Part III.C.2. of this permit.

The Plan will clearly describe for each major activity identified in Part IV.D.2.b. appropriate control measures and the timing during the construction process that the measures will be implemented. The primary permittee is encouraged to utilize the document, Developing Your Stormwater Pollution Prevention Plan: A Guide for Construction Sites, EPA 833-R-060-04, May 2007, when preparing the Plan. The description and implementation of controls shall address the following minimum components:

a. Erosion and sediment controls.

(1). Stabilization measures. A description of interim and permanent stabilization measures, including site-specific scheduling of the implementation of the measures. Site plans should ensure that existing vegetation is preserved and that disturbed portions of the site are stabilized. Stabilization measures may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be included in the Plan. Except as provided in paragraphs IV.D.3.(a).(1).(a). below, stabilization measures shall be initiated as soon as practicable in portions of the site where

construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently

(a). Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently cease is precluded by snow cover or other adverse weather conditions, stabilization measures shall be initiated as soon as practicable.

(2). Structural practices. A description of structural practices to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. Such practices may include silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection reinforced soil retaining systems gabions and temporary or permanent sediment basins. Structural practices should be placed on upland soils to the degree

attainable. The installation of these devices may be subject to Section 404 of the CWA. (3). Sediment basins. For common drainage locations a temporary (or permanent) sediment basin providing at least 1800 cubic feet (67 cubic yards) of storage per acre drained, or equivalent control measures, shall be provided until final

stabilization of the site. The 1800 cubic feet (67 cubic yards) of storage area per acre drained does not apply to flows from off-site areas and flows from on-site areas that are either undisturbed or have undergone final stabilization where such

flows are diverted around both the disturbed area and the sediment basin. For drainage locations where a temporary sediment basin providing at least 1800 cubic feet (67 cubic yards) of storage per acre drained, or equivalent controls is not attainable, sediment traps, silt fences, wood mulch berms or equivalent sediment controls are required for all side slope and down slope boundaries of the construction area. When the sediment fills to a volume at most of 22 cubic vards per acre for each acre of drainage area, the sediment shall be removed to restore the original design volume. This sediment must be properly disposed. Sediment basins may not be feasible at some construction sites. Careful consideration must

be used to determine when a sediment basin cannot be used and/or when 67 cubic yards of storage per acre drained is not attainable and a written justification explaining the decision(s) must be included in the Plan. Perennial and intermittent waters of the State shall not be used for temporary or permanent sediment detention. When discharging from sediment basins and impoundments, permittees are required to utilize outlet

structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the Plan. Outlet structures that withdraw water from the surface are temporary BMPs and must be removed prior to submitting a Notice of Termination. For construction activities where the NOI was submitted prior to January 1, 2014, this requirement of the permit is not applicable.

(4). Alternative BMPs. The use of alternative BMPs whose performance has been documented to be equivalent or superior to conventional BMPs as certified by a Design Professional may be allowed (unless disapproved by EPD or the Georgia Soil and Water Conservation Commission)

(5). High performance BMPs. The use of infiltration trenches, seep berms, sand filters drv wells flocculants or coagulants, etc. for minimizing point source discharges except for large rainfall events is encouraged.

c. Stormwater management. A description of measures that will be installed during the construction process to control been completed. Structural measures should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA. This permit only addresses the installation of stormwater management

measures, and not the ultimate operation and maintenance of such structures after the construction activities have been completed and the site has undergone final stabilization. Operators are only responsible for the installation and maintenance of stormwater management measures prior to final stabilization of the site, and are not responsible for maintenance after stormwater discharges associated with construction activity have been eliminated from the site. (1). Such practices may include: stormwater detention structures (including wet pond); stormwater

retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff on-site; and sequential

systems (which combine several practices). The Plan shall include an explanation of the technical basis used to select the practices to control pollution where flows exceed pre-development levels. (2). Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel for the purpose of providing a non-erosive velocity flow from the structure to a water course so that the natural physical and

biological characteristics and functions are maintained and protected (e.g., no significant changes in the hydrological regime of the receiving water(s)). (3). Installation and use of green infrastructure approaches and practices that mimic natural processes and direct stormwater where it can be infiltrated, evapotranspirated or re-used with significant utilization of soils and vegetation

rather than traditional hardscape collection, conveyance and storage structures are encouraged to the maximum extent practicable. Green Infrastructure practices or approaches include permeable or porous paving, vegetated swales instead of curbs and gutters, green roofs, tree boxes, rain gardens, constructed wetlands, infiltration planters, vegetated median strips, protection and enhancement of riparian buffers and floodplains, and the overall reduction in site disturbance and impervious area. Design information on Green Infrastructure practices and other ways to manage

stormwater can be found in the Georgia Stormwater Management Manual and Coastal Stormwater Supplement. Additional information on Green Infrastructure can be found at the USEPA website.

c. Other controls.

(1). Waste disposal. Locate waste collection areas away from streets, gutters, watercourses and storm drains. Waste collection areas, such as dumpsters, are often best located near construction site entrances to minimize traffic on disturbed

soils. The Plan should include secondary containment around liquid waste collection areas to further minimize the likelihood of contaminated discharges. Solid materials, including building materials, shall not be discharged to waters of the State, except as authorized by a Section 404 permit. (2). For building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site, provide cover (e.g. plastic sheeting,

temporary roofs) to minimize the exposure of these products to precipitation and to stormwater, or a similarly effective means designed to minimize the discharge of pollutants from these areas. Minimization of exposure is not required in cases where exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk to stormwater contamination (such as final products and materials intended for outdoor use). (3). Off-site vehicle tracking of dirt, soils, and sediments and the generation of dust shall be minimized or

eliminated to the maximum extent practical. The Plan shall include the best management practice to be implemented at the site or construction activity (4). Nothing in this permit relieves a permittee from any obligation to comply with all applicable State and

local regulations of waste disposal, sanitary sewer, septic and petroleum storage systems. (5). The Plan shall include best management practices for the remediation of all petroleum spills and leaks as appropriate. (6). The Plan shall include best management practices for concrete washdown of tools, concrete mixer

chutes, hoppers and the rear of vehicles. Washout of the drum at the construction site is prohibited. Additional information about best

management practices for concrete washout is available at the USEPA website (7). All permittees are required to minimize the discharge of pollutants from dewatering trenches and excavations. Discharges are prohibited unless managed by appropriate controls.

> WILLIAM T. BUCHANAN Level II Certified Design Professional

Certification Number _____0000065516 ISSUED: 1/25/2021 Expires: 1/25/2027

4. **Inspections.** a. Permittee requirements

(1). Each day when any type of construction activity has taken place at a primary permittee's site, certified personnel provided by the primary permittee shall inspect: (a) all areas at the primary permittee's site where petroleum products are stored, used, or handled for spills and leaks from vehicles and equipment and (b) all locations at the

primary permittee's site where vehicles enter or exit the site for evidence of off-site sediment tracking. These inspections must be conducted until a Notice of Termination is submitted. (2). Measure and record rainfall within disturbed areas of the site that have not met final stabilization once every 24 hours except any non-working Saturday, non-working Sunday and non-working Federal holiday. The data collected for the purpose of compliance with this permit shall be representative of the monitored activity. Measurement of

rainfall may be suspended if all areas of the site have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region.
(3). Certified personnel (provided by the Primary Permittee) shall inspect the following at least once every seven (7) calendar days: (a) disturbed areas of the Primary Permittee's construction site; (b) areas used

by the Primary Permittee for storage of materials that are exposed to precipitation; and (c) structural control measures. Erosion and sediment control measures identified in the Plan applicable to the Primary Permittee's site shall be observed to ensure that they are operating correctly. Certified personnel shall also conduct inspections within 24 hours of the end of a storm that is 0.5 inches rainfall or greater (unless such storm ends after 5:00 PM on any Friday or on any non-working Saturday, non-working Sunday or any non-working Federal holiday in which case the inspection shall be completed by the end of the next business day and/or working day, whichever occurs first). Post-rain inspections will reset the 7-day inspection frequency requirement. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s). For areas of a site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region, the permittee must comply with Part IV.D.4.a.(4). These inspections must be conducted until a Notice of Termination is

(4). Certified personnel (provided by the primary permittee) shall inspect at least once per month during the term of this permit (i.e., until a Notice of Termination has been submitted) the areas of the site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region. These areas shall be inspected for evidence of, or the potential for, pollutants entering the drainage system and the receiving water(s). Erosion and sediment control measures identified in the Plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures

are effective in preventing significant impacts to receiving water(s).

(5). Based on the results of each inspection, the site description and the pollution prevention and control measures identified in the Erosion, Sedimentation and Pollution Control Plan, the Plan shall be revised as appropriate not later than seven (7) calendar days following each inspection. Implementation of such changes shall be made as soon as practical but in no case later than seven (7) calendar days following each inspection.

(6). A report of each inspection that includes the name(s) of certified personnel making each inspection, the date(s) of each inspection, construction phase (i.e., initial, intermediate or final), major observations relating to the implementation of the Erosion, Sedimentation and Pollution Control Plan, and actions taken in accordance with Part IV.D.4.a.(5). of the permit shall be made and retained at the site or be readily available at a designated alternate location until the entire site or that portion of a construction site that has been phased has undergone final stabilization and a Notice of Termination is submitted to EPD. Such reports shall be readily available by end of the second business day and/or working day and shall identify all incidents of best management practices that have not been properly installed and/or maintained as described in the Plan. Where the report does not identify any incidents, the inspection report shall contain a certification that the best management practices are in compliance with Part V.G.2. of this permit.

4. Maintenance. The Plan shall include a description of procedures to ensure the timely maintenance of vegetation, erosion and sediment control measures and other protective measures identified in the site plan.

5. Sampling Requirements. This permit requires the monitoring of nephelometric turbidity in receiving water(s) or outfalls in accordance with this permit. This paragraph shall not apply to any land disturbance associated with the construction of single-family homes which are not part of a subdivision or planned common development unless five (5) acres or more will be disturbed. The following procedures constitute EPD's guidelines for sampling turbidity.

a. Sampling Requirements shall include the following:
(1). A USGS topographic map, a topographic map or a drawing (referred to as a topographic map) that is a scale equal to or more detailed than a 1:24000 map showing the location of the site or the stand alone construction: (a) the location of

all perennial and intermittent streams and other water bodies as shown on a USGS topographic map, and all other perennial and intermittent streams and other water bodies located during mandatory field verification, into which the stormwater is discharged and (b) the receiving water and/or outfall sampling locations. When the permittee has chosen to use a USGS topographic map and the receiving water(s) is not shown on the USGS topographic map, the location of the receiving water(s) must be hand-drawn on the USGS topographic map from where the stormwater(s) enters the receiving water(s) to the point where the receiving water(s) combines with the first blue line stream shown on the USGS topographic

(2). A written narrative of site specific analytical methods used to collect, handle and analyze the samples including quality control/quality assurance procedures. This narrative must include precise sampling methodology for each sampling

(3). When the permittee has determined that some or all outfalls will be sampled, a rationale must be included on the Plan for the NTU limit(s) selected from Appendix B. This rationale must include the size of the construction site, the calculation of the size of the surface water drainage area, and the type of receiving water(s) (i.e., trout stream or supporting warm water fisheries); and

(4). Any additional information EPD determines necessary to be part of the Plan. EPD will provide written notice to the permittee of the information necessary and the time line for submittal.
b. Sample Type. All sampling shall be collected by "grab samples" and the analysis of these samples must be conducted in accordance with methodology and test procedures established by 40 CFR Part 136 (unless other test procedures have been approved); the guidance document titled "NPDES Storm Water Sampling Guidance Document, EPA 833-B-92-001" and guidance documents that may be

prepared by the EPD. (1). Sample containers should be labeled prior to collecting the samples.

(2). Samples should be well mixed before transferring to a secondary container.(3). Large mouth, well cleaned and rinsed glass or plastic jars should be used for collecting samples. The

jars should be cleaned thoroughly to avoid contamination. (4). Manual, automatic or rising stage sampling may be utilized. Samples required by this permit should be analyzed immediately, but in no case later than 48 hours after collection. However, samples from automatic samplers must be collected no later than the next business day after their accumulation,

unless flow through automated analysis is utilized. If automatic sampling is utilized and the automatic sampler is not activated during the qualifying event, the permittee must utilize manual sampling or rising stage sampling during the next qualifying event. Dilution of samples is not required. Samples may be analyzed directly with a properly calibrated turbidimeter. Samples are not required to be cooled. (5). Sampling and analysis of the receiving water(s) or outfalls beyond the minimum frequency stated in this permit must be reported to EPD as specified in Part IV.E.

c. Sampling Points.
(1). For construction activities the primary permittee must sample all receiving water(s), or all outfall(s), or a combination of receiving water(s) and outfall(s). Samples taken for the purpose of compliance with this permit shall be representative of the monitored activity and representative of the water quality of the receiving water(s) and/or the stormwater outfalls using the following minimum guidelines:
(a). The upstream sample for each receiving water(s) must be taken immediately upstream of the

confluence of the first stormwater discharge from the permitted activity (i.e., the discharge farthest upstream at the site) but downstream of any other stormwater discharges not associated with the permitted activity. Where appropriate, several upstream samples from

across the receiving water(s) may need to be taken and the arithmetic average of the turbidity of these samples used for the upstream turbidity value. (b). The downstream sample for each receiving water(s) must be taken downstream of the confluence of the last stormwater discharge from the permitted activity (i.e., the discharge farthest downstream at the

upstream of any other stormwater discharge not associated with the permitted activity. Where appropriate, several downstream samples from across the receiving water(s) may need to be taken and the arithmetic average of the turbidity of these samples used for the downstream turbidity value. (c). Ideally the samples should be taken from the horizontal and vertical center of the receiving water(s)

or the stormwater outfall channel(s). (d). Care should be taken to avoid stirring the bottom sediments in the receiving water(s) or in the outfall stormwater channel. (e). The sampling container should be held so that the opening faces upstream.

(f). The samples should be kept free from floating debris.

(g). Permittees do not have to sample sheet flow that flows ontoundisturbed natural areas or areas stabilized by the project. For purposes of this section, stabilized shall mean, for unpaved areas and areas not covered by permanent structures and areas located outside the wastedisposal limits of a landfill cell that has been certified by EPD for waste disposal, 100% of the soil surface is uniformly covered in permanentvegetation with a density of 70% or greater, or landscaped according to the Plan (uniformly covered with landscaping materials in planned landscaped areas), or equivalent permanent stabilization measures as defined in the Manual (excluding a crop of annual vegetation and a seeding of target crop perennials appropriate for the region).

(h). All sampling pursuant to this permit must be done in such a way (including generally accepted sampling methods, locations, timing, and frequency) as to accurately reflect whether stormwater runoff from the construction site is in compliance with the standard set forth in Parts III.D.2. or III.D.4., whichever is applicable.
d. Sampling Frequency.

(1). The primary permittee must sample in accordance with the Plan at least once for each rainfall event described below. For a qualifying event, the permittee shall sample at the beginning of any stormwater discharge to a monitored receiving water and/or from a monitored outfall location within in forty-five (45) minutes or as soon as possible.

(2). However, where manual and automatic sampling are impossible (as defined in this permit), or are beyond the permittee's control, the permittee shall take samples as soon as possible, but in no case more than twelve (12) hours after the beginning of the stormwater discharge.
(3). Sampling by the permittee shall occur for the following qualifying events:

(a). For each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a stormwater discharge that occurs during normal business hours as defined in this permit after all clearing and grubbing operations have been completed, but prior to completion of mass grading operations, in the drainage area of the location selected as the sampling location;

(b). In addition to (a) above, for each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a stormwater discharge that occurs during normal business hours as defined in this permit either 90 days after the first sampling event or after all mass grading operations have been completed, but prior to submittal of a NOT, in the drainage area of the location selected as the sampling location, whichever comes first;
(c). At the time of sampling performed pursuant to (a) and (b) above, if BMPs in any area of the site that discharges to a receiving water or from an outfall are not properly designed, installed and maintained.

discharges to a receiving water or from an outfall are not properly designed, installed and maintained, corrective action shall be defined and implemented within two (2) business days, and turbidity samples shall be taken from discharges from that area of the site for each subsequent rain event that reaches or exceeds 0.5 inch during normal business hours* until the selected turbidity standard is attained, or until post-storm event inspections determine that BMPs are properly designed, installed and maintained;

(d). Where sampling pursuant to (a), (b) or (c) above is required but not possible (or not required because there was no discharge), the permittee, in accordance with Part IV.D.4.a.(6), must include a written justification in the inspection report of why sampling was not performed. Providing this justification does not relieve the permittee of any subsequent sampling obligations under (a). (b) or (c) above: and

(e). Existing construction activities, i.e., those that are occurring on or before the effective date of this permit, that have met the sampling required by (a) above shall sample in accordance with (b). Those existing construction activities that have met the sampling required by (b) above shall not be required to conduct additional sampling other than as required by (c) above.

*Note that the permittee may choose to meet the requirements of (a) and (b) above by collecting turbidity samples from any rain event that reaches or exceeds 0.5 inch and allows for sampling at any time of the day or week.

7. Non-stormwater discharges. Except for flows from fire fighting activities, sources of nonstormwater listed in Part III.A.2. of this permit that are combined with stormwater discharges associated with construction activity must be identified in the Plan. The Plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-stormwater component(s) of the discharge.

E. Reporting.
 1. The applicable permittees are required to submit the sampling results to the EPD at the address shown in Part II.C. by the fifteenth day of the month following the reporting period. Reporting periods are months during which samples are taken in accordance with this permit. Sampling results shall be in a clearly legible format. Upon written notification, EPD may require the applicable permittee to submit the sampling results on a more frequent basis. Sampling and analysis of any stormwater discharge(s) or the

receiving water(s) beyond the minimum frequency stated in this permit must be reported in a similar manner to the EPD. The sampling reports must be signed in accordance with Part V.G.2. Sampling reports must be submitted to EPD using the electronic submittal service provided by EPD. Sampling

reports must be submitted to EPD until such time as a NOT is submitted in accordance with Part VI2. All sampling reports shall include the following information:a. The rainfall amount, date, exact place and time of sampling or measurements;

- b. The name(s) of the certified personnel who performed the sampling and measurements;
- c. The date(s) analyses were performed;d. The time(s) analyses were initiated;
- e. The name(s) of the certified personnel who performed the analyses;
- f. References and written procedures, when available, for the analytical techniques or methods used; g. The results of such analyses, including the bench sheets, instrument readouts, computer disks or
- tapes, etc., used to determine these results; h. Results which exceed 1000 NTU shall be reported as "exceeds 1000 NTU;" and
- i. Certification statement that sampling was conducted as per the Plan.

3. All written correspondence required by this permit shall be submitted by return receipt certified mail (or similar service) to the appropriate District Office of the EPD according to the schedule in Appendix A of this permit. The permittee shall retain a copy of the proof of submittal at the construction site or the proof of submittal shall be readily available at a designated location from commencement of construction until such time as a NOT is submitted in accordance with Part VI.

F. Retention of Records.

1. The primary permittee shall retain the following records at the construction site or the records shall be readily available at a designated alternate location from commencement of construction until such time as a NOT is submitted in accordance with Part VI:

- a. A copy of all Notices of Intent submitted to EPD;
 b. A copy of the Erosion, Sedimentation and Pollution Control Plan required by this permit;
- c. The design professional's report of the results of the inspection conducted in accordance with Part IV.A.5. of this permit:
- d. A copy of all sampling information, results, and reports required by this permit;
 e. A copy of all inspection reports generated in accordance with Part IV.D.4.a. of this permit;
- f. A copy of all violation summaries and violation summary reports generated in accordance with Part III.D.2. of this permit; and

g. Daily rainfall information collected in accordance with Part IV.D.4.a.(2). of thispermit.

2. Copies of all Notices of Intent, Notices of Termination, inspection reports, sampling reports (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) or other reports requested by the EPD, Erosion, Sedimentation and Pollution Control Plans, records of all data used to complete the Notice of Intent to be covered by this permit and all other records required by this permit shall be retained by the permittee who either produced or used it for a period of at least three years from the date that the NOT is submitted in accordance with Part VI. of this permit. These records must be maintained at the permittee's primary place of business or at a designated alternative location once the construction activity has ceased at the permitted site. This period may be extended by request of the EPD at any time upon written notification to the permittee.

Part V. STANDARD PERMIT CONDITIONS A. Duty to Comply.

1. Each permittee must comply with all applicable conditions of this permit. Any permit noncompliance constitutes a violation of the Georgia Water Quality Control Act (O.C.G.A. §§12-5-20, et seq.) and is grounds for enforcement action; for permit termination; or for denial of a permit renewal application. Failure of a primary permittee to comply with any applicable term or condition of this permit shall not relieve any other primary permittee from compliance with their applicable terms and conditions of this permit.

2. Each permittee must document in their records any and all known violations of this permit at his/her site within seven (7) days of his/her knowledge of the violation. A summary of these violations must be submitted to EPD by the permittee at the addresses shown in Part II.C. within fourteen (14) days of his/her discovery of the violation.

3. Penalties for violations of permit conditions. The Federal Clean Water Act and the Georgia Water Quality Control Act (O.C.G.A. §§12-5-20, et seq.) provide that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine or by imprisonment, or by both. The Federal Clean Water Act and the Georgia Water Quality Control Act also provide procedures for imposing civil penalties which may be levied for violations of the Acts, any permit condition or limitation established pursuant

to the Acts, or negligently or intentionally failing or refusing to comply with any final or emergency order of the Director.
B. Continuation of the Expired General Permit. This permit expires on the date shown on the

cover page of this permit. However, an expired general permit continues in force and effect until a new general permit is issued, final and effective.
C. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for the permittee in an

enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

E. Duty to Provide Information. The permittee shall furnish to the Director; a State or local agency approving soil Erosion, Sedimentation and Pollution Control Plans, grading plans, or stormwater management plans; or in the case of a stormwater discharge associated with construction activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the local government operating the municipal separate storm sewer system, any information which is requested to determine compliance with this permit. In the case of information submitted to the EPD such information shall be considered public information and available under the Georgia Open Records Act.

F. Other Information. When the permittee becomes aware that he failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report required tobe submitted to the EPD, the permittee shall promptly submit such facts or information.
 G. Signatory Requirements. All Notices of Intent, Notice of Terminations, inspection reports,

- sampling reports or other reports requested by the EPD shall be signed as follows: 1. All Notices of Intent and Notices of Termination shall be signed as follows:
- a. For a corporation: by a responsible corporate officer. For the purpose of this permit, a responsible corporate officer. For the purpose of this permit, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or (2) the manager of one or more manufacturing, production or operating facilities provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
 b. For a partnership or sole proprietorship: by a general partner or the proprietor respectively; or
- b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 c. For a municipality, State, Federal, or other public facility: by either a principal executive officer or ranking elected official; and
 d. Changes to authorization. If an authorization under Part II.B. is no longer accurate, a modification NOI
- a satisfying the requirements of Part II.B. must be submitted to the EPD prior to or together with any inspection reports, sampling reports, or other reports requested by the EPD to be signed by a person described above or by a duly authorized representative of that person.
 All inspection reports, sampling reports, or other reports requested by the EPD shall be signed by a
- person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if: a. The authorization is made in writing by a person(s) described above and submitted to the EPD;
- b. The authorization specifies either an individual or a position having responsibility for specified operation(s) of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may be
- either a named individual or any individual occupying a named position); and
 c. Certification. Reports delineated in Part V.G.2. shall be signed by the permittee or duly authorized representative and shall make the following certification:
 "I certify under penalty of law that this report and all attachments were prepared under my direction

or supervision in accordance with a system designed to assure that certified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

H. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under the Georgia Hazardous Waste Management Act, O.C.G.A. § 12-8-60, et seq. or under Chapter 14 of Title 12 of the Official Code of Georgia Annotated; nor is the Operator relieved from any responsibilities, liabilities or penalties to which the permittee is or may be subject under Chapter 14 of Title 12 of the Official Code of Georgia Annotated; nor is the Operator relieved from any responsibilities, liabilities or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act or Section 106 of Comprehensive Environmental Response Compensation And Liability Act.

 Property Rights. The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.
 Severability. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such

application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.
K. Other Applicable Environmental Regulations and Laws. Nothing in this permit shall be

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construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act. Nothing in this permit, unless explicitly stated, exempts the permittee from compliance with other applicable local, state and federal ordinances, rules, regulations, and laws. Furthermore, it is not a defense to compliance with this permit that a local government authority has approved the permittee'sErosion, Sedimentation and Pollution Control Plan or failed to take enforcement action against the permittee for violations of the Erosion, Sedimentation and Pollution Control Plan, or other provisions of this permit. No condition of this permit shall release the permittee from any responsibility or requirements

under other environmental statutes or regulations.
 Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit and with the required plans. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of the permit.

M. Inspection and Entry. The permittee shall allow the Director or an authorized representative of EPA, EPD or to designated officials of the local government reviewing soil Erosion, Sedimentation and Pollution Control Plans, grading plans, or stormwater management plans; or, in the case of a construction site which discharges through a municipal separate storm sewer system, an authorized representative of the municipal operator of the separate storm sewer

system receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit; and

 Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and
 Inspect at reasonable times any facilities or equipment (including monitoring and control equipment).

N. Permit Actions. This permit may be revoked and reissued, or terminated for cause including but not limited to changes in the law or regulations. The filing of a request by the permittee for termination of the permit, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

Part VI. TERMINATION OF COVERAGE

A. Notice of Termination Eligibility. Notice of Termination signed in accordance with Part V.G.2. of

this permit must be submitted:

 For construction activities, by the permittee where the entire stand alone development has undergone final stabilization, all stormwater discharges associated with construction activity that are authorized by this permit have ceased, the site is in compliance with this permit and all temporary BMPs have been removed. For construction activities where the primary permittee has elected to submit NOIs for separate phases of the stand alone development, the phase or phases of the stand alone development on the NOT shall correspond to the phase or phases on the NOI.

By the Owner or Operator when the Owner or Operator of the site changes. Where stormwater discharges will continue after the identity of the Owner or Operator changes, the permittee must, prior to filing the Notice of Termination, notify any subsequent Owner or Operator of the permitted site as to the requirements of this permit.
 Notice of Termination Contents:

1. The NPDES permit number for the stormwater discharge associated with construction activity identified by the Notice of Termination (i.e., GAR100001 – Stand Alone);

The project construction site name, GPS location (decimal degrees) of construction exit, construction site location, city (if applicable) and county of the construction site for which the notification is submitted. This information must correspond to the similar information as provided on the NOI. Where an address for the construction site is not available, the construction site location information must be sufficient to accurately locate the construction site;
 The Owner's legal name, address, telephone number and email address and the Operator's legal

name, address, telephone and email address;
4. The name of the initial receiving water(s), and when the discharge is through a municipal separate storm sewer system (MS4), the name of the local government operating the municipal separate storm sewer system and the name of the receiving water(s) which receives the discharge from the MS4;
5. Copies of all sampling reports not previously submitted and/or a written justification why sampling was not conducted. Copies of all sampling reports may be submitted as a Portable Document Format (PDF) file on CD-ROM or other storage device;
6. Any other information specified on the NOT in effect at the time of submittal; and

7. The following certification signed in accordance with Part V.G.1. (signatory requirements): "I certify under penalty of law that either: (a) all stormwater discharges associated with construction activity authorized by this permit have ceased, the site is in compliance with this permit and all temporary BMPs have been removed or (b) I am no longer an Owner or Operator at the construction site and a new Owner or Operator has assumed operational control of the permitted construction site where I previously had ownership or operational control; and that discharging pollutants in stormwater associated with construction activity to waters of Georgia is unlawful under the Georgia Water Quality Control Act and the

Clean Water Act where the discharge is not authorized by a NPDES

C. Notice of Termination Submittal. All Notices of Termination (NOT) for this permit shall be submitted to EPD using the electronic submittal service provided by EPD and a copy to the Local Issuing Authority in jurisdictions authorized to issue a Land Disturbance Activity permit for the permittee's construction site pursuant to O.C.G.A. 12-7-1, et seq.

SOIL SEDIMENTATION AND POLLUTION CONTROL NOTES

CLEARING PHASE - INITIAL PERIMETER CONTROL

PRIOR TO THE LAND DISTURBING ACTIVITY, THE CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION MEETING WITH THE AREA SITE DEVELOPMENT INSPECTOR.

NO STAGING AREAS, MATERIAL STORAGE, CONCRETE WASH OUT AREAS, OR DEBRIS BURN AND BURIAL HOLES SHALL BE LOCATED WITHIN 50 FT OF DESIGNATED TREE PROTECTION AREAS OR STREAM BUFFERS.

A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE AT ALL TIMES. POST ON DAY ONE.

- PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF
 LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY
 DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE
 MEANS. THE LOCATION AND EXTENT OF ALL LAND DISTURBANCE
 ACTIVITY SHALL BE DEMARCATED FOR THE DURATION OF THE
 CONSTRUCTION ACTIVITY. NO LAND DISTURBANCE SHALL OCCUR
 OUTSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.
- PRIOR TO ANY OTHER CONSTRUCTION, A STABILIZED
 5. CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY OR EXIT FROM THE SITE OR ONTO ANY PUBLIC ROADWAY AS SHOWN ON THE PLANS.
- 6. IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION STORMWATER MANAGEMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE PHASE 1 E.S.P.C. PLAN.
- TREE PROTECTION FENCING AND STREAM BUFFER LIMITS SHOULD BE INSTALLED PRIOR TO THE START OF ANY LAND DISTURBANCE ACTIVITY AND MAINTAINED UNTIL FINAL LANDSCAPE IS INSTALLED. THE TREE PROTECTION FENCING SHOULD BE INSPECTED DAILY. ANY FAILURES OF SAID FENCING SHOULD BE REPAIRED IMMEDIATELY.
- AFTER INSTALLATION OF INITIAL EROSION CONTROL MEASURES THE SITE CONTRACTOR SHALL SCHEDULE AN INSPECTION BY THE PROJECT DESIGN PROFESSIONAL WITHIN 7 DAYS. NO OTHER CONSTRUCTION ACTIVITIES SHALL OCCUR UNTIL THE PROJECT PROFESSIONAL APPROVES THE INSTALLATION OF SAID EROSION CONTROL MEASURES. IF UNFORESEEN OCCURRENCES OCCUR IN THE FIELD THAT WARRANT ADDITIONAL EROSION CONTROL MEASURES, THE CONTRACTOR MUST CONSTRUCT ANY ADDITIONAL EROSION CONTROL DEVICES DEEMED NECESSARY BY THE SITE INSPECTION WITH CONSULTATION WITH DESIGN PROFESSIONAL.
- AFTER APPROVAL OF THE INITIAL EROSION CONTROL INSTALLATION, THE CONTRACTOR MAY PROCEED WITH CLEARING AND GRUBBING ACTIVITIES. AS CLEARING PERMITS, THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SEDIMENT PONDS AND DIVERSION DIKES TO

CONTROL EROSION AND STORMWATER RUNOFF.

THE CONTRACTOR SHALL IMPLEMENT NPDES REQUIREMENTS PART IV 10. OF GAR 100001 THRU THE DURATION OF PROJECT.

- MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL 11. EXPOSED AREAS WITHIN 14 DAYS OF LAND DISTURBANCE (LIA'S MAY REQUIRE LESS).
- TEMPORARY VEGETATION MAY BE EMPLOYED INSTEAD OF MULCH IF THE
 12. AREA REMAINS UNDISTURBED FOR LESS THAN 6 MONTHS. IF AN AREA WILL
 REMAIN UNDISTURBED FOR MORE THAN 6 MONTHS, PERMANENT
 VEGETATION TECHNIQUES SHALL BE EMPLOYED.
- CONTRACTOR SHALL INSPECT CONTROL MEASURES AT THE 13. END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.
- FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL 14. MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE APPROVED E.S.P.C. PLANS, I.E., MANDATORY STOP WORK ORDER.
- THE CONTRACTOR SHALL OBSERVE THE PROJECT SEQUENCE SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO INSURE THAT LAND STRIPPED OF ITS NATURAL COVER IS EXPOSED ONLY IN SMALL
- QUANTITIES. NO BURN OR BURY PITS SHALL BE PERMITTED ON THE 16. CONSTRUCTION SITE WITHOUT WRITTEN PERMISSION OF THE OWNER AND/OR THE ENGINEER OF RECORD.
- ADDITIONAL SILT BARRIERS MUST BE PLACED AS SHOWN ON THE 17. PLAN AS ACCESS IS OBTAINED DURING CLEARING. NO GRADING SHALL TAKE PLACE UNTIL SILT BARRIER INSTALLATION AND SEDIMENT PONDS ARE CONSTRUCTED AS SHOWN ON THE PHASE 1 - E.S.P.C.
- PLAN.
 SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE
 18. CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE
 MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS
 REACHED 1/3 THE CAPACITY OF THE DEVICE. ADDITIONAL
 DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE
 DEVELOPED.
- THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION 19. WHICH WILL PREVENT TRACK OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1"-3" OF STONE AS CONDITIONS DEMAND. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED IMMEDIATELY

GRADING PHASE - INTERMEDIATE EROSION & SEDIMENT CONTROL

- DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO ENSURE THAT LAND STRIPPED OF ITS NATURAL GROUND COVER IS EXPOSED ONLY IN SMALL QUANTITIES AND THEREFORE LIMITED DURATION, BEFORE PERMANENT EROSION PROTECTION IS ESTABLISHED.
- MAINTAIN FULL COORDINATION WITH THE DESIGN PROFESSIONAL, CONTRACTOR AND REGULATORY INSPECTOR AT ALL TIMES REGARDING PROJECT SEQUENCE.
- EARTHWORK OPERATIONS IN THE VICINITY OF STREAM BUFFERS SHALL 3. BE CAREFULLY CONTROLLED TO AVOID DUMPING OR SLOUGHING INTO THE BUFFER AREAS.

GEORGIA SOIL AND WATER CONSERVATION COMMISSION WILLIAM T. BUCHANAN

Level II Certified Design Professional

Certification Number 0000065516 Issued: 1/25/2021 Expires: 1/25/2027

(1)I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" (MANUAL) PUBLISHED BY THE STATE SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED, PROVIDES FOR THE SAMPLING OF THE RECEIVING WATER(S) OR THE SAMPLING OF STORM WATER OUTFALLS AND THAT THE DESIGNED SYSTEM OF BEST MANAGEMENT PRACTICES AND SAMPLING METHODS IS EXPECTED TO MEET THE REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. GAR100001.

(2)I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY MYSELF OR MY AUTHORIZED AGENT, UNDER MY DIRECT SUPERVISION.

Illiam T. Suchana WILLIAM T. BUCHANAN, P.E. LEVEL II CERT. NO. 0000065516

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FEMA FLOOD MAP SCALE: NTS

SURFACE DRAINAGE AREA MAP SCALE: NTS

NPDES GAR 100001 CERTIFICATION

04/29/2C DATE

33° 26' 35" N 33° 26' 30" N Map Scale: 1:1,230 if printed on A landscape (11" x 8.5") sheet. Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84 USDA Natural Resources Conservation Service

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI				
DgA	Dogue fine sandy loam, 0 to 3 percent slopes	0.9	14.7%				
Ra	Rains loamy sand	2.3	36.8%				
ТwB	Troup fine sand, 1 to 5 percent slopes	3.1	48.5%				
Totals for Area of Interest		6.3	100.0%				

NARRATIVE OF LAND DISTURBING ACTIVITY

ON A 2.10-ACRE PROPERTY AT 2640 GORDON HIGHWAY (TPN 066-0-053-00-0) IN AUGUSTA. THE PROPERTY IS UNDEVELOPED WITH SPARSE VEGETATIVE COVER (POOR CONDITION). THE SITE SLOPES SIGNIFICANTLY (RANGING FROM 5% TO 25%) FROM NORTHEAST TO SOUTHWEST. THE PROPOSED PROJECT WILL INCLUDE ASPHALT AND CONCRETE PAVING, STORMWATER INFRASTRUCTURE AND UTILITIES TO SERVE THE DEVELOPMENT. AN ABOVE GROUND DETENTION POND WILL PROVIDE STORMWATER QUANTITY CONTROL FOR THE DEVELOPMENT. ADS FLEXSTORM PURE INLET FILTERS UPSTREAM OF THE POND WILL PROVIDE WATER "B/D" AS ACCORDING TO THE USDA / NRCS WEB SOIL SURVEY. STORMWATER RUNOFF FROM THE PROPERTY DRAINS TO BUTLER CREEK.

PRACTICES THAT WILL BE USED TO REDUCE THE POLLUTANTS IN STORM WATER DISCHARGES DURING CONSTRUCTION INCLUDE (CHECKLIST ITEMS 26 & 35):

INITIAL PHASE: PERIMETER CONTROL

- SILT FENCE TO PREVENT SEDIMENT CARRIED BY SHEET FLOW FROM LEAVING THE SITE AND ENTERING DEPOSITION OS SEDIMENT AT THE STRUCTURE.
- TEMPORARY SEDIMENT TRAP TO PREVENT SEDIMENT FLOW FROM LEAVING THE SITE AND ALLOW SEDIMENT TO SETTLE OUT OF STORM WATER PRIOR TO DISCHARGE OFF SITE. CONSTRUCTION EXIT - TO REDUCE AND ELIMINATE TRANSPORT OF MUD FROM CONSTRUCTION AREA INTO
- PUBLIC RIGHTS-OF-WAY BY MOTOR VEHICLES OR BY RUNOFF,
- CONSTRUCTION ROAD TO PROVIDE A FIXED TRAVEL ROUTE FOR CONSTRUCTION TRAFFIC AND REDUCE EROSION AND SUBSEQUENT REGRADING OF PERMANENT ROADBEDS BETWEEN TIME OF INITIAL GRADING AND FINAL STABILIZATION.

INTERMEDIATE PHASE: INTERMEDIATE CONSTRUCTION CONTROL

- SILT FENCE TO PREVENT SEDIMENT CARRIED BY SHEET FLOW FROM LEAVING THE SITE AND ENTERING NATURAL DRAINAGE WAYS OR STORM DRAINAGE SYSTEM BY SLOWING STORM WATER RUNOFF AND CAUSING DEPOSITION OS SEDIMENT AT THE STRUCTURE.
- CONSTRUCTION EXIT TO REDUCE AND ELIMINATE TRANSPORT OF MUD FROM CONSTRUCTION AREA INTO PUBLIC RIGHTS-OF-WAY BY MOTOR VEHICLES OR BY RUNOFF, DUST CONTROL - TO PREVENT SURFACE AND AIR MOVEMENT OF DUST FROM EXPOSED SOIL SURFACE AND TO REDUCE PRESENCE OF AIRBORNE SUBSTANCES WHICH MAY BE HARMFUL OR INJURIOUS TO HUMAN HEALTH WELFARE, OR SAFETY, OR TO ANIMALS OR PLANT LIFE. • EROSION CONTROL MATTING ON SLOPES 3:1 OR GREATER.
- TEMPORARY GRASSING TO REDUCE RUNOFF AND SEDIMENT DAMAGE OF DOWNSTREAM RESOURCES. RIPRAP OUTLET PROTECTION TO REDUCE VELOCITY OF FLOW BEFORE ENTERING RECEIVING CHANNELS BELOW STORM DRAIN OUTLETS.

FINAL PHASE: SITE STABILIZATION

PERMANENT GRASSING AND/OR VEGETATION AS SPECIFIED ON THE LANDSCAPE PLAN

WATER THAT WILL OCCUR AFTER CONSTRUCTION OPERATIONS WILL INCLUDE (CHECKLIST ITEM 26):

• PERMANENT GRASSING - TO REDUCE RUNOFF AND SEDIMENT DRAINAGE; PROTECT SOIL SURFACE FROM PLANTINGS.

THE AUGUSTA FIRE DEPARTMENT PROPOSES THE CONSTRUCTION OF A NEW ±12,500 SF FIRE STATION LOCATED QUALITY CONTROL FOR THE DEVELOPMENT. THE SITE SOILS ARE SHOWN TO BE TROUP FINE SAND (HYDROLOGIC GROUP "A"), DOGUE FINE SANDY LOAD (HYDROLOGIC GROUP "C") AND RAINS LOAMY SAND (HYDROLOGIC GROUP

NATURAL DRAINAGE WAYS OR STORM DRAINAGE SYSTEM BY SLOWING STORM WATER RUNOFF AND CAUSING

MEASURES THAT WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS TO CONTROL POLLUTANTS IN STORM

EROSION AND TO IMPROVE INFILTRATION AND AERATION AS WELL AS ORGANIC MATTER FOR PERMANENT

GSWCC GEORGIA SOIL AND WATER CONSERVATION COMMISSION

WILLIAM T. BUCHANAN

Level II Certified Design Professional

Certification Number 0000065516

ISSUED: <u>1/25/2021</u> EXPIRES: <u>1/25/2027</u>

COUNT	SYMB.	SIZE	BOTANICAL NAME	COMMON NAME	HEIGHT	SPACING	TREE PTS
5	Lf'F'	3" CAL.	Lagerstroemia faurei 'Fantasy'	Fantasy Crepe Myrtle	10'-12'	AS SHOWN	300 SF
6	Lt	3" CAL.	Liriodendron tulipifera	Tulip Poplar	10'-12'	AS SHOWN	1400 SF
9	Ns'G'	3" CAL.	Nyssa sylvatica 'Green Gable'	Green Gable Black Gum	10'-12'	AS SHOWN	1400 SF
9	Td'M'	3" CAL.	Taxodium distichum 'Shawnee Brave'	Shawnee Brave Bald Cypress	10'-12'	AS SHOWN	1400 SF
6	Ix'N'	7 GAL.	llex x 'Nellie R. Stevens'	Nellie R. Stevens Holly Tree	FULL	AS SHOWN	750 SF
27	Мс	7 GAL.	Myrica cerifera	Southern Wax Myrtle	FULL	AS SHOWN	
62	Dx'V'	3 GAL.	Distylium x 'Vintage Jade'	Distylium x 'Vintage Jade'	FULL	AS SHOWN	
29	Fg'M'	3 GAL.	Fothergilla gardenii 'Mt. Airy'	Dwarf Fothergilla	FULL	AS SHOWN	
22	lg'C'	3 GAL.	Ilex glabra 'Compacta'	Compact Inkberry	FULL	AS SHOWN	
32	Rx'G'	3 GAL.	Rhododendron x 'Gumpo Pink'	Gumpo Pink Azalea	FULL	AS SHOWN	
430	Lm'S'	1 GAL.	Liriope muscari 'Super Blue'	Super Blue Mondo Grass	FULL	24" O.C.	
140	Та	1 GAL.	Trachelospermum asiaticum	Asiatic Jasmine	FULL	24" O.C.	
*APP	ROXIMATE	ELY 28,200 SF	HYBRID BERMUDA SOD *CONTRACTOR IS	S RESPONSIBLE FOR HIS OR HER OWN TAKE	OFFS		TOTAL
*APP *ALL NOTE	ROXIMATE TREES AR E: THE LAN	LY 9,500 SF I E TO BE A MI NDSCAPE AR(NIMUM OF 3" CALIPER, 8' IN HEIGHT AND CHITECT HAS SELECTED PLANT VARIETIE	S RESPONSIBLE FOR HIS OR HER OWN TAKE JNBRANCHED TO 6' S WHICH ATTAIN SPECIFIC SIZES. ANY PROP	OFFS OSED SUBSTITU	JTIONS	

ANTICIPATED CANOPY COVERAGE TEN (10) YEARS FROM THE TIME THAT THE SITE IS DEVELOPED.

TOTAL DISTURBED AREA: 2.29 ACRES (99,752 SF)

REQUIRED MINIMUM CANOPY: 99,752 x 0.3 = 29,925 SF (.69 ACRES)

TOTAL PRESERVED TREE CANOPY: 0 SF (0 ACRES)

ADDITIONAL CANOPY REQUIRED: 29,925 - 0 = 29,925 SF (.69 ACRES) 1 LARGE TREE= 1400 SF 1 MEDIUM TREE= 750 SF 1 SMALL TREE= 300 SF

> 24 LARGE TREES PROVIDED= 6 MEDIUM TREES PROVIDED= 5 SMALL TREES PROVIDED=

33,600 SF 4,500 SF 1,500 SF TOTAL= 39,600 SF

BUFFER REQUIREMENTS

BUFFER STRIP TREES 1 TREE/ 45 L.F. OF TOTAL LOT CONNECTION 310 LF - REQUIRES 7 LARGE/MEDIUM EVERGREEN TREES 7 TREES PROVIDED (SHIFTED ALONG LOT CONNECTION DUE TO SANITARY SEWER CONSTRAINTS) 310 LF - SHADOWBOX STYLE FENCE PROVIDED

TREE ORDINANCE REQUIREMENTS

LANDSCAPE STRIP TREES 1 TREE/ 45 L.F. OF TOTAL LOT FRONTAGE (GORDON HWY.) 425 LF - REQUIRES 9 LARGE TREES 9 LARGE TREES PROVIDED 1 TREE/ 45 L.F. OF TOTAL LOT FRONTAGE (POWELL RD.) 409 LF - REQUIRES 9 LARGE TREES 9 LARGE TREES PROVIDED

PARKING LOT TREES 1 TREE/ 3000 S.F. OF TOTAL PARKING LOT SURFACE AREA (NO PARKING SPACE IS MORE THAN 65' FROM THE TRUNK OF ANY PROPOSED TREE) 10,000 SF - REQUIRES 3 LARGE OR MEDIUM TREES - 4 LARGE OR MEDIUM TREES PROVIDED ON SITE

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JOHNSON,

LASCHOBER

& ASSOCIATES, P.C.

No. PEF000356

JUNE 30, 2026

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CRE WTB

04/03/2024

1" = 30'

1'-0" MIN DIAMETER OF HOLE TO BE 1'-0" BEYOND DIA. OF ROOTBALL TOP OF ROOTBALL SHALL BE PLACED 1"-2" ABOVE EXISTING GRADE - 3" DYE-FREE DOUBLE SLOPF HAMMERED HARDWOOD MULCH DO NOT COVER ROOT FLARE. NATIVE SOIL BACKFILL GRADE TO SLOPE AWAY FROM BASE OF TREE. PLACE SOIL IN 3"-4" LIFTS SETTLING WITH WATER TO AVOID AIR POCKETS. TYPICAL BED LAYOUT: MIN. ROOT MASS TO BE IN ACCORDANCE WITH "AMERICAN STANDARDS FOR NURSERY

L-201

3. NOTE COMPASS ORIENTATION OF TREE PRIOR TO DIGGING AND MATCH PRIOR

CONIFER TREE PLANTING DETAIL

- 2. TREE SHOULD BE UNWRAPPED FOR EXAMINATION. STEMS SHOULD BE WRAPPED FOR SHIPMENT
- FOR A ROOT BALL AT 150% OF STANDARD ROOT BALL SIZE. ROOT BALL SHOULD BE LIFTED AND
- 6. TREE SHOULD HAVE BEEN ROOT PRUNED ONE OR MORE TIMES. THE LAST ROOT PRUNING
- SHOULD HAVE OCCURRED AT LEAST ONE FULL GROWING SEASON BEFORE INSTALLATION.
- 9. TREE SHOULD SHOW VIGOROUS AND SUBSTANTIAL GROWTH FOR AT LEAST THE LAST TWO
- 10. TREE SHOULD BE CERTIFIED IN WRITING AS TO SCIENTIFIC NAME, VARIETY, AND/OR CULTIVAR
- 11. TREE SHOULD HAVE A SINGLE DOMINANT LEADER WITH NO SIDE BRANCHES TALLER THAN THE
- 12. TREE SHOULD HAVE APPROXIMATELY TWO-THIRDS OF ITS HEIGHT IN LIVING BRANCHES. 13. TREE SHOULD HAVE BRANCHES DISTRIBUTED ALONG THE STEM IN AN ALTERNATING PATTERN AND NOT OCCURRING HORIZONTALLY OPPOSITE EACH OTHER ACROSS THE STEM.
- 16. TREE SHOULD NOT HAVE ANY VISIBLE BRANCH STUBS OR INTERNODAL CUTS PRESENT.
- 21. TREES SHOULD NOT HAVE ALL BRANCHES GROWING FROM A SINGLE AREA ON THE STEM
- 28. TREE SHOULD NOT HAVE SPROUTS FROM AROUND WOUND AREAS OR BRANCH BASES.
- 30. TREE SHOULD NOT HAVE BRANCHES THAT CROSSOVER EACH OTHER OR RUB AGAINST EACH

- 1. THE LANDSCAPE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR
- 2. THE LANDSCAPE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIAL IN QUANTITIES SUFFICIENT TO
- 3. ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT AMERICAN STANDARDS FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
- 4. NO PLANT SHALL BE PUT INTO THE GROUND BEFORE ROUGH GRADING IS COMPLETE AND APPROVED
- 5. ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANT'S ORIGINAL
- 6. ALL PLANTS SHALL BE BALLED AND WRAPPED OR CONTAINER GROWN AS SPECIFIED. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND. ALL ROOT WRAPPING MATERIAL MADE OF
- PRIOR TO PLANTING, THE LOCATION OF TREES SHALL BE STAKED AND ALL PLANT MATERIAL SHALL BE INSPECTED FOR APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT OR EQUAL. NO PLANT MATERIAL WILL BE ACCEPTED IF IT IS DAMAGED, DISEASED OR INADEQUATE IN SIZE AS SPECIFIED ON PLANS. SUBSTITUTIONS DUE TO AVAILABILITY MUST BE APPROVED BY THE LANDSCAPE ARCHITECT.
- 10. THE LANDSCAPE CONTRACTOR SHALL PROVIDE FERTILIZER, PRE-EMERGENT HERBICIDE, LIME,
- 11. BEDLINES SHALL HAVE A 3" DEEP SHOVEL CUT TRENCH EDGE WHERE MULCH MEETS GRASS, CONCRETE WALKS OR CURBS UNLESS OTHERWISE SPECIFIED. BEDLINES SHALL BE SMOOTH AND CONTINUOUS AND BE WITHIN A REASONABLE LOCATION AND SHAPE AS ILLUSTRATED ON PLANS.
- 12. ALL PLANTING AREAS SHOULD HAVE POSITIVE DRAINAGE TO DISCOURAGE SATURATED ROOT 13. PLACE 3" OF DYE-FREE DOUBLE HAMMERED HARDWOOD MULCH OVER ALL PLANTING BEDS; TUCK
- 14. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR CLEAN UP OF ALL CONTAINERS, PLANT TAGS AND
- 16. ALL AREAS TO BE GRASSED SHALL BE SEEDED OR SODDED PER THE PLANT SCHEDULE AND THE

- 1. LAY OUT PERIMETER PLANTING SPACED AS PER PLAN.
- 2. FILL IN PLANTING BED WITH TRIANGULAR SPACING. ADJUST AS PER L.A.'S INSTRUCTIONS.
- 1. VERIFY FINISH GRADE ELEVATION. PLANT TOP OF ROOTBALL AT FINISH GRADE.
- 2. REMOVE BURLAP FROM TOP $\frac{1}{3}$ OF BALL. REMOVE CONTAINER PLANTS FROM CONTAINERS AND CUT ANY CIRCLING ROOTS

SHRUB PLANTING DETAIL NOT TO SCALE

IRRIGATION SPECIFICATIONS:

- CONTRACTOR SHALL DESIGN AND INSTALL AN IRRIGATION SYSTEM FOR 100% COVERAGE OF ALL NEW TREES, SHRUBS, GROUNDCOVER AND SOD. A SHOP DRAWING OF THE PROPOSED SYSTEM LAYOUT AND PROPOSED EQUIPMENT SCHEDULE MUST BE SUBMITTED TO OWNER FOR APPROVAL PRIOR TO CONSTRUCTION.
- ALL IRRIGATION EQUIPMENT SHALL BE MANUFACTURED BY RAINBIRD INC. OR APPROVED EQUAL CONTRACTOR SHALL FIELD VERIFY EXISTING WATER PRESSURE AND AVAILABLE VOLUME FOR MINIMUM MANUFACTURED SPECIFIED WORKING PRESSURE BEFORE WORKING IRRIGATION
- SYSTEM. 4. CONTRACTOR SHALL SUPPLY POWER TO CONTROLLER UTILIZING NEAREST EXISTING POWER SUPPLY. CONTRACTOR SHALL CONSULT WITH OWNER AS TO THE LOCATION AND PLACEMENT OF
- THE CONTROLLER. 5. CONTRACTOR WILL INSTALL HEADS AND NOZZLES THAT WILL LIMIT THE AMOUNT OF WATER THROWN ON IMPERVIOUS SURFACES AND STILL MAINTAIN 100% COVERAGE OF PLANTED AREAS WITHIN THE IRRIGATION LIMITS. WATER OVERSPRAY ONTO IMPERVIOUS SURFACES MUST BE MINIMIZED TO THE GREATEST EXTENT POSSIBLE. IRRIGATION WATER MUST BE DIRECTED AWAY FROM BUILDINGS & OTHER STRUCTURES.
- CONTRACTOR SHALL LOCATE ALL UTILITIES BEFORE IRRIGATION INSTALLATION BEGINS 7. NO IRRIGATION WATER SHALL BE THROWN ON BUILDING MASONRY. NO FUNNY PIPE OR OTHER FLEXIBLE PIPE CAN BE USED FOR SUPPLY OR FEEDER LINES. NO STATIONARY RISERS CAN BE USED
- 8. ALL PLASTIC PIPE FROM SIZES 4" AND ABOVE SHALL BE CLASS 200, SDR 21, UNPLASTICIZED RIGID PVC PIPE WITH INTEGRAL BELL AND RUBBER RING GASKET UNLESS OTHERWISE SPECIFIED. PIPE FROM SIZES 3" TO 3/4" SHALL BE CLASS 200, SOLVENT WELD, PVC PIPE, 1/2" PIPE SHALL BE CLASS 200. SOLVENT WELD, PVC PIPE, ALL PIPE SHALL BE SUPPLIED IN 20' STANDARD LENGTHS AND SHALL BE MANUFACTURED BY CERTAINTEED CORP., CRESTLINE, DURA, OR EQUAL, ALL PIPE THAT IS EXPOSED OR NOT BELOW GRADE SHALL BE SCHEDULE 80 PVC. ALL DRIP IRRIGATION SUPPLY LINES NOT IN LANDSCAPE BEDS SHALL BE BELOW GRADE.
- 9. ALL IN-GROUND WIRE CONNECTIONS MUST BE MADE WITH 3M-DBY WIRE CONNECTIONS OR APPROVED EQUAL
- 10. CONTROLLER SHALL BE BY RAIN BIRD OR APPROVED EQUAL. CONTROLLER SHALL INCLUDE RAIN SENSOR. CONTROLLER SHALL BE WEATHER TIGHT CONSTRUCTION.
- 11. ALL CONTROL VALVES MUST BE BRASS OR SCHD. 80 PVC WITH A SCHD. 80 ISOLATION VALVE AT EACH CONTROL VALVE.
- 12. VALVES IN BOXES MUST BE EASILY ACCESSIBLE AND INSTALLED WITH 8" DRAINAGE ROCK IN BOTTOM.
- 13. ALL VALVE BOXES SHALL BE SET LEVEL WITH FINISHED GRADE.

PERMANENT GRASSING NOTE:

NOTE: ALL AREAS TO BE SODDED SHALL RECEIVE 3" OF SCREENED TOPSOIL. TOP SOIL SHALL BE RAKED LEVEL AND FREE OF DEBRIS PRIOR TO SOD INSTALLATION. ALL AREAS TO BE SEEDED WILL RECEIVE 2" OF SCREENED TOP SOIL. TOP SOIL WILL BE RAKED LEVEL AND FREE OF DEBRIS PRIOR TO SEEDING. ALL SODDED AREAS WILL BE TOP DRESSED WITH COARSE SAND TO LEVEL IRREGULARITIES AND PROTECT SOD SEAMS. ALL NEWLY GRASSED AREAS SHALL RECEIVE 1.5" OF ABSORBED WATER EACH WEEK THROUGH CONSTRUCTION AND THE 90 DAY MAINTENANCE PERIOD.

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PLANTING SOIL MIX NOTE

1. PLANTING SOIL SHALL BE A MIXTURE OF APPROVED TOPSOIL, SAND, AND ORGANIC MATERIAL MIXED TO MEET THE FOLLOWING SPECIFICATION. 2. PARTICLE SIZE DISTRIBUTION ACCORDING TO U.S.D.A. PARTICLE CLASSIFICATIONS:

PARTICLE	SIZE (MM)	ALLOWABLE LIMIT
GRAVEL	>4.75	MAX. 3%
FINE GRAVEL	2.00-4.75	MAX. 10%
	1 00 2 00	

••••		
FINE GRAVEL	2.00-4.75	MAX. 10%
VERY COARSE SAND	1.00-2.00	
COARSE SAND+	0.50-1.00	COMBINED
MEDIUM SAND	0.25-0.50	50-75%
FINE SAND	0.1-0.25	5-15%
VERY FINE SAND	0.05-0.10	0-10%
SILT	0.002-0.05	10-20%
CLAY	<0.002	10-20%

- 3. THE U.S.D.A. SOIL TEXTURE CLASS SHALL BE A SANDY LOAM, WITH NO MORE THAN 75% SAND AND NO MORE THAN 35% COMBINED SILT+CLAY.
- 4. THE ORGANIC MATTER SHALL BE 5-8%.
- 5. DEPTH OF MIX AS INDICATED ON DRAWINGS.

3	4	5				6	7			8	
			PI A			IF CONTRACTOR RES	PONSIBLE FOR THEIR OWN QUANTITY T	AKE-OFFS			
			COUN	F SYMB.	SIZE	BOTANICAL NAME	COMMON NAME	HEIGHT	SPACING	TREE PTS.	TOTAL
		(4		Lf'F'	3" CAL.	Lagerstroemia faurei 'Fantasy'	Fantasy Crepe Myrtle	10'-12'	AS SHOWN	300 SF	1,500 SF
				Ns'G'	3" CAL.	Nvssa svlvatica 'Green Gable'	Green Gable Black Gum	10-12	AS SHOWN	1400 SF 1400 SF	8,400 SF
			3 9	Td'M'	3" CAL.	Taxodium distichum 'Shawnee Brave'	Shawnee Brave Bald Cypress	10'-12'	AS SHOWN	1400 SF	12,600 SF
			6	lx'N'	7 GAL.	Ilex x 'Nellie R. Stevens'	Nellie R. Stevens Holly Tree	FULL	AS SHOWN	750 SF	4,500 SF
			27	Мс	7 GAL.	Myrica cerifera	Southern Wax Myrtle	FULL	AS SHOWN		
		(Dx'V'	3 GAL.	Distylium x 'Vintage Jade'	Distylium x 'Vintage Jade'	FULL	AS SHOWN		
			$\begin{array}{c c} & 29 \\ \hline & 22 \end{array}$	Fg'M'	3 GAL.	Fothergilla gardenii 'Mt. Airy'	Dwarf Fothergilla	FULL	AS SHOWN		
ESTABLISHED FROM VRS NETWORK S.P.	С.		\bigcirc 32	Rx'G'	3 GAL.	Rhododendron x 'Gumpo Pink'	Gumpo Pink Azalea	FULL	AS SHOWN		
NAD 83 GEORGIA EAST ZONE N:1,252,399.5574			430	Lm'S'	1 GAL.	Liriope muscari 'Super Blue'	Super Blue Mondo Grass	FULL	24" O.C.		
E:668,640.5544 PK-NAIL		E.	<u>++</u> 140	Та	1 GAL.	Trachelospermum asiaticum	Asiatic Jasmine	FULL	24" O.C.		
			*APF	PROXIMATE	LY 28,200 SF	F HYBRID BERMUDA SOD *CONTRACTOR	IS RESPONSIBLE FOR HIS OR HER OWN	TAKE OFFS		TOTAL	39,600 SF
			*APF		LY 9,500 SF	HYBRID BERMUDA SEED *CONTRACTOR	IS RESPONSIBLE FOR HIS OR HER OWN	TAKE OFFS			
			"ALL NOT	F' THE LAN	E TO BE A M	CHITECT HAS SELECTED PLANT VARIET	UNBRANCHED 106	PROPOSED SUBSTIT	UTIONS		
			TO	THE PLANT	SCHEDULE I	DUE TO AVAILABLE SUPPLY MUST BE AP	PROVED BY THE PROJECT LANDSCAPE	ARCHITECT.			
POINT											
PARELL ROAD											
VW VARIED PURI							MINIMUM CANC	PY REQUIF	REMENT	-	
25 MDU	2-Ns'G'						ALL LAND UNDERGOING DEV	ELOPMENT SHALL P	ROVIDE FOR		NT
FOC	BERMUDA SOD						(30%) MINIMUM TREE CANOP SUM TOTAL OF PRESERVED	Y COVERAGE. TREE TREES AND REPLAC	EMENT TREES	VERAGE IS THE S AT THEIR	<u>-</u>
FOC							ANTICIPATED CANOPY COVE	RAGE TEN (10) YEAF	RS FROM THE	TIME THAT THE	Ξ
FOC	5+8-Rx'G'	AROUND BASE									
	- 7+3-lg'C - 1-LfF'	OF IREE ITP.					TOTAL DISTURBED AREA: 2.2	29 ACRES (99,752 SF))		
	- 3-Rx'G'						REQUIRED MINIMUM CANOPY	': 99,752 x 0.3 = 29,92	5 SF (.69 ACR	ES)	
	LOD						TOTAL PRESERVED TREE CA	NOPY: 0 SF (0 ACRE	S)		
		— 1+1-Td'M'					ADDITIONAL CANOPY REQUI	RED: 29,925 - 0 = 29,9	25 SF (.69 ACF	RES)	
	X Charles Coc Coc Coc							1 LARGE TREE= 1 MEDIUM TREE=	1400 SF 750 SE		
	22 4 4 295 286		URBANCE					1 SMALL TREE=	300 SF		
	206	AREA = 2.10 AC						24 LARGE TREES PR	ROVIDED=	33,600 SF	
5-Ta			STALL BERMU	DA SOD PE	R			6 MEDIUM TREES PR	ROVIDED=	4,500 SF	
		DE GR	ETAIL 12/L-201 RASSING NOT	AND PERM/ E ON L-201,	ANENT TYP.			S SMALL TREEST RC	TOTAL=	39,600 SF	
			~ . , <u> </u>								
			CHI	01			<u>BUFFER</u>		<u>IENTS</u>		
		* * * · · · · · ·			~·ð			JFFER STRIP TREES			
			- 9,500 SF		·		1 TREE/ 45 L.I 310 LF - REQUIRES 7	LARGE/MEDIUM EVE	NECTION RGREEN TREE	S	
	293.50		BERMUDA S				7 TREES PROVIDED (S SANITAF	HIFTED ALONG LOT CORE SEWER CONSTRAIN	ONNECTION DU	JE TO	
			304		1		310 LF - SHADO	WBOX STYLE FENCE	PROVIDED		
PROPOSED	2										
$\frac{BUILDING}{FE} = 294$	50										
INSTALL BUILDING	LANDSCAPE PER										
DETAILS 3/L-201 & 4	4/L-201, TYP.	3-Ns'G'	- F0	302			IREE ORDINA	ANCE REQU	IREME	<u> </u>	
PER DETAIL 8/L-201	I, TYP.	3-10 M + +/ +					<u>LANI</u> 1 TREE/ 451 E OF TO	<u>DSCAPE STRIP TREES</u> DTAL LOT FRONTAGE ()	
	10-DxV 30-Lm'S'						425 LF - F	REQUIRES 9 LARGE TR	EES	•)	
293 50				1			9 LA 1 TREE/ 45 L.F. OF T	OTAL LOT FRONTAGE) (POWELL RD.)		
		TILDING SETBACK					409 LF - F 9 LAF	REQUIRES 9 LARGE TR RGE TREES PROVIDED	REES		
	94-1-293	TRN 066-0-053-00-0				- · -					
5-Dx	V	n'S' 2.10 ACRES	- F0C		- OHP						
2255				4	, \ `	``	PA	ARKING LOT TREES			
	3-Ns'G'	AT&T -	$\sum \left \right\rangle$				1 TREE/ 3000 S.F. OF	TOTAL PARKING LOT			
	18" RU	AT&T					(NO PARKING SPACE IS MORE THA 10,000 SF - REQU	IRES 3 LARGE OR MEI	NK OF ANY PRO DIUM TREES	POSED TREE)	
	299 AT&T == = AT&T ==	SHOVEL CUT		 			- 4 LARGE OR M	EDIUM TREES PROVID	ED ON SITE		
AR LON	90 LOU AT&T FOC	BED EDGE TYP.			L						
AT = AT = OHF = AT	87 - 289 FOC										
- AT&T FOC _288	FOC	NULUH IYP. ALL BEDS									
FOC	FOC	I,200 SF HYBRID									
290 FOC											
INSTALL CON	IIFER TREES PER DETAIL										
INSTALLATIO	N NOTES ON L-201, TYP.	296									
BLIC		55									
Η											

LANDSCAPE PLAN L-101

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L-101 **ISSUED FOR BID / PERMIT**

1" = 30'

SCALE:

DRAWING NO.

1'-0" MIN DIAMETER OF HOLE TO BE 1'-0" BEYOND DIA. OF ROOTBALL TOP OF ROOTBALL SHALL BE PLACED 1"-2" ABOVE EXISTING GRADE 3" DYE-FREE DOUBLE SLOPE HAMMERED HARDWOOD MULCH DO NOT COVER ROOT FLARE. NATIVE SOIL BACKFILL GRADE TO SLOPE AWAY FROM BASE OF TREE. PLACE SOIL IN 3"-4" LIFTS SETTLING WITH WATER TO AVOID AIR POCKETS. TYPICAL BED LAYOUT: MIN. ROOT MASS TO BE IN ACCORDANCE WITH "AMERICAN STANDARDS FOR NURSERY

L-201

3. NOTE COMPASS ORIENTATION OF TREE PRIOR TO DIGGING AND MATCH PRIOR

CONIFER TREE PLANTING DETAIL

NOT TO SCALE

1. TREES HEIGHT AND CALIPER SHALL MEET THE REQUIREMENTS SPECIFIED IN THE PLANT

2. TREE SHOULD BE UNWRAPPED FOR EXAMINATION. STEMS SHOULD BE WRAPPED FOR SHIPMENT

5. TREE SHOULD HAVE A ROOT BALL SIZE THAT MINIMALLY MEETS NURSERY STANDARDS. STRIVE

6. TREE SHOULD HAVE BEEN ROOT PRUNED ONE OR MORE TIMES. THE LAST ROOT PRUNING

10. TREE SHOULD BE CERTIFIED IN WRITING AS TO SCIENTIFIC NAME, VARIETY, AND/OR CULTIVAR

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21. TREES SHOULD NOT HAVE ALL BRANCHES GROWING FROM A SINGLE AREA ON THE STEM (CLUSTERED OR CROWNED). TREES WITH BRANCHES NORMALLY GROWING IN WHORLS SHOULD

29. TREE SHOULD NOT HAVE VERTICAL CRACK CLOSURES OVER OLD WOUNDS. PROPER PRUNING

30. TREE SHOULD NOT HAVE BRANCHES THAT CROSSOVER EACH OTHER OR RUB AGAINST EACH

1. THE LANDSCAPE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR

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-TRIANGULAR SPACING -TYP. UNLESS NOTED ON PLANTING PLAN. **3" DOUBLE HAMMERED** HARDWOOD MULCH THROUGHOUT BED. DO NOT COVER ROOT FLARES. - PLANTING SOIL MIX PER PLANTING NOTES UNDISTURBED EXISTING SOIL ROOTBALL TO REST ON COMPACTED EXISTING SUBSOIL TO PREVENT SETTLEMENT

1. LAY OUT PERIMETER PLANTING SPACED AS PER PLAN.

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FINE GRAVEL	2.00-4.75	MAX. 10%
VERY COARSE SAND	1.00-2.00	
COARSE SAND+	0.50-1.00	COMBINED
MEDIUM SAND	0.25-0.50	50-75%
FINE SAND	0.1-0.25	5-15%
VERY FINE SAND	0.05-0.10	0-10%
SILT	0.002-0.05	10-20%
CLAY	<0.002	10-20%

A SANDY LOAM, WITH NO MORE THAN 75% SAND 3. THE U.S.D.A AND NO MO

4. THE ORGANIC MATTER SHALL BE 5-8%. 5. DEPTH OF MIX AS INDICATED ON DRAWINGS.

0.002-0	.00
<0.002	
A. SOIL TEXTURE CLASS SHALL	BE
ORE THAN 35% COMBINED SILT	+CL

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RFA '2024 JAP			
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8 ACCESSORY SCHEDULE NOTE: ALL ACCESSORIES TO HAVE MAX PROJECTION OF 4" **BOBRICK NO.** KEY ACCESSORY DESCRIPTION MOUNTING HEIGHT / ASI NO. * $\langle \text{EHD} \rangle$ ELECTRIC HAND DRYER - SURFACE ASI 0185-92 BOTTOM OF UNIT - 40" MOUNTED, BRIGHT STAINLESS FINISH SURFACE-MOUNTED JUMBO ROLL $\langle TT \rangle$ ASI 0042 BOTTOM OF UNIT - 1'-6" TISSUE DISPENSER $\langle \text{SDU} \rangle$ SURFACE-MOUNTED SANITARY ASI 0852 TOP OF UNIT - 2'-5" NAPKIN DISPOSAL GLASS MIRROR WITH STAINLESS $\langle MG1 \rangle$ ASI 0600-2436 BOTTOM OF UNIT - 3'-4" STEEL ANGLE FRAME, 24" x 36"H GLASS MIRROR WITH STAINLESS $\langle MG2 \rangle$ ASI 0600-3636 BOTTOM OF UNIT - 3'-4" STEEL ANGLE FRAME, 36" x 36"H SURFACE-MOUNTED FOAM B-26627 BOTTOM OF UNIT - 3'-6" SOAP DISPENSER SOLID PHENOLIC FOLDING $\langle FSS \rangle$ B-5191 TOP OF SEAT - 1'-5" SHOWER SEAT 1 1/2" DIAMETER STAINLESS STEEL $\langle \text{GB36} \rangle$ TOP OF UNIT - 3'-0" B-6806 x 36 GRAB BARS WITH SNAP FLANGE $\langle \text{GB42} \rangle$ 1 1/2" DIAMETER STAINLESS STEEL B-6806 x 42 TOP OF UNIT - 3'-0" GRAB BARS WITH SNAP FLANGE $\langle \text{GBSH} \rangle$ SHOWER 1 1/2" DIAMETER STAINLESS STEEL TOP OF UNIT - 3'-0" B-68616 GRAB BARS WITH SNAP FLANGE CENTER OF UNIT - 3'-2" - 4'-0" **CH** STAINLESS STEEL CLOTHES HOOK B-233 STAINLESS STEEL SHOWER BOTTOM OF UNIT - 6'-0" B-207 CURTAIN ROD $\langle \text{SCU} \rangle$ STAINLESS STEEL SHOWER B-204-1 CURTAIN HOOKS TOP OF UNIT - 6'-0" AND 72" VINYL SHOWER CURTAIN B-204-3 **WR** WASTE RECEPTACLE ASI 7317 PREFABRICATED SHOWER NICHE BY BOTTOM OF UNIT - 4'-0" KB 12 SN 305 305 A (SN) SCHLUTER SYSTEMS; 12" x 12" x 3.5"D UTILITY SHELF WITH MOP / BROOM $\langle \mathsf{MOP} \rangle$ B-224 TOP OF UNIT - 5'-0" HOLDERS AND RAG HOOKS

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* CONTRACTOR TO PROVIDE BOBRICK, OR ASI ACCESSORY AS NOTED OR APPROVED EQUAL

4 SCALE: 1/2" = 1'-0"

		EINIGH	COMMENTS
	WODEL #	FINISH	COMMENTS
).8" H	EW35G	GRAY	
7"H	SDC6-3PH	GRAY	
Н	W6/6E	WHITE	
Η	6496V	028 GRAY	
Н	SEC-18/WM	RED	
36"H		RED BARON	
75"H	GFW550SSNWW	WHITE	
75"H	GFD55ESSNWW	WHITE ON WHITE	
Н	IR-6-E	STAINLESS	208V, 3 PHASE
69.875"H	GDE25EYKS	STAINLESS	
x 32.25H	GDT226SSLSS	STAINLESS	ADJUSTABLE HEIGHT, ENERGY STAR, 51-DECIBEL STD SOUND LEVEL
Н	IDT0300A/D400	STAINLESS	305 LB STORAGE CAPACITY, AIR COOLED,
Η	H-3120	GRAY POWDER COAT	5-SHELVES, BOLTLESS ASSEMBLY

COORDINATE ALL APPLIANCE ACCESSORIES WITH APPLIANCE VENDOR OR DISTRIBUTOR. SEE PLUMBING DRAWINGS FOR PLUMBING FIXTURES. ALL EQUIPMENT IN THE EQUIPMENT SCHEDULE IS TO BE CONTRACTOR PROVIDED / CONTRACTOR

AS NOTED

SCALE

AWING NO

A-104

Since 1980

A-302

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F			ARCHITECTURAL SHINGLES ————
			PLYWOOD DECK
			SOFFIT
E			1 A-303
D			
С			
В			
A			
A-24X36.RFA EV. 05/16/2024 JAP			

























UL TEST NO.	STC RATING - N/A





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Since 1980 Architects • Engineers • Landscape Architect JOHNSON, LASCHOBER & ASSOCIATES, P.C. AUGUSTA, GA • CHARLESTON, SC TEL (706) 724-5756 • TEL (843) 619-4656 FAX (706) 724-3955 WWW.THEJLÁGROUP.COM 3 # Ζ < Ū TA, 4 AUGUS⁻ IR STREET, S IRE GOR σ 04 29 2025 GEORG/ JOHNSON, LASCHOBER * & ASSOCIATES, P.C. No. PEF000356 ູ່ expiration date: ູໍ ົ, ໍຸ JUNE 30, 2026 ຸໍ 🗸 TE OF AU. PROJECT NO. 3042.2403 DRAWN BY: CTH WLD CHECKED BY: 04/03/2024 DATE: SHEET TITLE: WALL TYPES SCALE AS NOTED DRAWING NO A-601 Α































#3

STATION

FIRE

GEORG/



3042.2403

JNA WLD

04/03/2024

AS NOTED

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BUILDING WRAP R-19 BATT INSULATION 4" ALUM FRAME 1" TEMPERED SEALANT & BACKER 5/8" PLYWOOD 4" MTL. STUDS 5/8" GYPBD. INSULATED GLASS SHEATHING ROD, BOTH SIDES @ 16" O.C. BOTH SIDES TYP. SHIM AS REQ'D R-19 BATT SILL FLASHING SHIM AS REQ'D INSULATION W/ 1/2" DAM SOLID SURFACE WINDOW SILL 6" MTL. STUDS SOLID SPLIT @ 16" O.C. FACE CMU SILL - 6" MTL. STUD W/ 1/2" OH - 5/8" GYPBD @ 16" O.C. AIR GAP - 4" ALUM FRAME SPLIT R-19 BATT 1" TEMPERED FACE CMU INSULATION INSULATED GLASS RIGID - 4" ALUM FRAME 5/8" PLYWD 1/4" TEMPERED INSULATION SHEATHING GLASS -BUILDING WRAP **SILL DETAIL - EXT. MTL. STUD** DOOR AS A-805 SCALE: 1 1/2" = 1'-0" SCHEDULED ------BRICK VENEER AIR GAP 1" TEMPERED 6" ALUM FRAME -**RIGID INSULATION** INSULATED GLASS SEALANT & BACKER -FLOORING AS BUILDING WRAP ROD, BOTH SIDES -SCHEDULED SHIM AS REQ'D BASE AS SILL FLASHING SCHEDULED W/ DAM -ROWLOCK - 5/8" PLYWD HEAD DETAIL - INT. MTL. STUD 14 SHEATHING A-805 SCALE: 3" = 1'-0" 6' MTL. STUD @ 16" O.C. 1/2" R-19 BATT INSULATION CONC SLAB -SEE S-DWGS -(10) SILL DETAIL - EXT. MTL. STUD 4" ALUM FRAME -A-805 SCALE: 1 1/2" = 1'-0" DOOR AS SCHEDULED -BRICK VENEER **RIGID INSULATION** AIR GAP AIR GAP 12" CMU - RIGID INSULATION BRICK VENEER BUILDING WRAP SOLDIER COURSE -12" BOND BEAM -SEE ELEVATIONS SEE S-DWGS FLASHING W/ DRIP EDGE -5/8" PLYWD SHEATHING SHIM AS REQ'D STEEL ANGLE rrg -6' MTL. STUD SEE S-DWGS 6" ALUM FRAME @ 16" O.C. SEALANT & 1" TEMPERED 3 1/2" R-19 BATT BACKER ROD, INSULATED INSULATION BOTH SIDES GLASS **HEAD DETAIL - EXT. CMU** JAMB DETAIL - INT. MTL. STUD 15 A-805 A-805 SCALE: 1 1/2" = 1'-0" SCALE: 3" = 1'-0" SAILOR COURSE -SEE ELEVATIONS BACKER ROD & SEALANT, BOTH SIDES SPLIT FACE CMU **BRICK VENEER** 6" ALUM FRAME AIR GAP AIR GAP PT WOOD **RIGID INSULATION** RIGID INSULATION DOOR AS BLOCKING SCHEDULED -- BUILDING WRAP ALUM TRANSITION 1" TEMPERED INSULATED STRIP — GLASS — 5/8" PLYWD SHIM AS FLOORING AS LIQUID APPLIED SHEATHING REQ'D -VAPOR BARRIER 6' MTL. STUD 12" CMU · @ 16" O.C. - R-19 BATT INSULATION **JAMB DETAIL - EXT. CMU** STOREFRONT INT. SILL DETAIL 16 A-805/ A-805 SCALE: 1 1/2" = 1'-0" SCALE: 3" = 1'-0" 1" TEMPERED 6" ALUM FRAME **INSULATED GLASS** SEALANT & BACKER 1" TEMPERED SHIM AS REQ'D ROD, BOTH SIDES -INSULATED GLASS 12" SINGLE SHIM AS REQ'D SILL FLASHING BULLNOSE W/ 1/2" DAM 5/8" GYPBD - 6" MTL. STUD SOLDIER COURSE -@ 16" O.C. SEE ELEVATIONS R-19 BATT BRICK VENEER INSULATION AIR GAP \checkmark RIGID INSULATION -LIQUID APPLIED VAPOR BARRIER **SILL DETAIL - EXT. CMU** A-805 SCALE: 1 1/2" = 1'-0"



1	2 3 4	5		6		
	ABBREVIATIONS	INTERIOR FINISH SCHEI	DULE			
	ACT: ACOUSTICAL CEILING TILE LVT: LUXURY VINYL TILE RSTR: RUBBER STAIR TREAD/RISER CG: CORNER GUARD MTL: METAL SC: SEALED CONCRETE	NUMBER NAME 100 APPARATUS BAY SC	FLOOR FINISHBASECRB-1	WALL MAT. V CMU EP	VALL FINISH CEILING MA* 'P-1 / EPP-2 EXP	T. CEIL
	CONC: CONCRETE OFCI: OWNER FURNISHED, CONTRACTOR SPF: SPORTS FLOORING CPT: CARPET INSTALLED SS: SOLID SURFACE	101 LOBBY LV 102 TOILET C ⁻	/T-1 RB-1 T-1 CTB-1	GB PT GB CV	-1 / PT-2 / PT-3 GB VT-1 / PT-1 GB	PT-5 PT-5
	CT: CERAMIC TILE OFOI: OWNER FURNISHED, OWNER INSTALLED ST: STAIN CTB: CERAMIC TILE BASE PC: POLISHED CONCRETE STC: STAMPED CONCRETE CTE: CERAMIC TILE EL OORING DI : DI : DI ASTIC LAMINATE	103TOILETCT104COMMUNITY ROOMLV	T-1 / CT-2 CTB-1 /T-1 RB-1	GB CV GB PT	JT-1 / PT-1 GB -1 / PT-2 GB / ACT	PT-5 PT-5
	CTF: CERAMIC TILE FLOORING PL: PLASTIC LAMINATE STL: STAINLESS SHEET CWT: CERAMIC WALL TILE PLW: PLYWOOD SV: SHEET VINYL EPX: EPOXY FLOORING PM: PERFORATED METAL TBD: TO BE DETERMINED	105 STORAGE LV 106 I.T. SC	/T-1 RB-1 C RB-1	GB PT GB PT	-1 GB -1 GB	PT-5
	EPC: EPOXY COATING PT: PAINT TR: TRANSITION STRIP EPP: EPOXY PAINT PTB: PORCELAIN TILE BASE WC: WALL COVERING	107 EXERCISE RI 108 BATTALION CHIEF QUARTERS LV	F-1 RB-1 /T-1 RB-1	GB PT GB PT	-1 / PT-3 ACT -1 ACT	ACT-
	ETR:EXISTING TO REMAINPTF:PORCELAIN TILE FLOORINGWDB:WOOD BASEEXP:EXPOSED STRUCTUREPWT:PORCELAIN WALL TILEWDF:WOOD FLOORING	109 OFFICE LV 110 TOOLS PC	/T-1 RB-1 C RB-1	GB PT GB FP	-1 ACT 'P-1 GB	ACT-
	FRP: FIBER REINFORCED PANEL RB: RUBBER / VINYL BASE WAF: WOOD ATHLETIC FLOORING GB: GYPSUM BOARD RF: RUBBER FLOOR VCT: VINYL COMPOSITION TILE	111 CORR LV	/T-1 RB-1	GB PT	-1/EPP-2 ACT	ACT-
	GT: GROUT RN: RUBBER NOSING VRB: VENTED RUBBER BASE RT: RUBBER TILE	112 CONNECT EV 113 EMS STORAGE SC 114 DECON EE	C RB-1	CMU/GB EP	^{(P-1} GB	EPP-
	FINISH NOTES	114 DECON Er 115 DECON SHOWER ROOM EF 116 DECON TOUET ROOM EF	PX-1 EPX-1	GB EP	'P-1 GB	EPP-
		117 DECON LOCKER ROOM EF	PX-1 EPX-1 PX-1 EPX-1	CMU/GB EP	P-1 GB P-1 GB	EPP-
	 INSTALLERS OF EACH FINISH MATERIAL SHALL INSPECT BOTH THE SUBSTRATE AND CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED. INSTALLER SHALL NOT PROCEED UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED IN AN ACCEPTABLE MANNER TO ALL PARTIES AND MEET ALL MANUFACTURERS REQUIREMENTS. 	118 TURN-OUT GEAR EF 119 DAYROOM LV 120 KITCHEN LV 121 TLT/SHOWER CT	PX-1 EPX-1 /T-1 RB-1 /T-1 RB-1 T-1 CTB-1	GB PT GB PT GB CW	P-1 GB -1/PT-2/PT-3 GB/ACT -1/PT-3 GB/ACT WT-1/CT-2/ GB	PT-5
	 PREPARE FLOORING SUBSTRATES ACCORDING TO MANUFACTURER'S WRITTEN RECOMMENDATIONS. INSTALL FLOOR FINISH PRIOR TO INSTALLING WALL BASE (TYPICAL ALL FLOORING). SELECT FLOOR TRANSITIONS ACCORDING TO FLOOR MATERIAL THICKNESS. PROVIDE TRANSITIONS STRIPS AT ALL FLOOR FINISH CHANGES. SEE FINISH 	122 TLT/SHOWER C	T-1 / CT-2 CTB-1	GB CV PT	-1 VT-1 / CT-2 / GB -1	PT-5
	SPECIFICATIONS. ALL FLOOR FINISH CHANGES SHALL OCCUR AT THE CENTER LINE OF CLOSED DOOR.	123LINENLV124TLT/SHOWERC ⁻	/T-1 RB-1 T-1 / CT-2 CTB-1	GB PT GB CV	-1 GB VT-1 / CT-2 / GB	PT-5 PT-5
	4. PROTECT NEW FLOORING INSTALLATION WITH CLEAN CONSTRUCTION PAPER OR OTHER HEAVY COVERING DURING CONSTRUCTION PERIOD TO PREVENT STAINING OR DAMAGE. AFTER CLEANING, PROVIDE PROTECTIVE COVERING AND MAINTAIN CONDITIONS TO PROTECT FLOORING FROM DAMAGE AND TRAFFIC FROM MOVE-IN OF EQUIPMENT.	125LAUNDRY /JANLV126ELECSC	/T-1 RB-1 C RB-1	GB PT GB PT	-1 -1 GB -1 GB	PT-5
	5. CLEAN AND PREPARE SURFACES TO BE PAINTED ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS FOR EACH SUBSTRATE CONDITION AND AS SPECIFIED. APPLY PAINT ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS. USE APPLICATORS AND TECHNIQUES BEST SUITED FOR SUBSTRATE AND TYPE OF MATERIAL BEING APPLIED. PROVIDE A MINIMUM OF ONE (1) PRIMER COAT AND TWO (2) FINISH COATS UNLESS OTHERWISE INDICATED.	127 CORRIDOR LV 128 SLEEP 1 LV 129 SLEEP 4 LV	/T-1 RB-1 /T-1 RB-1 /T-1 RB-1	GB PT GB PT GB PT	-1 ACT -1 ACT -1 ACT	ACT- ACT- ACT-
	6. ALL WALLS TO RECEIVE A FINISH. IF MISSING FROM SCHEDULE, CONTACT ARCHITECT OR INTERIOR DESIGNER.	130 SLEEP 2 LV 131 SLEEP 5 LV	/T-1 RB-1 /T-1 RB-1	GB PT	-1 ACT -1 ACT	ACT-
	7. ALL HOLLOW METAL DOOR AND DOOR FRAMES TO RECEIVE PAINT, PER DOOR SCHEDULE AND INTERIOR FINISH SPECIFICATIONS.	132 SLEEP 3 LV 133 SLEEP 6 LV	/T-1 RB-1 /T-1 RB-1	GB PT GB PT	-1 ACT -1 ACT	ACT-
	8. ALL GYP. BOARD AND EXPOSED CEILINGS TO RECEIVE PAINT, PER INTERIOR FINISH SCHEDULE AND SPECIFICATIONS.	134 SLEEP 7 LV 135 SLEEP 8 LV	/T-1 RB-1 /T-1 RB-1	GB PT GB PT	-1 ACT -1 ACT	ACT-
	9. PAINT ENTIRETY OF APPARATUS BAY TRUSSES EPP-2 RED, ONLY. PURLINS, OTHER STRUCTURE AND EXPOSED CEILING TO BE PAINTED EPP-1. PRIME AND PAINT ALL EXPOSED STRUCTURE, FRAMING, BRACING, DUCTWORK AND CONDUIT.	201 MEZZANINE SC	C RB-1	CMU / GB EP	P-1 EXP	EPP-
	10. SEE A-902 FOR PAINTED WALL STRIPE DESIGN IN APPARATUS BAY.			\SE		
	11. ALLOW SUFFICIENT TIME BETWEEN SUCCESSIVE COATS OF PAINT TO PERMIT PROPER DRYING. AFTER WORK OF OTHER TRADES IS COMPLETE, TOUCH UP AND RESTORE DAMAGED OR DEFACED PAINTED SURFACES.	MANUFACTURER: ARMSTRONG	MANUFACTURER: B&F CI	ERAMICS	MANUFACTURER: SHAV	
	12. MANUAL ROLLER SHADES ON ALL EXTERIOR WINDOWS AT 10'-0"H AND BELOW, UNLESS NOTED OTHERWISE.	TILE SPEC: FINE FISSURED HIGH NRC, 24" x 24" x 7/8" ANGLED TEGULAR, #1756,	SPEC: MYSTONE, UNPOL SIZE: BULLNOSE 3"x12"	ISHED	SPEC: UNCOMMON GRC SIZE: 6" x 36"	OUND 6
	13. CORNER GUARDS TO BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS ABOVE WALL BASE.	GRID SPEC: PRELUDE XL 15/16"		ITER	COLOR: TELLURIDE 025 CONTACT: JOE WALKE	40 R
	14. ALL DEVICES (OUTLETS, SWITCHES, ETC.) AND COVER PLATES SHALL BE WHITE, UNLESS NOTED OTHERWISE.	SUSPENSION SYSTEM, COLOR: WHITE	706-722-6804		706-831-3938	3
	15. COORDINATE HEIGHT OF WALL-MOUNTED TVS WITH POWER AND DATA REQUIREMENTS; PROVIDE FULLY RECESSED BACK BOXES AT WALL TVS.	CG-1 - CORNER GUARD	EPX-1 - EPOXY RESIN FL		PL-1 - PLASTIC LAMINAT	
	16. IF ANY DISCREPANCIES OR OMISSIONS ARE FOUND IN THE INTERIOR FINISH SCHEDULE OR SPECIFICATIONS, CONTACT ARCHITECT OR INTERIOR DESIGNER PRIOR TO ORDERING PRODUCT OR COMMENCING WORK.	SPEC: SURFACE MOUNT STAINLESS STEEL	SPEC: RESUFLOR DECO	QUARTZ BC23 WITH	+ SPEC: STANDARD LAMI	
		CONTACT: ALEXIS CAPPS, 704-456-5568	TOP TO MEET GYP. BOAF	RD WALL	COLOR: SHADOW D96-6	0
		acapps@inprocorp.com	CONTACT: ZACH FOSTE	R, 706-495-0505,		
		CT-1 - PORCELAIN TILE	FRP-1 - RIGID SHEET	@snerwin.com	PL-2 - PLASTIC LAMINAT	
			MANUFACTURER: CRANE	E COMPOSITES	MANUFACTURER: WILS(
		SIZE: 8"x16"	COLOR: SADDLEBUNCH	(1296)	COLOR: CASUAL LINEN	#4944-3
		COLOR: SAND	TEXTURE: SATIN SANDS CONTACT: JOHN BECK,	ГОNE 704-830-8653,		
		706-722-6804	jbeck@craneco	omposites.com		
	RIGID SHEET (FRP)	CT-2 - PORCELAIN TILE MANUFACTURER: B&F CERAMICS	GT-1 - FLOOR GROUT MANUFACTURER: MAPEI		MANUFACTURER: ROPF	 ЭЕ
		SPEC: MYSTONE, UNPOLISHED SIZE: MOSAIC 2"x 2"	SPEC: SANDED		SPEC: STD COVE BASE, COLOR: #640 CREEKBEL	700 SEF
					CONTACT:	-
		706-722-6804				
		CWT-1 - PORCELAIN WALL TILE	GT-2 - WALL GROUT		RF-1 - RUBBER FLOORI	NG
		MANUFACTURER: B&F CERAMICS SPEC: MYSTONE, UNPOLISHED	MANUFACTURER: MAPEI SPEC: UNSANDED		MANUFACTURER: ROPP SPEC: RECOIL FITNESS	'E FLOORI
		SIZE: 8"x16" PATTERN: SQUARE GRID	COLOR: #106 WALNUT		SIZE: 3/8" COLOR: 186 RED	
	MANUFACTURER'S STAINLESS	COLOR: SAND CONTACT: THE TILE CENTER			CONTACT:	
			1		RS-1 - MANUAL ROLLER	SHADE
	DETAIL - RIGID SHEET				MANUFACTURER: SWF	
	A-901 SCALE: 6" = 1'-0"				CROSSHATCH A SERIES SIZE: VARIES - SEF PI A	3, 3% OF NS AND
					FABRIC COLOR: BONE /	PLATIN
					RS-2 - MANIJAL ROLLED	
					MANUFACTURER: SWF	CONTR/
					SPEC: TRUEPERFORMA ENTERPRISE BLACKOU	INCE MA
					SIZE: VARIES - SEE PLAN FABRIC COLOR: C1303 7	NS AND FAN

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GEN	ERAL NOTES:									
GEN	ERAL					CON	NCRETE			
1.	THESE GENERAL NOTES READER'S CONVENIENC	S PRESEN E. SEE PI	T AND/OR SUMMARI LANS AND SPECIFIC	ZE KEY PROJE ATIONS FOR F	CT INFORMATION FOR THE PLAN URTHER REQUIREMENTS.	1.	ALL CO FOLLC	ONCRETE WOF WING:	RK SHALL BE	IN ACCORDANCE W
2.	ALL REFERENCES TO ST THESE DOCUMENTS, UN	ANDARD	S HEREIN ARE TO M TED OTHERWISE IN	OST RECENT I PROJECT SPE	SSUE IN EFFECT AS OF THE DATE CIFICATIONS.	OF	A. (CONCRETE ST	RENGTHS AI	ND MIXES SHALL BE
3.	DESIGN BASIS: 2018 IN	TERNATIC	ONAL BUILDING COD	E (IBC)			ŝ	STRENGTH(PS	I) AIR(%)	CEMENT V
	a. RISK CATEG	ORY = IV					-	_,000		
	B. WIND: ULTIMATE DE WIND EXPOS INTERNAL PE COMPONENT	ESIGN WIN SURE CATI RESSURE F & CLADE	ND SPEED = 126 MP EGORY = B COEFFICIENT = 0.18 DING DESIGN PRESS	H 3 ± (ENCLOSED 5URE - SEE DIA	BUILDING) GRAMS ON DETAIL 6/S-503		3	3,000	**	TYPE / / IL
	C. SEISMIC:									
	MAPPED SPE MAPPED SPE		ESPONSE ACCEL (S ESPONSE ACCEL (1	HORT PERIOD SECOND PERI	S) Ss = 0.28 OD) S1 = 0.11		2	4,000	**	TYPE I / II / IL
	STE CLASS SPECTRAL R SPECTRAL R	= D ESPONSE ESPONSE	E COEFFICIENT (SHC E COEFFICIENT (1 SE	ORT PERIODS) ECOND PERIOD	SDS = 0.29) SD1 = 0.17			4,000 2,500	**	TYPE I / II / IL
	SEISMIC DES ANALYSIS PF	SIGN CATE ROCEDUR	EGORY = D RE: EQUIVALENT LAT	FERAL FORCE	PROCEDURE					
	APPARATUS BAY BASIC SEISMIC FO RESPONSE MODIE	RCE RESI	ISTING SYSTEM - SP	ECIAL REINFO	RCED MASONRY SHEAR WALLS		*	CONCRE AGGREGATE P	TE IS A SEMI ER ASTM C3	I-LIGHTWEIGHT CON 330.
	SEISMIC RESPONS DESIGN BASE SHE	SE COEFF AR = 155k	ICIENT Cs = 0.10				* E	* NATURAI ENTRAINED AII	LY ENTRAPI R UNDER FR	PED AIR ONLY UNLE EEZE/THAW CONDIT
	OFFICE / RESIDEN BASIC SEISMIC FO	CE BAY RCE RESI	ISTING SYSTEM - LIG	GHT GAGE SHE	AR WALLS WITH STRUCTURAL		B. F	FLY ASH PER A 1. THE QUA	ASTM C618, T NTITY OF CE	TYPE C OR F WILL BE EMENT REPLACED S
	SHEATHING RESPONSE MODIF SEISMIC RESPONS	ICATION F	FACTOR R = 6.5 ICIENT Cs = 0.07					2. CEMENT	SHALL BE R	EPLACED BY FLY AS
	DESIGN BASE SHE	AR = 15K					C. /	ALL CONCRETI SHALL SHOW V	E DELIVERED VEIGHTS OF	D TO THE SITE SHAL FALL MATERIALS, V(
	ROOF: 20 psf							/ERIFICATION	OF MIX PRO	PORTIONS.
	MEZZANINE: 100 ps APPARATUS BAY F	sf FLOOR: AF	PPARATUS WITH 40K	AXLE LOADS	OR 20K WHEEL LOAD		D. (CONSOLIDATE CONCRETE WI	ALL CONCR LL BE REJEC	ETE IN FORMS AND CTED AND REPLACE
	E. SNOW LOAD					2.		RETE REINFOR	RCING SING EXCEPT	
	ABBREVIATIONS:			DEINE			B. \	WELDING OF R		G STEEL IS NOT PER
	B BOTTOM (BAR) INT INTERIOR	FIN FLR CLR	FLOOR CLEAR	TRS	TRUSS STEEL		C. F	REINFORCING	SHALL NOT	BE HEATED TO BEN
	EXT EXTERIOR EL ELEVATION	T/* B/*	TOP OF * BOTTOM OF *	WD CONC	WOOD CONCRETE MASONIDY	2	D. \	WELDED WIRE	FABRIC SHA	ALL BE PER ASTM A-
	EW EACH WAY EF EACH FACE	GA EQ	GAGE/GAUGE EQUAL	LG APPROX	LIGHT GAGE APPROXIMATE	3.	SUBIMI А. (CONCRETE MI	X DESIGNS; \$	SHOP DRAWINGS F
	NS NEAR SIDE FS FAR SIDE	FTG TYP	FOOTING TYPICAL	SPC'S UNO	SPACE/SPACES/SPECS UNLESS NOTED OTHERWISE		F	AND PRODUCT REPRESENTAT	DATA, ETC. IVE AT LEAS	AS OUTLINED IN TH ST 15 DAYS PRIOR T
	UNLESS OTHERWISE NO LOCATIONS AT WHICH O	OTED, REC	QUIREMENTS GIVEN NS ARE SIMILAR. TH	FOR ONE LOC E REQUIREME	ATION ALSO APPLY AT OTHER NTS GIVEN SHALL BE ADAPTED T	0	B. A	ALL DATA SHAI	LL BE SUBMI	TTED "CONTRACTO
	COORDINATE WORK OF	OTHER TI	RADES SHOWN ON I	DRAWINGS OR	INDICATED IN SPECIFICATIONS V	4. VITH	A. \	WHEN EXCAVA	TION TO RE	QUIRED SUBGRADE
	STRUCTURAL WORK.	NY PART	OF THE STRUCTUR	AL WORK SHAI	L SHOW THE INTERFACE WITH		B. 2	24 HOURS PRIC	OR TO ANY S D ITEMS.	CHEDULED CONCR
	OTHER RELATED TRADE OF RELATED TRADES BY SUBMITTING SHOP DRAY	S. THE CO CERTIFII WINGS FO	ONTRACTOR SHALL ED MANUFACTUREF OR ARCHITECT/ENGI	VERIFY DIMEN R'S DRAWINGS NFER'S APPRO	SIONS, LOCATIONS, MATERIALS, AND SO INDICATE BEFORE	ETC. LIGH	IT GAGE	STEEL		
	THE DESIGN OF THE ST		SHOWN IS BASED C	ON INTERACTIO	N OF VARIOUS CONNECTED PAR	TS 1.	FURNI	SH AND INSTA	LL ALL PRE-I	ENGINEERED LIGHT
	UNDERWAY MAY REQUI THE CONTRACTOR SHAL CONSTRUCTION AND PR	RE SUPPL LL DETERI ROVIDE AL	LEMENTAL TEMPORA MINE THE NEED OF LL SUCH MEASURES	ARY SUPPORT SUCH TEMPOR	S, BRACING OR OTHER MEASURE	S. 2.	FURNI	SH AND INSTA	LY. LL ALL PRE-I CONSISTING	ENGINEERED LIGHT
R	THWORK/FOUNDATION FOUNDATION DESIGN B/	ASIS:				з	AND A	SSEMBLED PR	RIOR TO DELI	IVERY, OR AT THE JO
	REPORT OF SUBSURFA	CE EXPLO	RATION AND GEOTE	ECHNICAL EVA).	LUATION, PREPARED BY ECS,	0.	FOLLC	WING: AMERICAN IRC	N AND STEE	
	BASED ON THE PRESCR			ENTS THAT WE			B. /	AMERICAN SO	CIETY OF TE	STING MATERIALS:
	DESIGN MODULUS OF S		E REACTION (K) = 150) PCI	AGITT 10 2,300 T GI .		A F C	ASTM A446: "S PHYSICAL (STF GRADE A, FY =	PECIFICATIO RUCTURAL) (= 33 KSI: 18	ON FOR STEEL SHEE QUALITY.") GAUGE AND LIGHTE
	NO BLASTING WILL BE A	LLOWED.					(GRADE D, FY = GALVANIZING:	= 50 KSI: 16 G60 COATIN	GAUGE AND HEAVI G CLASS
	CONTROL OF GROUND	WATER, IF	FREQUIRED, SHALL HE FOUNDATION SOL	BE ACCOMPLIS	SHED IN A MANNER THAT WILL CAUSE INSTABILITY OF THE		C. /	AMERICAN WE AWS D1.0 "COE	LDING SOCIE DE FOR WELI	ETY: DING IN BUILDING C
	COORDINATE FOUNDAT		K WITH ALL OTHER 1	IRADES.	ING STRUCTURES.	4.		SES SHALL BE		D AND ERECTED BY
	PIPES AND OTHER WOR FOOTINGS OR PARALLE	K WHICH L TO WAL	REQUIRE EXCAVATI L FOOTINGS, SHALL	NG OR TRENC	HING ADJACENT TO COLUMN TED BELOW LINES EXTENDING		PRACT TESTI	TICES A QUALI	TY CONTROL	L PROGRAM WHICH TO ARCHITECT AND
	DOWNWARD FROM THE HORIZONTAL.	BOTTOM	EDGE OF THE FOOT	'ING AT A 45 D	EGREE ANGLE FROM	5.	SUBMI HANDI	T FABRICATOR	R'S TECHNIC CTION.	AL DATA COVERING
	EXCAVATIONS FOR FOO EXISTING FOUNDATIONS	TINGS, MAS, SHALL N	ATS AND OTHER FO	UNDATIONS B	JILT NEXT TO OR AROUND SURFACE OF THE EXISTING	F	A. 5	SUBMIT CERTI	FICATE, SIGN BE SUPPLIED	NED BY AN OFFICEF FOR PROJECT CON
	TO EXISTING FOOTINGS OVER-EXCAVATED AND	(CLOSER FILLED TO	TO THE FOOTING E CACCOUNT FOR BA	DGE THAN THE DGE THAN TH	E HOLE DEPTH) CAN NOT BE SPECIFICALLY APPROVED BY	6.	SUBMI	T SHOP DRAW	INGS SHOW	ING SHAPES AND D
	THE ENGINEER OF RECO	ORD. THE CON	TRACT DOCUMENTS		EVATION SIZE AND THICKNESS		BEARI	NG AND ANCH R ACCESSORIE	ORAGE DET	AILS. SPECIFY AND D FOR PROPER INS
	OF FOUNDATIONS SHAL SHOP DRAWINGS. SUCH	L BE INDIG	CATED BY THE GENI SED DEVIATIONS SH	ERAL CONTRA	CTOR ON THE REINFORCING D AND NOTED "ENGINEER	7.	SEQUE	ENCES AND IN		S. GE MATERIALS AND
	VERIFY". STRUCTURAL FILL SHAL	L BE PLAC	CED IN LOOSE LIFTS	NO MORE TH	AN 8" THICK WITH A COMPACTION		INSTR GROU	UCTIONS TO A ND IN A DRY V	VOID DAMAG	GE FROM BENDING, SPACE OR PROTEC
_	OF 95% STANDARD PRO	CTOR (PE	ER ASTM D-698) MAX			8.	FRAMI EDGES	NG COMPONE S SHALL BE GF	NTS SHALL E ROUND SMO	BE FASTENED TO EA
= 0 2	3FEUIFICATIONS LISTED 00 - CAST-IN-PLACE CON 00 - STRUCTURAL STEFI	ICRETE	G	I RUC I URAL II	IF URIVIA HUN:	9.	PREFA NOT C	ABRICATED TR AUSE LOCAL [USSES SHAL DISTORTION	L BE BRACED AGAI OF ANY MEMBER.
21	00 - STEEL JOIST FRAMII 00 - STEEL DECKING					10.	ALL LIC	GHT GAUGE S	TEEL FRAMIN Y PERFORM	NG SHALL BE ERECT
+U 1 1	00 - COLD-FORMED MET. 00 - COLD-FORMED MET. 00 - METAL FABRICATION	AL TRUSS	SES			11.	ALL W		ERECTED F	PLUMB AND LEVEL A
550						12.	MEMB	ERS SHALL BE	OF SIZE AN	D SPACING SHOWN
550						13.			RY BRACING	AS REQUIRED TO N
550										
550						14.	ANCHO	OR TRUSSES S	SECURELY A	T ALL BEARING POIN

MASONRY WALL REINFORCING/JOINTS

TH ACI 318-14, DIVISION 3 OF THE SPECIFICATIONS, AND THE

AS FOLLOWS:

V/C RATIO S	SLUMP	AGGREGATE(MAX.)	LOCATION
-	-	-	CONDUIT ENCASEMENT AND BACKFILL BELOW FOOTINGS
0.52	4" +/- 1"	3/4"	EQUIP. PADS, SPREAD FOOTINGS, WALL FOOTINGS, SHEAR WALLS, AND STAIR PAN FILL
0.48 4	1" +/- 1"	3/4"	SLAB ON GRADE
0.48 4	1" +/- 1"	3/4"	ELEVATED SLABS
-	8"	3/8"	COARSE GROUT FOR MASONRY BLOCK FILL

CRETE WITH A MAXIMUM WEIGHT OF 120 #/CU. FT. COARSE

S CONCRETE IS EXPOSED TO FREEZE/THAW. USE 4% TO 6%

PERMITTED PROVIDED THE FOLLOWING LIMITS ARE MET: ALL BE NO MORE THAN 20%.

AT THE RATE OF 1.25 LBS. OF FLY ASH TO 1.0 LBS OF CEMENT.

HAVE A COMPUTER BATCH WEIGHT TICKET. THE BATCH TICKET LUME OF CONCRETE AND TIME BATCHED. THE BATCH WEIGHT NER'S REPRESENTATIVE ON SITE AT THE TIME OF DELIVERY FOR

RENCHES WITH VIBRATORS. POORLY CONSOLIDATED AT CONTRACTOR'S EXPENSE.

OW, SHALL BE PER ASTM A-615, GRADE 60.

1ITTED UNLESS ASTM A-706, GRADE 60 REINFORCEMENT IS USED.

R CONCRETE REINFORCING, EMBEDDED ITEMS; ACCESSORIES; SPECIFICATIONS SHALL BE PROVIDED TO THE OWNER'S THE START OF WORK FOR APPROVAL

APPROVED".

HE OWNER.

ELEVATIONS IS REACHED.

TE PLACEMENT FOR INSPECTION OF FORMWORK, REINFORCING

GAUGE METAL FRAMING AS SHOWN ON THE DRAWINGS AND TS, RAFTERS AND PURLINS AND INCIDENTAL FRAMING FOR A

GAUGE METAL TRUSSES WHICH INCLUDES PLANAR LTED CONNECTED MEMBERS WHICH ARE FABRICATED, CUT B SITE.

BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE

MED STEEL STRUCTURAL MEMBERS.

, ZINC COATED (GALVANIZED BY THE HOT-DIP PROCESS,

NSTRUCTION" ANSI Z49.1 "SAFETY IN WELDING AND CUTTING"

FIRM WHICH HAS A RECORD INCLUDING A MINIMUM OF FIVE (5) SSEMBLIES SIMILAR TO SCOPE REQUIRED AND WHICH NCLUDES INSPECTION BY AN INDEPENDENT INSPECTION AND AUTHORITIES HAVING JURISDICTION.

MATERIALS, SHAPES, HARDWARE, FABRICATION PROCESS,

OF SUBCONTRACTOR OR FABRICATING FIRM, INDICATING THAT PLY WITH INDICATED REQUIREMENTS.

IENSIONS OF MEMBERS TO BE USED INCLUDING PITCH, SPAN, TYPE OF CONFIGURATION OF TRUSS REQUIRED. SHOW ALL DETAIL ALL SUPPLEMENTAL STRAPPING, BRACING CLIPS AND ALLATION. SHOP DRAWINGS SHALL INCLUDE ALL PLACEMENT

CCESSORIES IN ACCORDANCE WITH MANUFACTURER'S VERTURNING OR OTHER CAUSE. STORAGE SHALL BE OFF-WITH WATERPROOF COVERINGS.

CH OTHER BY WELDING, BOLTING, OR SCREWING. ALL SHARP

ST RACKING. LIFTING OF TRUSSES SHALL BE DONE SO AS TO

ED BY APPROVED METHODS USING EQUIPMENT OF ADEQUATE

ND TO DIMENSIONS, SPACINGS AND ELEVATIONS INDICATED ON

ON THE DRAWINGS.

INTAIN TRUSSES PLUMB, PARALLEL AND IN LOCATION

TS. COMPLY WITH METHODS AND DETAILS INDICATED.

DESIGN DRAWINGS FOR ANY ADDITIONAL REQUIREMENTS AND/OR STACK BOND CRITERIA: 2. VERTICAL REINFORCING (RUNNING BOND):

PROVIDE REINFORCING STEEL IN A CONCRETE FILLED CELL CONTINUOUS FROM FOOTING INTO BOND BEAM AT TOP OF WALL. LAP BARS WITH FOOTING DOWEL AND EXTEND 4" MINIMUM INTO BOND BEAM. BREAK-OUT BOTTOM OF BOND BEAM AT FILLED CELL LOCATIONS. PROVIDE AT THE FOLLOWING LOCATIONS:

AT ALL WALL CORNERS.

• WITHIN 8" OF ENDS OF ALL WALLS AND AT EACH SIDE OF EXPANSION AND CONTROL JOINTS

THE REINFORCING, JOINTS AND CRITERIA DESCRIBED IN THE FOLLOWING GENERAL NOTES ARE

REQUIRED AS A MINIMUM FOR ALL RUNNING BOND MASONRY WALLS. SEE SPECIFIC CRITERIA ON

AT ALL DOOR AND WINDOW JAMBS AND AT ALL OPENINGS GREATER THAN 16" IN WIDTH. ALONG ENTIRE LENGTH OF ALL WALLS AS NOTED IN THE TABLE BELOW:

	VERTICAL FOR SEISMIC DESIGN CATEGORY D								
WALL WIDTH		NON-LO	AD BEARI	NG WALL	S	LOAD BEARING WALLS			
8"	8" 1-#4 @ 4'-0" OC MAX.						#5 @ 32" (OC MAX.	
12"		1-#4 (@ 4'-0" OC	MAX.		1-#6 @ 24" OC MAX.			
VERTICAL	VERTICAL BAR SPLICES SHALL HAVE A MINIMUM LAP AS NOTED IN THE TABLE BELOW								
	MASONRY REINFORCING LAP LENGTHS								
BAR		#3	#4	#5	#6	#7	#8	#9	
LENGTH		18"	24"	30"	36"	42"	48"	54"	

C. VERTICAL FILLED CELLS SHALL BE FILLED WITH CONCRETE IN 4'-0" MAX. LIFTS.

3. HORIZONTAL REINFORCEMENT (RUNNING BOND):

A. PROVIDE HORIZONTAL JOINT REINFORCING AS NOTED IN THE TABLE BELOW: Fy=60,000psi, F'm=1,500psi, BARS TO BE CENTERED IN THE WALL

HORIZONTAL FOR SEISMIC DESIGN CATEGORY D								
WALL WIDTH	NON-LOAD BEARING WALLS	LOAD BEARING WALLS						
8"	2-LONGITUDINAL W1.7 (9 GAGE) WIRES @ 16" OC MAX.	2-LONGITUDINAL W1.7 (9 GAGE) WIRES @ 16" OC MAX. PLUS 1-#5 @ 7'-4" OC MAX. IN CONC FILLED KNOCKOUT WEB BLOCK						
12"	2-LONGITUDINAL W1.7 (9 GAGE) WIRES @ 16" OC MAX.	2-LONGITUDINAL W1.7 (9 GAGE) WIRES @ 16" OC MAX. PLUS 1-#5 @ 4'-0" OC MAX. IN CONC FILLED KNOCKOUT WEB BLOCK						

PROVIDE CONCRETE FILLED BOND BEAM WITH 2 - #5 REBARS CONTINUOUS WHERE WALLS ARE STRUCTURALLY CONNECTED TO ROOF AND FLOOR LEVELS AND AT THE TOPS OF ALL WALLS.

PROVIDE CONCRETE FILLED COURSE WITH 1 - #4 REBAR AT DOOR AND WINDOW HEADS, AND AT C. ALL WINDOW SILLS. EXTEND THE GREATER OF 2'-0" OR 40 BAR DIAMETERS BEYOND OPENING.

4. CONTROL JOINTS:

A. CONTROL JOINTS SHALL BE LOCATED IN ALL WALLS AT THE FOLLOWING LOCATIONS:

- AT A MAXIMUM SPACING OF 3 TIMES THE WALL HEIGHT, BUT NOT GREATER THAN 40'-0" ON CENTER AT A DISTANCE OF NOT OVER ONE TIME THE WALL HEIGHT FROM BUILDING CORNERS.
- AT ALL CHANGES IN WALL HEIGHT. AT ALL CHANGES IN WALL THICKNESS, SUCH AS AT PIPE OR DUCT CHASES, AND ADJACENT
- TO STEEL COLUMNS EMBEDDED IN WALLS AND PILASTERS. ABOVE JOINTS IN FOUNDATIONS AND IN FLOORS.
- BELOW JOINTS IN FLOORS OR ROOFS THAT BEAR ON THE WALL •
- MASONRY WALL CONTROL JOINTS: ALL HORIZONTAL JOINT REINFORCING SHALL TERMINATE AT THE CONTROL JOINT (UNLESS NOTED OTHERWISE ON DRAWINGS). INTERRUPT HORIZONTAL REINFORCING IN INTERMEDIATE BOND BEAMS. ALL BOND BEAM REINFORCING IN BOND BEAMS LOCATED AT OR NEAR THE TOP OF THE WALL SHALL BE CONTINUOUS THROUGH CONTROL JOINTS
- C. IF CONTROL JOINTS ARE NOT SHOWN ON THE DRAWINGS, COORDINATE WITH THE ARCHITECT AND STRUCTURAL ENGINEER, BEFORE CONSTRUCTION BEGINS, TO DETERMINE JOINT LOCATIONS REQUIRED.
- ISOLATION JOINTS SHALL BE LOCATED WHERE NON-LOAD BEARING WALLS ABUT LOAD BEARING 5 WALLS OR SHEAR WALLS.
- 6. WALL BRACING:
 - A. ALL NON-LOAD BEARING MASONRY WALLS, (FULL HEIGHT AND PARTIAL HEIGHT) SHALL BE BRACED ALONG ENTIRE LENGTH. BRACE POINTS SHALL OCCUR AT CONCRETE FILLED VERTICAL CELLS AS DEFINED IN NOTE 2.A ABOVE.

ELEVATED METAL DECK

UNLESS NOTED OTHERWISE, THESE METAL DECK NOTES APPLY TO NON-COMPOSITE METAL FLOOR DECKING TOPPED WITH CONCRETE, AND UN-TOPPED METAL ROOF DECKING.

- INSTALLATION OF ELEVATED METAL DECK SHALL BE IN ACCORDANCE WITH DIVISION 5 OF THE SPECIFICATIONS AND THE FOLLOWING:
- 3. STEEL DECK SHALL BE MANUFACTURED AND ERECTED IN ACCORDANCE WITH THE STEEL DECK INSTITUTE. ALL DECKING SHALL BE GALVANIZED, UNLESS NOTED OTHERWISE ON THE PLANS.
- CONTRACTOR SHALL PROVIDE ACCESSORIES REQUIRED TO COMPLETE THE METAL DECK INSTALLATION AND THE CONCRETE PLACEMENT INCLUDING (BUT NOT LIMITED TO) CELL AND COLUMN CLOSURES, POUR STOPS AND BEAM FILLERS.
- UNLESS NOTED OTHERWISE ON THE DESIGN DRAWINGS, THE CONTRACTOR SHALL INSTALL AN EDGE ANGLE OR BENT PLATE AROUND THE DECKING PERIMETER AND AT INTERIOR OPENINGS. THE ANGLE OR BENT PLATE SHALL BE A MINIMUM 1/4 INCH THICK WITH A HEIGHT THAT MATCHES THE SLAB THICKNESS FOR FLOOR DECKING OR 4 INCHES FOR ROOF DECKING.
- 6. METAL DECK ENDS WHICH ABUT A CMU WALL (AND ARE NOT SUPPORTED BY STEEL FRAMING WITHIN 6" OF THE DECK EDGE) SHALL BE SUPPORTED BY AN L4X3X1/4 LLV CONTINUOUS ANGLE ATTACHED TO THE WALL WITH POST-INSTALLED ANCHORS. METAL DECK SIDES ABUTTING A WALL DO NOT NEED ADDITIONAL SUPPORT UNLESS NOTED OTHERWISE ON THE DESIGN DRAWINGS.
- UNLESS NOTED OTHERWISE ON THE DESIGN DRAWINGS, METAL ROOF DECKING SHALL BE ATTACHED 7 TO THE SUPPORTING STRUCTURE WITH A 36/7 PATTERN WITHIN 12 FEET OF ANY BUILDING EDGE. FLOOR DECKING AND REMAINING ROOF DECKING SHALL BE ATTACHED WITH A 36/4 PATTERN. ATTACHMENT SHALL BE WITH #12 SELF-DRILLING SCREWS OR POWDER ACTUATED OR PNEUMATIC PINS
- METAL DECKING SHALL BE CONNECTED AT ITS SIDE LAPS WITH 2-#10 SCREWS MINIMUM. MAXIMUM SPACING OF SIDE LAP SCREWS SHALL BE 3'-0" UNLESS NOTED OTHERWISE IN THE DESIGN DRAWINGS.
- EXACT LOCATION AND SIZES OF PENETRATIONS THROUGH FLOORS AND ROOFS SHALL BE 9 COORDINATED WITH MECHANICAL AND ELECTRICAL DRAWINGS. FRAMING FOR MECHANICAL EQUIPMENT SHALL BE AS DETAILED ON THE DRAWINGS AND SHALL BE SUBMITTED FOR REVIEW. ALL OPENINGS GREATER THAN 12" IN DIAMETER OR 12" SQUARE SHALL BE REINFORCED BY ANGLE FRAMING.
- 10. ALL HVAC EQUIPMENT (FANS, ETC.) SHALL BE SUPPORTED BY STRUCTURAL STEEL FRAMING AND/OR ANGLE FRAMING. NO EQUIPMENT SHALL BE SUPPORTED DIRECTLY BY THE METAL DECK.
- 11. SUBMITTALS A. SHOP DRAWINGS AND MATERIAL SUBMITTALS SHALL BE REQUIRED FOR ELEVATED STEEL DECK; ACCESSORIES; AND PRODUCT DATA, ETC., AS OUTLINED IN THE SPECIFICATIONS.
 - ALL DATA SHALL BE SUBMITTED "CONTRACTOR APPROVED".



AS NOTED

SCALE

AWING NO

STRUCTURAL STEEL

3.

D.

1. INSTALLATION OF STRUCTURAL STEEL, SHALL BE IN ACCORDANCE WITH DIVISION 5 OF THE SPECIFICATIONS AND THE FOLLOWING:

STRUCTURAL AND MISCELLANEOUS STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION, "SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS", 15TH EDITION, 2016.

STEEL FABRICATOR SHALL PARTICIPATE IN THE AISC QUALITY CERTIFICATION PROGRAM AND BE DESIGNATED AS AISC-CERTIFIED PLANT, CATEGORY STD.

4. UNLESS NOTED OTHERWISE STEEL MATERIALS SHALL CONFORM TO THE FOLLOWING:

STRUCTURAL (W) BEAMS AND COLUMNS - ASTM A-572 GRADE 50 OR ASTM A992. STRUCTURAL (C) CHANNELS AND ANGLES - ASTM A-36

- MISCELLANEOUS PLATES, BARS AND ANGLES ASTM A-36.
- ANCHOR BOLTS AND RODS ASTM A-36 OR ASTM F1554, GRADE 36. COLD-FORMED HOLLOW STRUCTURAL SECTIONS (HSS) - ASTM A500, GRADE B STRUCTURAL TUBING

STRUCTURAL PIPE - ASTM A53, TYPE E OR S, GRADE B. STANDARD (STD) WEIGHT, UNLESS NOTED OTHERWISE ON DRAWINGS.

5. UNLESS NOTED OTHERWISE BOLTED CONNECTIONS SHALL CONFORM TO THE FOLLOWING: A. HIGH STRENGTH BOLTS - 3/4" DIAMETER ASTM A-325-N TYPE 1, HEAVY-HEX. NUTS - HEAVY-HEX ASTM A563, GRADE C. WASHERS - ASTM F436 TYPE 1, HARDENED (RCSC SPEC TABLE 6.1 AND PART 14 FOR ANCHOR

RODS). BOLT, NUT AND WASHER FINISH SHALL MATCH THE FINISH OF THE STEEL IT CONNECTS.

6. UNLESS NOTED OTHERWISE ON THE DESIGN DRAWINGS ALL STRUCTURAL AND MISCELLANEOUS STEEL SHALL BE SHOP PRIMED. PRIMER PAINT SHALL BE COMPATIBLE WITH FINISH PAINTS.

7. MINIMUM SIZE WELD SHALL BE 1/4" FILLET WITH E70XX ELECTRODES. ALL WELDS SHALL BE PERFORMED BY CERTIFIED WELDERS AND CONFORM TO REQUIREMENTS OF AWS D1.1.

8. MINIMUM MATERIAL THICKNESS SHALL NOT BE LESS THAN 3/8" FOR MISCELLANEOUS PLATES.

INSTALL COLUMNS PLUMB BY USING STEEL WEDGES AT EDGES OF BASE PLATE TO PROVIDE FIRM BEARING. GROUT FOR SETTING PLATES SHALL BE NON-SHRINK, NON-METALLIC. WHEN GROUT HAS GAINED SUFFICIENT STRENGTH TO SUPPORT LOAD, ALL WEDGES AND SHIMS SHALL BE REMOVED AND **RESULTING VOIDS FILLED WITH GROUT.**

10. ALIGN AND ADJUST VARIOUS MEMBERS THAT FORM PART OF A STEEL STRUCTURE BEFORE PERMANENTLY FASTENING, MAINTAIN ERECTION TOLERANCES OF STRUCTURAL STEEL WITHIN AISC 303 "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES."

11. DO NOT USE THERMAL CUTTING DURING ERECTION OR ENLARGE HOLES BY BURNING.

12. CLEAN AND REPAIR FINISHES DAMAGED DURING ERECTION.

13. SUBMITTALS

A. SHOP DRAWINGS AND MATERIAL SUBMITTALS SHALL BE REQUIRED FOR STRUCTURAL AND MISCELLANEOUS STEEL, ACCESSORIES; AND PRODUCT DATA, ETC., AS OUTLINED IN THE SPECIFICATIONS B. ALL DATA SHALL BE SUBMITTED "CONTRACTOR APPROVED".

STEEL JOISTS

INSTALLATION OF OPEN WEB STEEL JOISTS SHALL BE IN ACCORDANCE WITH DIVISION 5 OF THE SPECIFICATIONS AND THE FOLLOWING:

OPEN WEB STEEL JOISTS SHALL CONFORM TO THE STEEL JOIST INSTITUTE "STANDARD SPECIFICATIONS FOR OPEN WEB STEEL JOISTS, K AND LH-SERIES", 2015. JOISTS ARE DESIGNED FOR A MAXIMUM ALLOWABLE TENSILE STRESS OF 30,000 PSI. BRIDGING SHALL BE ATTACHED TO STEEL BEAMS OR MASONRY AT THE END OF ALL BRIDGING LINES UNLESS OTHERWISE NOTED ON PLANS.

SIZE OF JOISTS INDICATED ON FRAMING PLANS ARE DETERMINED FROM "STANDARD LOAD TABLE FOR OPEN WEB STEEL JOISTS".

JOIST MANUFACTURER SHALL DESIGN AND FABRICATE JOISTS FOR POINT LOADS WHERE INDICATED. JOIST DEPTH SHALL BE AS INDICATED ON THE FRAMING PLAN. JOISTS ARE TO BE DESIGNED FOR A DEAD LOAD OF 60 PSF AND A LIVE LOAD OF 100 PSF, IN ADDITION TO THE POINT LOADS INDICATED, UNLESS OTHERWISE NOTED ON THE PLANS.

PROVIDE SPECIAL SLOPED BEARING SEATS FOR ALL JOISTS AND STEEL BEAMS ON GREATER THAN 1/4" PER FOOT SLOPE.

JOISTS SHALL BE REINFORCED w/ 2 - ∠1 1/2 x 1 1/2 x 3/16 AT ALL LOCATIONS WHERE A POINT LOAD IS APPLIED TO THE TOP AND BOTTOM CHORD OF A JOIST, MORE THAN 1'-0" FROM A PANEL POINT. ANGLES SHALL BE WELDED TO THE CHORD MEMBER AT THE POINT OF LOAD AND WELDED TO THE NEAREST PANEL POINT ON THE OPPOSITE CHORD. SEE DETAILS ON DRAWINGS.

SUBMITTALS Α

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8.

SHOP DRAWINGS AND MATERIAL SUBMITTALS SHALL BE REQUIRED FOR OPEN WEB JOISTS; ACCESSORIES: AND PRODUCT DATA. ETC., AS OUTLINED IN THE SPECIFICATIONS. ALL DATA SHALL BE SUBMITTED "CONTRACTOR APPROVED".

LOAD-BEARING METAL STUD NOTES:

1. UNLESS NOTED OTHERWISE, ALL STUDS SHALL BE EQUAL TO A MINIMUM OF 18 GA. SPACED AT 16" CENTERS WITH 18 GA. TRACK, TOP AND BOTTOM.

MINIMUM YIELD STRENGTH (Fy) FOR STUDS IS 33,000 p.s.i. FOR 18 GA. AND 20 GA. MATERIALS, AND 50,000 p.s.i. FOR 16 GA., 14 GA., AND 12 GA. MATERIALS.

3. ALL STUDS, TRACK, BRIDGING AND ACCESSORIES SHALL BE FORMED FROM STEEL HAVING A G-60 GALVANIZED COATING MEETING THE REQUIREMENTS OF A.S.T.M. A653.

4. STUDS SHALL HAVE FULL BEARING AGAINST THE INSIDE TRACK WEB TOP AND BOTTOM. STUDS MUST BE CUT SQUARE.

5. BRIDGING IS TO BE SPACED AT NO MORE THAN 4'-0" OC VERTICALLY.

UNLESS NOTED DIFFERENTLY, MINIMUM TRACK FASTENING SHALL BE 0.177" DIAMETER POWDER ACTUATED FASTENERS SPACED ON 12" CENTERS FOR BEARING WALLS, AND AT 16" OC FOR NON-LOAD BEARING WALLS (UNO), WITH 1 1/2" MINIMUM PENETRATION INTO CONCRETE.

VOIDS BENEATH TRACK SHALL NOT BE PERMITTED. CONTRACTOR SHALL PROVIDE A REASONABLY LEVEL SLAB WITH A TOLERANCE OF 1/8" IN 10 FEET. WHERE UNEVENESS OF SUPPORTING FLOOR PREVENTS CONTINUOUS SOLID BEARING. PANEL OR TRACK SHALL BE LEVELED BY PLACING MORTAR OR GROUT BENEATH TRACK.

CONTINUOUS STUDS EACH SIDE OF HEADERS SHALL BE EQUAL TO 1/2 OF THE INTERRUPTED STUDS PLUS ONE STUD AT EACH SIDE. USE MINIMUM OF TWO (2) STUDS EACH SIDE. HEADERS SHALL BE DESIGNED TO TRANSFER ALL UNIFORM AND/OR CONCENTRATED LOADS. SHEAR SHALL BE TRANSFERRED BY FULL BEARING ON JACK STUDS OR BY SHEAR PLATES. SHEAR PLATES SHALL BE 16 GA. MINIMUM.

CUTTING OF LOAD-BEARING METAL STUDS IS NOT PERMITTED WITHOUT SPECIFIC APPROVAL FROM THE ENGINEER OF RECORD.

1	2		3
UCTURAL TESTS & SPECIAL INSPE	TIONS (IBC 2018)		
04 SPECIAL INSPECTIONS			REINFORCING STEEL:
SHALL DEMONSTRATE COMPETENCE, TO THE SATISF	ACTION OF THE BUILDING OFFICIAL, FOR	PERSON	A. REINFORCING STEEL RESISTING FLEXURAL
	N OR OPERATION REQUIRING SPECIAL IN	SPECTION.	AXIAL FORCES IN INTERMEDIATE AND SPEC MOMENT FRAMES, BOUNDARY ELEMENTS
04.3 STATEMENT OF SPECIAL INSPECTIONS			SPECIAL CONCRETE STRUCTURAL WALLS
PROVISIONS AS OUTLINED ON THESE DESIGN DOCUM	ENTS DEFINE THE STRUCTURAL SPECIAL AL INSPECTIONS AS REQUIRED BY THE L	INSPECTIONS OCAL	C. SHEAR REINFORCEMENT
3DICTION FOR PERMIT APPLICATIONS IS TO BE PREPA	RED USING THE INFORMATION PRESENT	ED HERE.	D. OTHER REINFORCING STEEL
04.3.1 REPORT REQUIREMENTS			1705.3 CONCRETE CONSTRUCTION
IAL INSPECTORS SHALL KEEP RECORDS OF INSPECT ECTION REPORTS TO THE BUILDING OFFICIAL, AND TO	ONS. THE SPECIAL INSPECTOR SHALL FOR THE REGISTERED DESIGN PROFESSION	JRNISH AL IN	MATERIAL/ACTIVITY
'ONSIBLE CHARGE. REPORTS SHALL INDICATE THAT '	NORK INSPECTED WAS DONE IN CONFOR S SHALL BE BROUGHT TO THE IMMEDIATE	MANCE TO E ATTENTION	INSPECTION OF REINFORCING STEEL INSTALLA
HE CONTRACTOR FOR CORRECTION. IF THE DISCREF L BE BROUGHT TO THE ATTENTION OF THE BUILDING	ANCIES ARE NOT CORRECTED, THE DISC OFFICIAL AND TO THE REGISTERED DESI	REPANCIES GN	INSPECTION OF ANCHORS CAST IN CONCRETE ALLOWABLE LOADS HAVE BEEN INCREASED PE
ESSIONAL IN RESPONSIBLE CHARGE PRIOR TO THE CONTROL OF TO THE CONTROL OF THE CONT	COMPLETION OF THAT PHASE OF THE WO AND CORRECTION OF ANY DISCREPANC	RK. A FINAL IES NOTED IN	SECTION 1908.5 OR WHERE STRENGTH DESIGN INSPECTION OF ANCHORS AND REINFORCING S
NSPECTIONS SHALL BE SUBMITTED AT A POINT IN TIN DING OFFICIAL PRIOR TO THE START OF WORK.	IE AGREED UPON BY THE PERMIT APPLIC	ANT AND THE	POST-INSTALLED IN HARDENED CONCRETE: PE RESEARCH REPORTS INCLUDING VERIFICATION
			ANCHOR TYPE, ANCHOR DIMENSIONS, HOLE DI HOLE CLEANING PROCEDURES, ANCHOR SPAC
J4.4 CONTRACTOR RESPONSIBILITY	ON OF A WIND AND/OR A SEISMIC-FORCE	RESISTING	DISTANCES, CONCRETE MINIMUM THICKNESS, EMBEDMENT AND TIGHTENING TORQUE
EM, DESIGNATED WIND AND/OR SEISMIC SYSTEM, OR SHALL SUBMIT A WRITTEN CONTRACTOR'S STATEME	COMPONENT LISTED IN THE QUALITY AS	SURANCE	VERIFY USE OF APPROVED DESIGN MIX
TO THE OWNER PRIOR TO THE COMMENCEMENT OF V	/ORK ON THE SYSTEM OR COMPONENT.	THE SS OF THE	FRESH CONCRETE SAMPLING, PERFORM SLUMP AND AIR CONTENT TESTS AND
IAL REQUIREMENTS CONTAINED IN THE QUALITY ASS	URANCE PLAN.		DETERMINE TEMPERATURE OF CONCRETE INSPECTION OF CONCRETE PLACEMENT
04.5 INSPECTION OF FABRICATORS			FOR PROPER APPLICATION TECHNIQUES
MATERIAL/ACTIVITY	SERVICE	EXTENT	TEMPERATURE AND TECHNIQUES
Y FABRICATION/QUALITY CONTROL PROCEDURES	IN PLANT REVIEW	PERIODIC	INSPECTION OF FORMWORK FOR SHAPE, LINES, LOCATION AND DIMENSIONS
05.1.1 SPECIAL CASES			CONCRETE STRENGTH TESTING AND VERIFICA
MATERIAL/ACTIVITY	SERVICE	EXTENT	
K UNUSUAL IN NATURE, INCLUDING BUT NOT LIMITED TERNATIVE MATERIALS AND SYSTEMS, UNUSUAL	SUBMITTAL REVIEW, SHOP		
3N APPLICATIONS, MATERIALS AND SYSTEMS WITH IAL MANUFACTURER'S REQUIREMENTS)	AND/OR FIELD INSPECTION		(A) LEVEL A, B AND C QUALITY ASSURANCE:
			1) VERIFY COMPLIANCE WITH APPROVED S
	SERVICF	EXTENT	(B) LEVEL B QUALITY ASSURANCE:
ICATOR AND ERECTOR DOCUMENTS (VERIFY			faac PRIOR TO CONSTRUCTION
RTS AND CERTIFICATES AS LISTED IN AISC 360, TER N, PARAGRAPH 3.2 FOR COMPLIANCE WITH	SUBMITTAL REVIEW	EACH SUBMITTAL	(C) LEVEL C QUALITY ASSURANCE:
			CONSTRUCTION AND FOR EVERY 5,000 S
THAL VERIFICATION OF STRUCTURAL STEEL		PERIODIC	2) VERIFICATION OF PROPORTIONS OF
TH, EMBEDMENT. SEE 1705.3 FOR ANCHORS)		PERIODIC	MATERIALS IN PREMIXED OR PREBLEND MORTAR, PRE-STRESSING GROUT, AND
ICATION OF JOINT DETAILS AT EACH CONNECTION	FIELD INSPECTION	PERIODIC	OTHER THAN SELF-CONSOLIDATING GRO DELIVERED TO THE PROJECT SITE
CTURAL STEEL WELDING:			3) VERIFY PLACEMENT OF MASONRY UNITS
NSPECTION TASKS PRIOR TO WELDING (OBSERVE, OR PERFORM FOR EACH WELDED JOINT OR MEMBER	SHOP AND FIELD INSPECTION	OBSERVE OR PERFORM	(D) LEVELS B AND C QUALITY ASSURANCE:
HE QA TASKS LISTED IN AISC 360, TABLE N5.4-1) NSPECTION TASKS DURING WELDING (OBSERVE		AS NOTED	
R PERFORM FOR EACH WELDED JOINT OR MEMBER, HE QA TASKS LISTED IN AISC 360 TABLE N5 4-2)	SHOP AND FIELD INSPECTION	OBSERVE	2) VERIFY COMPLIANCE WITH APPROVED S
VSPECTION TASKS AFTER WELDING (OBSERVE, OR PERFORM FOR FACH WELDED JOINT OR MEMBER THE			3) VERIFY PROPORTIONS OF SITE-MIXED MORTAR, GROUT AND PRE-STRESSING
A TASKS LISTED IN AISC 360, TABLE N5.4-3)		AS NOTED	GROUT FOR BONDED TENDONS 4) VERIFY GRADE, TYPE, AND SIZE OF
COMPLETE PENETRATION GROOVE WELDS	SHOP OR FIELD ULTRASONIC	DEDIODIO	REINFORCEMENT AND ANCHOR BOLTS, PRE-STRESSING TENDONS AND ANCHO
5/16" OR GREATER IN RISK CATEGORY III OR IV	TESTING - 100%		5) VERIFY CONSTRUCTION OF MORTAR JO
5/16" OR GREATER IN RISK CATEGORY II	TESTING - 10% OF WELDS MINIMUM	PERIODIC	6) VERIFY PLACEMENT OF REINFORCEMEN CONNECTORS, AND PRE-STRESSING
) THERMALLY CUT SURFACES OF ACCESS HOLES WHEN MATERIAL t > 2"	SHOP OR FIELD MAGNETIC PARTICAL OR PENETRANT TESTING	PERIODIC	TENDONS AND ANCHORAGES 7) VERIFY GROUT SPACE PRIOR TO
) WELDED JOINTS SUBJECT TO FATIGUE WHEN REQUIRED BY AISC 360, APPENDIX 3, TABLE A-3.1	SHOP OR FIELD RADIOGRAPHIC OR ULTRASONIC TESTING	PERIODIC	GROUTING
) FABRICATOR'S NDT REPORTS WHEN FABRICATOR PERFORMS NDT	VERIFY REPORTS	EACH SUBMITTAI	8) VERIFY PLACEMENT OF GROUT AND PRE-STRESSING GROUT FOR BONDED T
CTURAL STEEL BOLTING:	SHOP AND FIELD INSPECTION		9) VERIFY SIZE AND LOCATION OF
NSPECTION TASKS PRIOR TO BOLTING		OBSERVE OR	10) VERIFY TYPE, SIZE, AND LOCATION OF
SOLITED CONNECTION, IN ACCORDANCE WITH		PERFORM AS NOTED	ANCHORS, INCLUDING DETAILS OF ANCH MASONRY TO STRUCTURAL MEMBERS, I
UN TAONO LIGTED IN AISC 360, TABLE N5.6-1)			OR OTHER CONSTRUCTION.
HE QA TASKS LISTED IN AISC 360, TABLE N5.6-2)		OBSERVE	11) VERIFY WELDING OF REINFORCEMENT (
a) TURN-OF-NUT WITH MATCHING MARKINGS		PERIODIC	12) VERIFY PREPARATION, CONSTRUCTION PROTESTION OF MASONRY DURING CO
b) DIRECT TENSION INDICATOR		PERIODIC	WEATHER (TEMPERATURE BELOW 40°F) WEATHER (TEMPERATURE ABOVE 90°F)
c) TWIST-OFF TYPE TENSION CONTROL BOLT		PERIODIC	13) VERIFY APPLICATION AND
	5 	CONTINUOUS	MEASUREMENT OF PRESTRESSING FOR 14) VERIFY PLACEMENT OF AAC MASONRY
SNUG-TIGHT JOINTS		PERIODIC	AND CONSTRUCTION OF THIN-BED MOR JOINTS (FIRST 5000 SF OF AAC MASONR
NSPECTION TASKS AFTER BOLTING (PERFORM TASKS			
VITH QA TASKS LISTED IN AISC 360, TABLE N5.6-3)			
CTION OF STEEL ELEMENTS OF COMPOSITE TRUCTION PRIOR TO CONCRETE PLACEMENT	SHOP AND FIELD		AAC MASONRY (FIRST 5000 SF OF AAC M
CORDANCE WITH QA TASKS LISTED IN AISC ABLE N6.1	INSPECTION AND TESTING	AS NOTED	
		·]	
MATERIAL/ACTIVITY	SERVICE	EXTENT	
RIAL VERIFICATION OF COLD-FORMED STEEL DECK:			
IDENTIFICATION MARKINGS	FIELD INSPECTION	PERIODIC	
MANUFACTURER'S CERTIFIED TEST REPORTS	SUBMITTAL REVIEW	EACH	
JECTION OF COLD-FORMED STEEL DECK		SUDIVITTAL	
JPPORTING STRUCTURE:		PERIODIC	
OTHER FASTENERS (IN ACCORDANCE			
WITH AISC 360, SECTION N6) VERIFY FASTENERS ARE IN CONFORMANCE			
		PERIODIC	
CONFORMANCE WITH APPROVED SUBMITTAL		PERIODIC	
IDENTIFICATION MARKINGS MANUFACTURER'S CERTIFIED TEST REPORTS JECTION OF COLD-FORMED STEEL DECK JPPORTING STRUCTURE: WELDING OTHER FASTENERS (IN ACCORDANCE WITH AISC 360, SECTION N6)) VERIFY FASTENERS ARE IN CONFORMANCE WITH APPROVED SUBMITTAL) VERIFY FASTENER INSTALLATION IS IN CONFORMANCE WITH APPROVED SUBMITTAL AND MANUFACTURER'S RECOMMENDATIONS	FIELD INSPECTION SUBMITTAL REVIEW SHOP AND FIELD INSPECTION	PERIODIC EACH SUBMITTA PERIODIC PERIODIC	

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FIELD INSPECTION

FIELD TESTING

FIELD INSPECTION

LEVEL B -PERIODIC LEVEL C -CONTINUOUS LEVEL B -PERIODIC LEVEL C -CONTINUOUS LEVEL B -PERIODIC LEVEL C -CONTINUOUS

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	SHOP AND FIELD INSPECTION		17) VERIFY PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY (AFTER THE FIRST 5000 SF OF AAC MASONRY)
RAL AND PECIAL S OF S AND		CONTINUOUS	 18) PREPARE GROUT AND MORTAR SPECIMENS 19) OBSERVE PREPARATION OF PRISMS
			1705.6 SOILS (STRUCTURAL) SEE CIVIL FOR MASS GR
			MATERIAL/ACTIVITY
	SERVICE	EXTENT	VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY
LATION	SHOP AND FIELD INSPECTION	PERIODIC	VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL
re where Per Gn IS Used	SHOP AND FIELD INSPECTION	PERIODIC	VERIFY USE OF PROPER MATERIALS, DENSITIES,
G STEEL PER ON OF DIMENSIONS, ACING, EDGE S, ANCHOR	FIELD INSPECTION	PERIODIC OR AS REQ'D BY THE RESEARCH REPORT ISSUED BY AN APPROVED	AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF CONTROLLED FILL PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY
	SHOP AND FIELD INSPECTION	PERIODIC	1705.10.2 COLD-FORMED STEEL SPECIAL INSPECTION
	SHOP AND FIELD INSPECTION	CONTINUOUS	INSPECTION DURING WELDING OPERATIONS OF ELEMENT OF THE MAIN WINDFORCE-RESISTING SYSTEM
	SHOP AND FIELD INSPECTION	CONTINUOUS	INSPECTIONS FOR SCREW ATTACHMENT, BOLTING, ANCHORING AND OTHER FASTENING OF COMPONENTS WITHIN THE MAIN WINDFORCE-RESISTING SYSTEM
	SHOP AND FIELD INSPECTION	PERIODIC	1705.10.3 WIND-RESISTING COMPONENTS
	FIELD INSPECTION	PERIODIC	MATERIAL/ACTIVITY
CATION JMENTS	FIELD TESTING AND REVIEW OF LABORATORY REPORTS	PERIODIC	ROOF CLADDING WALL CLADDING
			1705 11 SPECIAL INSPECTIONS FOR SEISMIC RESIST
	SERVICE	EXIENI	MATERIAL/ACTIVITY
O SUBMITTALS	FIELD INSPECTION	PERIODIC	1705.11.1 STRUCTURAL STEEL INSPECTION OF STRUCTURAL STEEL IN
	TESTING BY UNIT STRENGTH METHOD OR PRISM TEST METHOD	PERIODIC	1705.11.3 COLD-FORMED STEEL LIGHT-FRAME CONST
TO 0 SF	TESTING BY UNIT STRENGTH METHOD OR PRISM TEST METHOD	PERIODIC	INSPECTION DURING WELDING OPERATIONS OF ELEMENTS OF THE SEISMIC-FORCE RESISTING SYSTEM INSPECTIONS FOR SCREW ATTACHMENT, BOLTING,
NDED ID GROUT	FIELD INSPECTION	CONTINUOUS	ANCHORING AND OTHER FASTENING OF COMPONENTS WITHIN THE SIESMIC-FORCE-RESISTING SYSTEM 1705.11.4 DESIGNATED SEISMIC SYSTEMS VERIFICAT
SROUT, AS			ANCHORAGE OR MOUNTING CONFORMS TO THE CERTIFICATE OF COMPLIANCE IN ACCORDANCE
ITS	FIELD INSPECTION	PERIODIC	WITH SECTION 1705.12.3
/ISUAL OLIDATING CT	FIELD TESTING	CONTINUOUS	INSPECTION DURING THE ERECTION AND FASTENING OF EXTERIOR CLADDING AND INTERIOR AND EXTERIOR VENE
D SUBMITTALS	FIELD INSPECTION	PERIODIC	INSPECTION DURING THE ERECTION AND FASTENING OF INTERIOR AND EXTERIOR NON-LOAD BEARING WALLS
G	FIELD INSPECTION	PERIODIC	INSPECTION DURING ANCHORAGE OF ACCESS FLOORS 1705.11.6 MECHANICAL AND ELECTRICAL COMPONEN
S, AND IORAGES	FIELD INSPECTION	PERIODIC	INSPECTION DURING THE ANCHORAGE OF ELECTRICAL EQUIPMENT FOR EMERGENCY OR STANDBY POWER SYSTEMS
JOINTS FNT	FIELD INSPECTION	PERIODIC LEVEL B -	INSPECTION DURING ANCHORAGE OF OTHER
	FIELD INSPECTION	PERIODIC LEVEL C - CONTINUOUS LEVEL B -	INSPECTION DURING INSTALLATION AND ANCHORAGE OF PIPING SYSTEMS DESIGNED TO CARRY HAZARDOUS
	FIELD INSPECTION	PERIODIC LEVEL C - CONTINUOUS	INSPECTION DURING THE INSTALLATION AND ANCHORAGE OF HVAC DUCTWORK THAT WILL
D TENDONS	FIELD INSPECTION	CONTINUOUS	INSPECTION DURING INSTALLATION AND
	FIELD INSPECTION	PERIODIC	ANCHORAGE OF VIBRATION ISOLATION SYSTEMS 1705.11.7 STORAGE RACKS
= ICHORAGE OF S, FRAMES,	FIELD INSPECTION	LEVEL B - PERIODIC LEVEL C -	INSPECTION DURING THE ANCHORAGE OF STORAGE RACKS 8 FEET OR GREATER IN HEIGHT
T (SEE 1705.2.2)	FIELD INSPECTION	CONTINUOUS CONTINUOUS	1705.12 TESTING AND QUALIFICATION FOR SEISMIC R MATERIAL/ACTIVITY
DN, AND OLD 'F) OR HOT	FIELD INSPECTION	PERIODIC	1705.12.1 CONCRETE REINFORCEMENT REVIEW CERTIFIED MILL TEST REPORTS FOR EACH SHIPMENT OF REINFORCEMENT USED TO RESIST
ORCE	FIELD INSPECTION	CONTINUOUS	EARTHQUAKE-INDUCED FLEXURAL AND AXIAL FORCES IN REINFORCED CONCRETE SPECIAL MOMENT FRAMES, SPECIAL STRUCTURAL WALLS, AND COUPLING BEAMS
Y UNITS DRTAR	FIELD INSPECTION	CONTINUOUS	CONNECTING SPECIAL STRUCTURAL WALLS VERIFY REINFORCEMENT WELDABILITY OF ASTM A615 REINFORCEMENT USED TO RESIST FARTHOUAKE INDUCT
Y UNITS DRTAR JOINTS	FIELD INSPECTION	LEVEL B - PERIODIC LEVEL C -	FLEXURAL AND AXIAL FORCES IN REINFORCED CONCRET SPECIAL MOMENT FRAMES, SPECIAL STRUCTURAL WALL
DRTAR FOR C MASONRY)	FIELD INSPECTION	CONTINUOUS	STRUCTURAL WALLS 1705.12.2 STRUCTURAL STEEL
			TEST IN ACCORDANCE WITH THE QUALITY ASSURANCE REQUIREMENTS OF AISC 341
			1705.12.3 SEISMIC CERTIFICATION OF NONSTRUCTUR
			REVIEW CERTIFICATE OF COMPLIANCE FOR DESIGNATED SEISMIC SYSTEM COMPONENTS
			1705.16 FIRE-RESISTANT PENETRATIONS AND JOINTS MATERIAL/ACTIVITY
			INSPECT PENETRATION FIRESTOP
			INSPECT FIRE-RESISTANT JOINT SYSTEMS
			1705.17 SMOKE CONTROL SYSTEMS

	SERVICE	EXTENT
ERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE DEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY	FIELD INSPECTION	PERIODIC
ERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL	FIELD INSPECTION	PERIODIC
ERFORM CLASSIFICATION AND TESTING OF ONTROLLED FILL MATERIALS	FIELD INSPECTION	PERIODIC
ND LIFT THICKNESSES DURING PLACEMENT AND OMPACTION OF CONTROLLED FILL	FIELD INSPECTION	CONTINUOUS
RIOR TO PLACEMENT OF CONTROLLED FILL, BSERVE SUBGRADE AND VERIFY THAT SITE AS BEEN PREPARED PROPERLY	FIELD INSPECTION	PERIODIC
1705.10.2 COLD-FORMED STEEL SPECIAL INSPECTIONS FO	R WIND RESISTANCE	
	SERVICE	EXTENT
OF THE MAIN WINDFORCE-RESISTING SYSTEM	SHOP AND FIELD INSPECTION	PERIODIC
NSPECTIONS FOR SCREW ATTACHMENT, BOLTING, NCHORING AND OTHER FASTENING OF COMPONENTS /ITHIN THE MAIN WINDFORCE-RESISTING SYSTEM	SHOP AND FIELD INSPECTION	PERIODIC
1705.10.3 WIND-RESISTING COMPONENTS		
		PERIODIC
	SHOP AND FIELD INSPECTION	PERIODIC
1705.11 SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE	- DEFINED ARCH/MECH/ELEC	
MATERIAL/ACTIVITY	SERVICE	EXTENT
1705.11.1 STRUCTURAL STEEL		
ISPECTION OF STRUCTURAL STEEL IN CCORDANCE WITH AISC 341	SHOP AND FIELD INSPECTION	IN ACCORDANCE w/ AISC 341
1705.11.3 COLD-FORMED STEEL LIGHT-FRAME CONSTRUCT	ΓΙΟΝ	
EMENTS OF THE SEISMIC-FORCE RESISTING SYSTEM	SHOP AND FIELD INSPECTION	PERIODIC
NCHORING AND OTHER FASTENING OF COMPONENTS (ITHIN THE SIESMIC-FORCE-RESISTING SYSTEM	SHOP AND FIELD INSPECTION	PERIODIC
1705.11.4 DESIGNATED SEISMIC SYSTEMS VERIFICATION		
NCHORAGE OR MOUNTING CONFORMS TO THE ERTIFICATE OF COMPLIANCE IN ACCORDANCE /ITH SECTION 1705.12.3	FIELD INSPECTION	PERIODIC
1705.11.5 ARCHITECTURAL COMPONENTS		
SPECTION DURING THE ERECTION AND FASTENING OF	FIELD INSPECTION	PERIODIC
ISPECTION DURING THE ERECTION AND FASTENING OF	FIELD INSPECTION	PERIODIC
ISPECTION DURING ANCHORAGE OF ACCESS FLOORS	FIELD INSPECTION	PERIODIC
1705.11.6 MECHANICAL AND ELECTRICAL COMPONENTS		
ISPECTION DURING THE ANCHORAGE OF LECTRICAL EQUIPMENT FOR EMERGENCY OR TANDBY POWER SYSTEMS	FIELD INSPECTION	PERIODIC
NSPECTION DURING ANCHORAGE OF OTHER LECTRICAL EQUIPMENT	FIELD INSPECTION	PERIODIC
NSPECTION DURING INSTALLATION AND ANCHORAGE OF IPING SYSTEMS DESIGNED TO CARRY HAZARDOUS	FIELD INSPECTION	PERIODIC
NSPECTION DURING THE INSTALLATION AND NCHORAGE OF HVAC DUCTWORK THAT WILL	FIELD INSPECTION	PERIODIC
SONTAIN HAZARDOUS MATERIALS NSPECTION DURING INSTALLATION AND NCHORAGE OF VIBRATION ISOLATION SYSTEMS	FIELD INSPECTION	PERIODIC
1705.11.7 STORAGE RACKS		
NSPECTION DURING THE ANCHORAGE OF TORAGE RACKS 8 FEET OR GREATER IN HEIGHT	FIELD INSPECTION	PERIODIC
1705.12 TESTING AND QUALIFICATION FOR SEISMIC RESIST		
1705.12.1 CONCRETE REINFORCEMENT	SERVICE	EXTENT
EVIEW CERTIFIED MILL TEST REPORTS FOR EACH SHIPMENT OF REINFORCEMENT USED TO RESIST ARTHQUAKE-INDUCED FLEXURAL AND AXIAL FORCES IN REINFORCED CONCRETE SPECIAL MOMENT FRAMES, SPECIAL STRUCTURAL WALLS, AND COUPLING BEAMS CONNECTING SPECIAL STRUCTURAL WALLS	REVIEW CERTIFIED MILL TEST REPORTS	EACH SHIPMENT
ERIFY REINFORCEMENT WELDABILITY OF ASTM A615 EINFORCEMENT USED TO RESIST EARTHQUAKE-INDUCED LEXURAL AND AXIAL FORCES IN REINFORCED CONCRETE PECIAL MOMENT FRAMES, SPECIAL STRUCTURAL WALLS, ND COUPLING BEAMS CONNECTING SPECIAL TRUCTURAL WALLS	REVIEW TEST REPORTS	EACH SHIPMENT
1705.12.2 STRUCTURAL STEEL EST IN ACCORDANCE WITH THE QUALITY ASSURANCE	SHOP AND FIELD TESTING	PER AISC 341
EQUIREMENTS OF AISC 341 1705.12.3 SEISMIC CERTIFICATION OF NONSTRUCTURAL CO	OMPONENTS	
EVIEW CERTIFICATE OF COMPLIANCE FOR DESIGNATED EISMIC SYSTEM COMPONENTS	CERTIFICATE OF COMPLIANCE REVIEW	EACH SHIPMENT
1705.16 FIRE-RESISTANT PENETRATIONS AND JOINTS		
		PER ASTM
ISPECT FIRE-RESISTANT JOINT SYSTEMS	FIELD TESTING	E2174 PER ASTM F2303
1705.17 SMOKE CONTROL SYSTEMS		
MATERIAL/ACTIVITY	SERVICE	EXTENT
EAKAGE TESTING AND RECORDING OF DEVICE	FIELD TESTING	PERIODIC
RIOR TO OCCUPANCY AND AFTER SUFFICIENT OMPLETION, PRESSURE DIFFERENCE TESTING, LOW MEASUREMENTS, AND DETECTION AND ONTROL VERIFICATION	FIELD TESTING	PERIODIC
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SCALE: 1" = 1'-0"









FIRE PROTECTION GENERAL NOTES:

GENERAL: THESE GENERAL NOTES PRESENT AND/OR SUMMARIZE KEY PRODUCT INFORMATION FOR THE PLAN READER'S CONVENIENCE. SEE PLANS AND SPECIFICATIONS FOR FURTHER REQUIREMENTS.

WORK COVERED BY THIS DOCUMENT SHALL INCLUDE ALL LABOR, MATERIAL, PRODUCTS, AND SERVICES FOR, AND INCIDENTAL TO, INSTALLATION OF COMPLETE AND OPERATING HVAC SYSTEMS DRAWN OR SPECIFIED.

ALL WORK SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES INCLUDING, BUT NOT LIMITED TO, NFPA 13, NFPA 14, NFPA 20, NFPA 22, NFPA 24, INTERNATIONAL BUILDING CODE w/ AMENDMENTS, AND INTERNATIONAL FIRE CODE w/ AMENDMENTS.

ALL EQUIPMENT AND MATERIALS SHALL BE AS SPECIFIED OR "APPROVED EQUAL" BY THE ARCHITECT OR ENGINEER.

SPRINKLER PIPE SIZING, PIPE ROUTING, SPRINKLER LOCATIONS, AND PIPE SUPPORTS/BRACING BY SPRINKLER CONTRACTOR. PROVIDE SHOP DRAWINGS, HYDRAULIC CALCULATIONS, AND EQUIPMENT SUBMITTALS FOR REVIEW BY ENGINEER, AHJ, AND OWNER. SEE DIVISION 21 SPECIFICATIONS, IF APPLICABLE.

EXACT LOCATIONS AND ROUGHING REQUIREMENTS FOR PIPING AND EQUIPMENT SHALL BE DETERMINED FROM ARCHITECTURAL DRAWINGS, LARGE SCALE ARCHITECTURAL DETAILS, AND APPROVED MANUFACTURER'S SHOP DRAWINGS. PARTICULAR ATTENTION SHALL BE DIRECTED TO FIXTURES OR EQUIPMENT FURNISHED UNDER OTHER DIVISIONS.

SEE ARCHITECTURAL PLANS FOR WALL CONSTRUCTION AND REFLECTED CEILING PLANS.

EXACT LOCATION OF PIPING SHALL BE DETERMINED BY JOB CONDITIONS. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF HIS WORK WITH THAT OF OTHER TRADES AND ARRANGE PIPING TO CLEAR STRUCTURAL MEMBERS AND DUCTWORK.

IN FIRE WALLS, PACK ANNULAR SPACE BETWEEN PIPE AND WALL WITH FIRESTOP COMPOUND IN ACCORDANCE WITH ITS UL LISTING.

PIPING AND FITTING UNDERGROUND FIRE-SUPPRESSION WATER-SERVICE PIPING SHALL BE MECHANICAL-JOINT, DUCTILE-IRON PIPE; MECHANICAL-JOINT, DUCTILE- OR GRAY-IRON, STANDARD-PATTERN OR DUCTILE-IRON, COMPACT-PATTERN FITTINGS; GLANDS, GASKETS, AND BOLTS; AND GASKETED JOINTS.

WET-PIPE SPRINKLER SYSTEM, NPS 2 AND SMALLER, SHALL BE STANDARD-WEIGHT, BLACK-STEEL PIPE WITH THREADED ENDS; UNCOATED, GRAY-IRON THREADED FITTINGS; AND THREADED JOINTS.

WET-PIPE SPRINKLER SYSTEM, NPS 2-1/2 AND LARGER, SHALL BE SCHEDULE 10, BLACK-STEEL PIPE WITH ROLL-GROOVED ENDS; UNCOATED, GROOVED-END FITTINGS FOR STEEL PIPING; GROOVED-END-PIPE COUPLINGS FOR STEEL PIPING; AND GROOVED JOINTS.

LISTED FIRE-PROTECTION VALVES: VALVES SHALL BE UL LISTED AND FM APPROVED, WITH MINIMUM 175-PSIG PRESSURE

RATING. VALVES FOR GROOVED-END PIPING MAY BE FURNISHED WITH GROOVED ENDS INSTEAD OF TYPE OF ENDS SPECIFIED.

CHECK VALVES, NPS 2 OR SMALLER, SHALL BE UL 312, SWING CHECK TYPE, BRONZE BODY, AND THREADED ENDS.

CHECK VALVES, NPS 2-1/2 OR LARGER, SHALL BE UL 312, SWING CHECK TYPE, CAST OR DUCTILE IRON BODY, AND FLANGED OR GROOVED ENDS.

OS&Y GATE VALVES, NPS 2 AND SMALLER, SHALL BE UL 262, BRONZE BODY, EXTERNAL SUPERVISORY SWITCH, AND THREADED ENDS.

OS&Y GATE VALVES, NPS 2-1/2 AND LARGER, SHALL BE UL 262, CAST OR DUCTILE IRON BODY, EXTERNAL SUPERVISORY SWITCH, AND FLANGED OR GROOVED ENDS.

INDICATING-TYPE VALVES, NPS 2 AND SMALLER, SHALL BE UL 1091, BALL OR BUTTERFLY TYPE, BRONZE BODY, INTERNAL SUPERVISORY SWITCH, AND THREADED ENDS.

INDICATING-TYPE VALVES, NPS 2-1/2 AND LARGER, SHALL BE UL 1091, BUTTERFLY TYPE, CAST OR DUCTILE IRON BODY, INTERNAL SUPERVISORY SWITCH, AND FLANGED OR GROOVED ENDS.

SPECIALTY VALVES: VALVES SHALL BE UL LISTED AND FM APPROVED, WITH MINIMUM 175-PSIG PRESSURE RATING. VALVES FOR GROOVED-END PIPING MAY BE FURNISHED WITH GROOVED ENDS INSTEAD OF TYPE OF ENDS SPECIFIED.

ALARM CHECK VALVES SHALL BE UL 193, DESIGNED FOR HORIZONTAL OR VERTICAL INSTALLATION, AND INCLUDE TRIM SETS FOR BYPASS, DRAIN, ELECTRICAL SPRINKLER ALARM SWITCH, PRESSURE GAGES, RETARDING CHAMBER, AND FILL-LINE ATTACHMENT WITH STRAINER.

AUTOMATIC (BALL DRIP) DRAIN VALVES SHALL BE UL 1726, AUTOMATIC DRAINING, BALL CHECK, NPS 3/4, AND THREADED ENDS.

RATING.

AUTOMATIC SPRINKLERS WITH HEAT-RESPONSIVE ELEMENT SHALL BE UL 199, NOMINAL 1/2-INCH ORIFICE WITH DISCHARGE COEFFICIENT K OF 5.6, AND FOR "ORDINARY" TEMPERATURE CLASSIFICATION RATING UNLESS OTHERWISE INDICATED OR REQUIRED BY APPLICATION.

SPRINKLER FINISHES SHALL BE CHROME PLATED, BRONZE, OR PAINTED, AS INDICATED.

SPRINKLER GUARDS SHALL BE UL 199, WIRE CAGE WITH FASTENING DEVICE FOR ATTACHING TO SPRINKLER.

ALARM DEVICES DEVICES SHALL BE UL LISTED OR FM APPROVED. ALARM-DEVICE TYPES SHALL MATCH PIPING AND EQUIPMENT CONNECTIONS.

ELECTRICALLY OPERATED ALARM BELL SHALL BE UL 464; VIBRATING, METAL ALARM BELL; 8-INCH MINIMUM DIAMETER; RED-ENAMEL FACTORY FINISH, SUITABLE FOR OUTDOOR USE.

WATER-FLOW INDICATORS SHALL BE UL 346: ELECTRICALLY SUPERVISED: TWO SINGLE POLE, DOUBLE THROW CIRCUIT SWITCHES FOR ISOLATED ALARM AND AUXILIARY CONTACTS, 7A , 125VAC, AND 0.25AM 24VDC; COMPLETE WITH FACTORY-SET, FIELD-ADJUSTABLE RETARD ELEMENT TO PREVENT FALSE SIGNALS AND TAMPERPROOF COVER THAT SENDS SIGNAL IF REMOVED; PADDLE OPERATED, 250 PSIG PRESSURE RATING.

VALVE SUPERVISORY SWITCHES SHALL BE UL 346; ELECTRICALLY SUPERVISED; SINGLE POLE, DOUBLE THROW SWITCH WITH NORMALLY CLOSED CONTACTS; DESIGNED TO SIGNAL THAT CONTROLLED VALVE IS IN OTHER THAN FULLY OPEN POSITION.

PROVIDE SHOP DRAWINGS, HYDRAULIC CALCULATIONS, AND EQUIPMENT SUBMITTALS FOR REVIEW BY ENGINEER, AHJ, AND OWNER.

APPLICABLE CODES AND STANDARDS		
CODES AND STANDARDS	EDITION	
INTERNATIONAL BUILDING CODE (IBC)	2018	
INTERNATIONAL FIRE CODE (IFC)	2018	
NFPA 13	2019	
NFPA 24	2019	

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HAZARD CLASSIFICATION:

- ALL AREAS SHALL BE REGARDED AS LIGHT HAZARD UNLESS NOTED OTHERWISE.
- L.H. LIGHT HAZARD, PER NFPA 13
- OH-1 ORDINARY HAZARD, GROUP 1, PER NFPA 13

LEGEND:

- FS FIRE SPRINKLER PIPING
- NS> NON-SPRINKLERED AREA

FIRE BARRIER LEGEND:

- 1 HOUR FIRE-RATED CONSTRUCTION

- 2 HOUR FIRE-RATED CONSTRUCTION

DESIGN CRITERIA:

- 1. TYPES OF SYSTEMS: WET PIPE
- 2. DENSITY / DESIGN AREA (OFFICE AREAS):
- L.H. 0.10 GPM/FT² OVER H.M.D. 1500 FT²
- OH-1 0.15 GPM/FT² OVER H.M.D. 1500 FT² DESIGN AREA SHALL BE INCREASED BY 30% FOR SLOPED CEILINGS, COMPLYING WITH NFPA 13, 19.3.3.2.4
- 3. SPRINKLERS SHALL BE:
- 5.6 K-FACTOR AND A TEMPERATURE RATING OF 165°F UPRIGHT TYPE FOR ROOMS WITHOUT CEILINGS
- RECESSED PENDENT TYPE FOR ROOMS WITH CEILINGS
- SIDEWALL TYPE FOR WALL MOUNTING BRIGHT CHROME WITH BRIGHT CHROME ESCUTCHEON IN FINISHED SPACES
- EXPOSED TO VIEW, ROUGH BRONZE IN UNFINISHED SPACES NOT EXPOSED TO VIEW
- 4. MAXIMUM PROTECTION AREA PER SPRINKLER SHALL NOT EXCEED 225 FT² FOR LIGHT HAZARD AND 130 FT² FOR ORDINARY HAZARD.
- 5. PROVIDE SEISMIC BRACING PER NFPA AND IBC.
- 6. HOSE ALLOWANCE SHALL BE 100 GPM FOR LIGHT HAZARD OCCUPANCIES AND 250 GPM FOR ORDINARY HAZARD OCCUPANCIES.
- 7. COMPLY WITH NFPA 13 FOR ABOVEGROUND PIPING AND NFPA 24 FOR UNDERGROUND PIPING.

FIRE FLOW TEST DATA:

- 1. TEST DATE: 11/06/2018
- 2. PERFORMED BY: JEMAL STUKES OF AUGUSTA UTILITIES DEPARTMENT
- 3. LOCATION OF RESIDUAL FIRE HYDRANT R: 2868 OLD HIGHWAY 1
- 4. LOCATION OF FLOW FIRE HYDRANT F: 2832 OLD HIGHWAY 1
- 5. STATIC PRESSURE OF RESIDUAL FIRE HYDRANT R: 115 PSIG
- 6. MEASURED FLOW ARE FLOW HYDRANT F: 1,645 GPM
- 7. RESIDUAL PRESSURE AT RESIDUAL HYDRANT R: 105 PSIG
- 8. CONTRACTOR SHALL VERIFY AVAILABLE FLOW WITH NEW FLOW TEST FOR DESIGN PURPOSES IF ABOVE DATE IS MORE THAN SIX MONTHS OLD.

SPRINKLERS SHALL BE UL LISTED OR FM APPROVED, WITH MINIMUM 175-PSIG PRESSURE

SPRINKLER ESCUTCHEONS SHALL BE CHROME-PLATED STEEL, ONE PIECE, FLAT.













² MEZZANINE FIRE PROTECTION PLAN

PLUMBING GENERAL NOTES:

DENERGE: DENERGE NOTES PRESENT AND/OR SUMMARIZE KEY PRODUCT INFORMATION FOR THE PLAN READER'S CONVENIENCE. SEE PLANS AND SPECIFICATIONS FOR FURTHER REQUIREMENTS.

WORK COVERED BY THIS DOCUMENT SHALL INCLUDE ALL LABOR, MATERIAL, PRODUCTS, AND SERVICES FOR, AND INCIDENTAL TO, INSTALLATION OF COMPLETE AND OPERATING PLUMBING SYSTEMS DRAWN OR SPECIFIED.

ALL WORK SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES INCLUDING, BUT NOT LIMITED TO, INTERNATIONAL PLUMBING CODE w/ AMENDMENTS, INTERNATIONAL FUEL GAS CODE w/ AMENDMENTS, ADA STANDARDS FOR ACCESSIBLE DESIGN AND ALL ADA AMENDMENTS.

ALL EQUIPMENT AND MATERIALS SHALL BE AS SPECIFIED OR "APPROVED EQUAL" BY THE ARCHITECT OR ENGINEER.

INSTALL ALL PLUMBING FIXTURES PER MANUFACTURER'S INSTRUCTIONS.

EXACT LOCATIONS AND ROUGHING REQUIREMENTS FOR ALL FIXTURES AND EQUIPMENT SHALL BE DETERMINED FROM ARCHITECTURAL DRAWINGS, LARGE SCALE ARCHITECTURAL DETAILS, AND APPROVED MANUFACTURER'S SHOP DRAWINGS. PARTICULAR ATTENTION SHALL BE DIRECTED TO FIXTURES OR EQUIPMENT FURNISHED UNDER OTHER DIVISIONS.

PIPING IS SHOWN IN ITS GENERAL LOCATION (UNLESS DIMENSIONED). EXACT LOCATION SHALL BE DETERMINED BY JOB CONDITIONS. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF HIS WORK WITH THAT OF OTHER TRADES AND ARRANGE PIPING TO CLEAR STRUCTURAL MEMBERS AND DUCTWORK. EXACT LOCATIONS SHALL BE PROVIDED ON "AS-BUILT" DRAWINGS.

MINIMUM SIZE WATER LINE FOR THREE OR MORE FIXTURES SHALL BE 3/4". REFER TO PLUMBING FIXTURE SCHEDULE FOR INDIVIDUAL RUNOUT SIZES.

ALL PIPING TO BE CONCEALED IN A WALL, CEILING, OR A CHASE UNLESS OTHERWISE NOTED. PIPING SHOWN OUT OF CHASES FOR CLARITY.

PROVIDE SLEEVES FOR PIPES PASSING THROUGH FLOORS, MASONRY WALLS AND FIRE OR SMOKE PARTITIONS. PACK MINERAL WOOL IN ANNULAR SPACE BETWEEN PIPE SLEEVE.

REFER TO ARCHITECTURAL DRAWINGS FOR EXACT FIXTURE MOUNTING HEIGHTS. ALL ACCESSIBLE FIXTURES SHALL COMPLY WITH STATE BUILDING CODE AND ADA STANDARDS FOR ACCESSIBLE DESIGN.

ARRANGEMENTS OF WORK SHALL BE AS SHOWN. DRAWINGS ARE NOT INTENDED TO INDICATE ALL OFFSETS AND FITTINGS. EXAMINE ALL DRAWINGS, INVESTIGATE CONDITIONS TO BE ENCOUNTERED AND ARRANGE WORK ACCORDINGLY; FURNISH ALL FITTINGS AND OFFSETS.

MEASUREMENT OF DRAWINGS BY SCALE SHALL NOT BE USED AS DIMENSIONS FOR FABRICATION. MEASUREMENTS FOR LOCATING FIXTURES, EQUIPMENT, DUCTWORK, PIPING AND ACCESSORIES SHALL BE MADE ON THE SITE AND SHALL BE BASED ON ACTUAL JOB CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MEASUREMENTS WHERE THE CONTRACTOR PREFABRICATES ANY WORK BASED ON THE DRAWINGS WITHOUT VERIFYING ACTUAL JOB CONDITIONS, THEN THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL COST INVOLVED IN MAKING CHANGES TO PREFABRICATED WORK WHERE CONFLICTS OCCUR.

ARRANGE FOR CHASES, SLOTS, AND OPENINGS IN OTHER BUILDING COMPONENTS DURING PROGRESS OF CONSTRUCTION TO ALLOW FOR INSTALLATIONS.

INSTALL SYSTEMS, MATERIALS, AND EQUIPMENT LEVEL, PLUMB, PARALLEL, AND PERPENDICULAR TO OTHER BUILDING SYSTEMS AND COMPONENTS.

COPPER PIPING SHALL NOT BE INSTALLED IN DIRECT CONTACT WITH MASONRY. CEMENT MORTAR, CONCRETE, OR DISSIMILAR METALS. PLUMBING CONTRACTOR TO PROVIDE SLEEVES AND COORDINATE w/ GENERAL CONTRACTOR DURING SLAB INSTALLATION.

CUTTING AND REPAIRING: THE PLUMBING CONTRACTOR SHALL DO ALL CUTTING AND REPAIRING OF WALLS, FLOORS, CEILINGS, ETC. NECESSARY FOR THE INSTALLATION OF THE WORK BUT HE SHALL NOT CUT INTO ANY STRUCTURAL MEMBER WITHOUT THE PERMISSION OF THE ARCHITECT.

PROVIDE SHOCK ABSORBERS AS INDICATED ON PLANS.

PLUMBING CONTRACTOR TO PROVIDE PROPER SEPARATION BETWEEN WATER SUPPLY AND WASTE/SANITARY PIPING PER INTERNATIONAL PLUMBING CODE.

PLUMBING CONTRACTOR TO PROVIDE PREPRINTED 1/2" HIGH LETTERED LABELS FOR THE FOLLOWING: INTERIOR MAIN SHUT-OFF VALVE, POTABLE WATER SUPPLY PIPING, & HOT WATER PIPING. LABELS SHOULD BE MOUNTED EVERY 20'-0" ON HORIZONTAL RUNS.

GENERAL CONTRACTOR TO PROVIDE ACCESS PANELS FOR ALL INACCESSIBLE, ABOVE CEILING VALVES AND EQUIPMENT. COORDINATE LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.

ALL LAVATORIES LOCATED IN PUBLIC TOILET FACILITIES SHALL DELIVER TEMPERED WATER THROUGH AN APPROVED WATER-TEMPERATURE LIMITING DEVICE THAT CONFORMS TO ASSE 1070/ASME A112.1070/CSA B125.70 OR CSA B125.3, PER THE IPC.

DOMESTIC WATER PIPING: UNDER-BUILDING SLAB, DOMESTIC WATER, BUILDING SERVICE PIPING SHALL BE SOFT COPPER TUBING, ASTM B 88, TYPE K, WITH WROUGHT-COPPER, SOLDER-JOINT FITTINGS, AND BRAZED JOINTS. AVOID JOINTS UNDER BUILDING SLAB WHERE POSSIBLE.

ALL OTHER UNDER-BUILDING SLAB, DOMESTIC WATER PIPING SHALL BE SOFT COPPER TUBING, ASTM B 88, TYPE L, WITH WROUGHT-COPPER, SOLDER-JOINT FITTINGS, AND BRAZED JOINTS. AVOID JOINTS UNDER BUILDING SLAB WHERE POSSIBLE.

ALL ABOVEGROUND DOMESTIC WATER PIPING SHALL BE HARD COPPER TUBING, ASTM B 88, TYPE L, WITH CAST- OR WROUGHT-COPPER, SOLDER-JOINT FITTINGS, AND SOLDERED JOINTS

ALL INDOOR DOMESTIC COLD, HOT, AND RECIRCULATED HOT WATER PIPING SHALL BE INSULATED WITH 1 INCH THICK MINERAL-FIBER, PREFORMED PIPE INSULATION. COMPLYING WITH ASTM C 547, TYPE I, GRADE A, WITH FACTORY-APPLIED ASJ. INSTALL INSULATION CONTINUOUSLY THROUGH WALL, PARTITION, FLOOR, AND ROOF PENETRATIONS.

SANITARY WASTE AND VENT PIPING

ALL SOIL, DRAIN, WASTE AND VENT PIPING SHALL BE SCHEDULE 40 PVC-DWV WITH SOLVENT WELD JOINTS, CONFORMING TO ASTM D 2665 AND ASTM D 2564.

ALL SOIL, DRAIN, WASTE AND VENT PIPING LOCATED UNDERGROUND BELOW APPARATUS BAY SHALL BE SERVICE CLASS, CAST-IRON SOIL PIPING, CONFORMING TO ASTM A 74, ASTM C 564, AND ASTM B 29.

ALL PIPING PASSING THROUGH THE ROOF SHALL BE FLASHED WITH ROOF FLASHING ASSEMBLY COMPATIBLE WITH THE ROOF SYSTEM.

<u> THERMAL HANGER SHIELD INSERT</u> INSTALL THERMAL HANGER SHIELD INSERT IN PIPE HANGER FOR INSULATED PIPING,

WITH PROTECTIVE SADDLE. FOR COLD PIPING, INSERT MATERIAL SHALL BE ASTM C552, TYPE II CELLULAR GLASS WITH 100-PSI OR ASTM C591, TYPE VI, GRADE 1 POLYISOCYANURATE WITH 125-PSI MINIMUM COMPRESSIVE STRENGTH AND VAPOR BARRIER. FOR HOT PIPING, INSERT MATERIAL SHALL BE WATER-REPELLENT-TREATED, ASTM C533, TYPE I CALCIUM SILICATE WITH 100-PSI, ASTM C552, TYPE II CELLULAR GLASS WITH 100-PSI, OR ASTM C591, TYPE VI, GRADE 1 POLYISOCYANURATE WITH 125-PSI MINIMUM COMPRESSIVE STRENGTH.

SLEEVES AND SLEEVE SEALS:

INSTALL SLEEVES FOR PIPING PASSING THROUGH PENETRATIONS IN FLOORS, PARTITIONS, ROOFS, AND WALLS. INSTALL SLEEVES IN CONCRETE FLOORS, CONCRETE ROOF SLABS, AND CONCRETE WALLS AS NEW SLABS AND WALLS ARE CONSTRUCTED; CUT SLEEVES TO LENGTH FOR MOUNTING FLUSH WITH BOTH SURFACES; USING GROUT OR SILICONE SEALANT, SEAL OUTSIDE OF SLEEVES IN SLABS AND WALLS WITHOUT SLEEVE-SEAL SYSTEM. INSTALL SLEEVES THAT ARE LARGE ENOUGH TO PROVIDE 1/4-INCH ANNULAR CLEAR SPACE BETWEEN SLEEVE AND PIPE OR PIPE INSULATION; SEAL ANNULAR SPACE BETWEEN SLEEVE AND PIPING OR PIPING INSULATION. FOR SLEEVES THAT WILL HAVE SLEEVE-SEAL SYSTEM INSTALLED, SELECT SLEEVES OF SIZE LARGE ENOUGH TO PROVIDE 1-INCH ANNULAR CLEAR SPACE BETWEEN PIPING AND CONCRETE SLABS AND WALLS; SLEEVES ARE NOT REQUIRED FOR CORE-DRILLED HOLES. MAINTAIN INDICATED FIRE OR SMOKE RATING OF WALLS, PARTITIONS, CEILINGS, AND FLOORS AT PIPE PENETRATIONS THROUGH RATED CONSTRUCTION; SEAL PIPE PENETRATIONS WITH FIRE- AND SMOKE-STOP MATERIALS.

USE SLEEVES AND SLEEVE SEALS FOR THE FOLLOWING PIPING-PENETRATION APPLICATIONS: 1. EXTERIOR CONCRETE WALLS ABOVE GRADE: STEEL PIPE SLEEVES, ASTM A 53, TYPE E, GRADE B, SCHEDULE 40, GALVANIZED, WITH PLAIN ENDS AND INTEGRAL

- WATERSTOP COLLAR.
- 2. EXTERIOR CONCRETE WALLS BELOW GRADE: CAST-IRON PIPE SLEEVES, WITH PLAIN ENDS AND INTEGRAL WATERSTOP COLLAR WITH SLEEVE-SEAL SYSTEM.
- 3. CONCRETE SLAB-ON-GRADE: CAST-IRON PIPE SLEEVES, WITH PLAIN ENDS AND INTEGRAL WATERSTOP COLLAR WITH SLEEVE-SEAL SYSTEM.
- 4. CONCRETE SLABS ABOVE GRADE: STACK-SLEEVE FITTINGS. INTERIOR PARTITIONS: STEEL PIPE SLEEVES, ASTM A 53, TYPE E, GRADE B, SCHEDULE 40, GALVANIZED, WITH PLAIN ENDS AND INTEGRAL WELDED WATERSTOP COLLAR FOR PIPING SMALLER THAN NPS 6; GALVANIZED-STEEL SHEET SLEEVES, 0.0239-INCH MINIMUM THICKNESS, ROUND TUBE CLOSED WITH WELDED LONGITUDINAL JOINT FOR PIPING NPS 6 AND LARGER.

WATER HAMMER ARRESTOR

A WATER HAMMER ARRESTOR SHALL BE INSTALLED AT EVERY FIXTURE WHERE QUICK CLOSING VALVES ARE UTILIZED. WATER HAMMER ARRESTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. WATER HAMMER ARRESTORS SHALL CONFORM TO ASSE 1010.

FIELD QUALITY CONTROL:

ALL DOMESTIC WATER PIPING SHALL BE TESTED FOR LEAKS AND DEFECTS; FILL DOMESTIC WATER PIPING, CAP, AND SUBJECT PIPING TO STATIC WATER PRESSURE OF 50 PSIG ABOVE OPERATING PRESSURE, WITHOUT EXCEEDING PRESSURE RATING OF PIPING SYSTEM MATERIALS. ISOLATE TEST SOURCE AND ALLOW IT TO STAND FOR FOUR HOURS.

LEAKS AND LOSS IN TEST PRESSURE CONSTITUTE DEFECTS THAT MUST BE REPAIRED. LEAVE DOMESTIC WATER PIPING UNCOVERED AND UNCONCEALED UNTIL IT HAS BEEN TESTED AND APPROVED.

ALL SANITARY WASTE AND VENT PIPING SHALL BE TESTED FOR LEAKS AND DEFECTS AT COMPLETION OF ROUGH-IN; CLOSE OPENINGS IN PIPING SYSTEM AND FILL WITH WATER TO POINT OF OVERFLOW, BUT NOT LESS THAN 10-FOOT HEAD OF WATER. FROM 15 MINUTES BEFORE INSPECTION STARTS TO COMPLETION OF INSPECTION, WATER LEVEL MUST NOT DROP. INSPECT JOINTS FOR LEAKS. REPAIR LEAKS AND DEFECTS WITH NEW MATERIALS AND RETEST PIPING, OR PORTIONS THEREOF, UNTIL SATISFACTORY RESULTS ARE OBTAINED. INSTALL TEST TEES WHEN THE SYSTEM IS TO BE TESTED IN SECTIONS. LEAVE SANITARY WASTE AND VENT PIPING UNCOVERED AND UNCONCEALED UNTIL IT HAS BEEN TESTED AND APPROVED.

APPLICABLE CODES AND STANDARDS		
CODES AND STANDARDS	EDITION	
INTERNATIONAL BUILDING CODE (IBC)	2018	
INTERNATIONAL PLUMBING CODE (IPC)	2018	
INTERNATIONAL ENERGY CONSERVATION CODE (IECC)	2015	
ASHRAE 90.1	2013	
NFPA 13	2019	
NATIONAL ELECTRICAL CODE (NEC)	2023	
ADA STANDARDS FOR ACCESSIBLE DESIGN	2010	

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PLUMBING LEGEND				
SYMBOL	DESCRIPTION			
FD	FLOOR DRAIN (SEE SCHEDULE)			
SD	SHOWER DRAIN (SEE SCHEDULE)			
HD	HUB DRAIN (SEE SCHEDULE)			
GCO	GROUND CLEANOUT (SEE SCHEDULE)			
VTR	VENT THROUGH ROOF			
V	VENT PIPE			
W	WASTE PIPING			
S	SANITARY PIPING			
CW	COLD WATER PIPING			
HW	HOT WATER PIPING (110°F)			
HWR	HOT WATER RECIRCULATION PIPING			
TW	TEPID WATER PIPING (70°F)			
OW	OIL WASTE PIPING			
CI	CAST IRON PIPING			
P.R.V.	PRESSURE REDUCING VALVE			
U.N.O.	UNLESS NOTED OTHERWISE			
TYP.	TYPICAL			
I.E.	INVERT ELEVATION			
网	FULL PORT BALL VALVE			
•	WATER HAMMER ARRESTOR			
3/4"-WH 🕂	WALL HYDRANT (SEE PLUMBING SCHEDULE)			
1/2"-HB 🕂	HOSE BIBB (SEE PLUMBING SCHEDULE)			
Ģ	PIPE DOWN			
O	PIPE UP			








MEZZANINE



PLUMBING FIXTURE SCHEDULE						TURE SCHEDULE	
MARK	FIXTURE	CW	NOM. PI HW	PE SIZE W	V	DESCRIPTION	
P-1	COUNTERTOP LAVATORY (H.C.)	1/2"	1/2"	2"	1 1/2"	AMERICAN STANDARD 0476.028 ACCESSIBLE LAVATORY, AMERICAN STANDARD 7385.050 FAUCET, GRID DRAIN, ANGLE STOPS, & 3/8" SUPPLIES, PLUMBEREX HANDY-SHIELD MODEL 2003	
P-2	WALL-HUNG LAVATORY (H.C.)	1/2"	1/2"	2"	1 1/2"	AMERICAN STANDARD 0355.012 ACCESSIBLE LAVATORY, AMERICAN STANDARD 7385.050 FAUCET, GRID DRAIN, ANGLE STOPS, & 3/8" SUPPLIES, PLUMBEREX HANDY- SHIELD MODEL 2003	
P-3	WATER CLOSET (H.C.)	1/2"	-	4"	1 1/2"	AMERICAN STANDARD CADET PRO 215AB.104, 1.28 GAL. FLUS w/ CHURCH 295C TOILET SEAT	
P-4	DOUBLE BOWL SINK w/DISPOSER	1/2"	1/2"	2"	1 1/2"	JUST DLX2237A-J SINK 22"x37"x10" (4 HOLE), #J-35 STRAINERS, AMERICAN STANDARD 7074.040 FAUCET, SUPPLIES, STOP VALVES, AND TRAP INSINKERATOR POWER SERIES, 3/4 HP MOTOR, 120V/1Ø/60	
P-5	MOP BASIN	1/2"	1/2"	3"	1 1/2"	FIAT MODEL MSB-2424, FAUCET 830-AA, HOSE & HOSE BRACKET 832-AA, MOP HANGER 889-CC AND STRAINER	
P-6	LAUNDRY TUB (FLOOR MOUNTED)	1/2"	1/2"	2"	1 1/2"	FIAT MODEL FL-1 LAUNDRY TUB w/ MODEL A-1 FAUCET AND STRAINER	
P-7	HI/LO WATER COOLER w/BOTTLE FILLER	1/2"	-	2"	1 1/2"	OASIS VERSACOOLER II MODEL PG8EBQSL	
P-8	SHOWER HEAD AND MIXING VALVE	1/2"	1/2"	-	-	SYMMONS ORIGINS TEMPTROL S-9601-P-1.5-X	
P-9	SHOWER HEAD AND MIXING VALVE (H.C.)	1/2"	1/2"	-	-	SYMMONS ORIGINS TEMPTROL 9605-PLR-1.5-X SHOWER VAL SYSTEM w/HAND SHOWER AND DUAL OUTLET DIVERTER VAL	
P-10	SHOWER (H.C.)	1/2"	1/2"	2"	1 1/2"	FREEDOM SHOWERS APF6036BF1.25L ACRYLIC ACCESSIBLE SHOWER w/ FOLD-UP SEAT ON LEFT, SHOWER DRAIN, SHOWER ROD AND CURTAIN, SYMMONS ORIGINS TEMPTROL 9605-PLR-1.5-X SHOWER VALVE SYSTEM w/HAND SHOWER AND DUAL OUTLET DIVERTER VALVE	
P-11	DECON SHOWER HEAD AND MIXING VALVE (H.C.)	1/2"	1/2"	-	-	SYMMONS ORIGINS TEMPTROL 9605PLR-1.5-L5-X SHOWER VALVE SYSTEM w/DUAL OUTLET DIVERTER VALVE, SYMMONS 402SH1-1.5-CA8 RAIN SHOWERHEAD (CEILING MOUNTED AND CENTERED ABOVE DRAIN)	
P-12	DECON SHOWER FAUCET AND HOSE	1/2"	1/2"	-	-	T&S BRASS MODEL PG-8WREV (INSTALL ADJACENT TO DECON SHOWER VALVE, P-11)	
P-13	SAFETY SHOWER w/ EYE WASH	1 1/4"	1 1/4"	-	-	HAWS MODEL 8320-8325 COMBINATION SHOWER & EYE/FACE WASH w/ HAWS MODEL 9201E THERMOSTATIC MIXING VALVE	
P-14	DOUBLE BOWL SINK	1/2"	1/2"	2"	1 1/2"	ADVANCE TABCO MODEL 93-62-36-18RL SINK 77"x31", ADVANCE TABCO MODEL K-116 FAUCET, SUPPLIES, STOP VALVES, AND TRAP	
IB-1	ICE MAKER VALVE	1/2"	-	-	-	IPS WATER TITE MODEL MBFRAB1200, FIRE RATED	
WB-1	WASHER BOX	1/2"	1/2"	2"	1 1/2"	IPS WATER TITE MODEL W4700 OUTLET BOX w/ LINT LUV-R (WALL MOUNTED) IN-LINE LINT FILTER BY ENVIRONMENTAL ENHANCEMENTS	
WDB	WALL DRAIN BOX	-	-	2"	-	OATEY MODA FIRE RATED DRAIN BOX	
3/4"-WH-1	WALL HYDRANT	3/4"	-	-	-	J.R. SMITH MODEL 5509QT FOR 6" WALL THICKNESS. WARNING - FAUCET MUST BE INSTALLED w/ DOWNWARD PITCH TOWARD NOZZLE & HOSE MUST BE REMOVED IN FREEZING WEATHER OR FAUCET MAY FREEZE & BURST.	
3/4"-WH-2	WALL HYDRANT	3/4"	-	-	-	J.R. SMITH MODEL 5509QT FOR 10" WALL THICKNESS. WARNING - FAUCET MUST BE INSTALLED w/ DOWNWARD PITCH TOWARD NOZZLE & HOSE MUST BE REMOVED IN FREEZING WEATHER OR FAUCET MAY FREEZE & BURST.	
1/2"-HB	HOSE BIBB	1/2"	-	-	-	WOODFORD MODEL B24P-1/2 w/ BOX	
PMP-1	RECIRCULATION PUMP	-	3/4"	-	-	BELL & GOSSETT MODEL NBF-22 w/ TIMECLOCK 120V/1Ø/60 (7 GPM @ 10 FOOT HEAD)	
EWH-1	ELEC. WATER HEATER	3/4"	3/4"	-	-	A.O. SMITH MODEL DVE-120A, 119 GALLON CAP., 40.5KW INPUT, 208V/3Ø/60, RECOVERY RATE OF 166 GPH AT A 100° F TEMP. RISE (PROVIDE FLOORMASTER RS-094 WATER HEATER SHUT-OFF	
NOTES:	 ALL FIXTURES, FITTING ACT; WHERE APPLICAB SUPPORT URINALS w/ W RIM HEIGHT SHALL COM 	5, AND T _E. /ALL HA IPLY w/ .	RIM TO NGERS ADA RE	COMPL AND TH QUIREM	Y WITH RU BO	I THE LATEST REVISION OF THE AMERICAN DISABILITIES LTS. AND STANDARD MANUFACTURER RECOMMENDED	
	INSTALLATION HEIGHTS FOR NON-ADA FIXTURES. 4. PLUMBING CONTRACTOR TO COORDINATE w/ COUNTER TOP CONTRACTOR BEFORE ORDERING SINKS.						

HANGERS & SUPPORTS				
SPACING: DO NOT EXCEED THE FOLLOWING SPACING, ON CENTERS				
PIPE SIZE	SCH. 40 PVC	COPPER	STEEL	HANGER ROD DIA.
1/2" - 3/4"	4 FT.	5 FT.	7 FT.	1/4"
1"	4 FT.	6 FT.	7 FT.	1/4"
1 1/2"	4 FT.	6 FT.	9 FT.	3/8"
2"	4 FT.	8 FT.	10 FT.	3/8"
2 1/2"	4 FT.	9 FT.	11 FT.	3/8"
3"	4 FT.	10 FT.	12 FT.	3/8"
4"	4 FT.	10 FT.	12 FT.	1/2"

WATER HAMMER ARRESTER SCHEDULE				
FIXTURE UNIT RATING				
1-11				
12-32				
33-60				
61-113				
114-154				
155-330				

NOTE: USE PISTON TYPE COMPLYING WITH STANDARD P.D.I. WH-201 AND ASSE 1010.

FLOOR DRAIN & CLEANOUT SCHEDULE

SYMPOL	BASIS OF DESI	GN		NOTE
STIVIDUL	MANUFACTURER	MODEL		NOTES
FD-1	J.R. SMITH	2010-B	12	
FD-2	J.R. SMITH	2473	2	APPARATUS
GCO	J.R. SMITH	4237		
HD	MIFAB	F1100-DD	2	
SD	PLASTIC ODDITIES	PBR406	12	

FLOOR DRAIN & CLEANOUT ACCESSORIES

D PROVIDE MANUFAC. RECOMMENDED STRAINER SIZE PROVIDE TRAP SEAL D BASED ON OUTLET SIZE (PROSET TRAP GUAR)	1) PF BA	ROVIDE MANUFAC. RECOMMENDED STRAINER SIZE	2	PROVIDE TRAP SEAL DEVIC (PROSET TRAP GUARD OR

NOTES:

1. PROVIDE PROSET "T-RITE" DRAINS ON ALL FLOOR/SHOWER/HUB DRAINS THAT ARE THROUGH PENETRATION OF A FIRE RATED FLOOR.

2. COORDINATE FLOOR FINISHES w/ FLOOR DRAINS AND FLOOR CLEANOUTS. (ADJUST FLOOR DRAIN AND FLOOR CLEANOUT ELEVATIONS AS REQUIRED)









HVAC GENERAL NOTES:

THESE GENERAL NOTES PRESENT AND/OR SUMMARIZE KEY PRODUCT INFORMATION FOR THE PLAN READER'S CONVENIENCE. SEE PLANS AND SPECIFICATIONS FOR FURTHER REQUIREMENTS.

WORK COVERED BY THIS DOCUMENT SHALL INCLUDE ALL LABOR, MATERIAL, PRODUCTS, AND SERVICES FOR, AND INCIDENTAL TO, INSTALLATION OF COMPLETE AND OPERATING HVAC SYSTEMS DRAWN OR SPECIFIED.

ALL WORK SHALL CONFORM TO ALL APPLICABLE FEDERAL. STATE, AND LOCAL CODES INCLUDING, BUT NOT LIMITED TO, NFPA 13, NATIONAL ELECTRICAL CODE, AND INTERNATIONAL MECHANICAL CODE w/ AMENDMENTS.

ALL EQUIPMENT AND MATERIALS SHALL BE AS SPECIFIED OR "APPROVED EQUAL" BY THE ARCHITECT OR ENGINEER.

INSTALL ALL MECHANICAL EQUIPMENT PER MANUFACTURER'S INSTRUCTIONS.

ARRANGEMENTS OF MECHANICAL WORK SHALL BE AS SHOWN. DRAWINGS ARE NOT INTENDED TO INDICATE ALL OFFSETS AND FITTINGS. EXAMINE ALL DRAWINGS. INVESTIGATE CONDITIONS TO BE ENCOUNTERED AND ARRANGE WORK ACCORDINGLY; FURNISH AND INSTALL ALL FITTINGS AND OFFSETS.

DRAWINGS ARE NOT INTENDED TO SHOW IN DETAIL EXACT LOCATIONS AND CONNECTIONS FOR EQUIPMENT AND ACCESSORIES. FINAL CONNECTIONS SHALL BE AS SHOWN ON APPROVED SHOP DRAWINGS.

MEASUREMENT OF DRAWINGS BY SCALE SHALL NOT BE USED AS DIMENSIONS FOR FABRICATION. MEASUREMENTS FOR LOCATING EQUIPMENT, DUCTWORK, PIPING AND ACCESSORIES SHALL BE MADE ON THE JOB SITE AND SHALL BE BASED ON ACTUAL JOB CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MEASUREMENTS. WHERE THE CONTRACTOR PREFABRICATES ANY WORK BASED ON THE DRAWINGS WITHOUT VERIFYING ACTUAL JOB CONDITIONS, THEN THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL COSTS INVOLVED IN MAKING CHANGES TO PREFABRICATED WORK WHERE CONFLICTS OCCUR.

THE CONTRACTOR SHALL CHECK CEILING HEIGHTS IN EACH SPACE ON ARCHITECTURAL DRAWINGS AND SHALL ARRANGE ALL MECHANICAL WORK TO FIT IN THE SPACE ABOVE THE CEILING ALLOWING FOR ACCESS TO REMOVE TILE. PARTICULAR ATTENTION SHALL BE DIRECTED TOWARD DUCT SIZES AS SHOWN ON DRAWINGS, TO VERIFY THAT DUCTWORK ALONG WITH ALL OTHER WORK WILL FIT IN THE SPACE ABOVE THE CEILINGS. AFTER VERIFYING DIMENSIONS, IF THE CONTRACTOR DETERMINES THAT THE WORK WILL NOT FIT IN THE SPACE INDICATED, THEN THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF THE CONFLICT AND SHALL NOT INSTALL ANY WORK UNTIL INSTRUCTIONS ARE RECEIVED FROM THE ARCHITECT/ENGINEER. IF THE CONTRACTOR INSTALLS WORK AS SHOWN ON DRAWINGS WITHOUT VERIFYING ADEQUACY OF SPACES, AND THE WORK DOES NOT FIT THE SPACE SHOWN, THEN THE CONTRACTOR SHALL BE RESPONSIBLE FOR REARRANGING WORK AND CHANGING DUCT SIZES AS REQUIRED TO FIT THE SPACE AND THE CONTRACTOR SHALL PAY ALL COSTS CONNECTED WITH THE CHANGES.

CONTRACTOR SHALL INSTALL DUCTS, PIPING AND EQUIPMENT IN A NEAT AND WORKMANLIKE MANNER AND SHALL AVOID CONFLICT WITH OTHER WORK. EQUIPMENT SHALL BE SO ARRANGED AND FITTED INTO AVAILABLE SPACE SO THAT WORKING PARTS INCLUDING FILTERS AND LUBRICATION POINTS, AND COIL REMOVAL ARE ACCESSIBLE FOR SERVICE WITHOUT DAMAGE TO BUILDING STRUCTURE OR FINISHES OR WITHOUT MOVING OTHER EQUIPMENT. THE CONTRACTOR SHALL NOT INSTALL ANY EQUIPMENT WHERE PARTS ARE INACCESSIBLE FOR SERVICE.

WHERE MOUNTING HEIGHTS ARE NOT DETAILED OR DIMENSIONED, INSTALL SYSTEMS, MATERIALS, AND EQUIPMENT TO PROVIDE MAXIMUM HEADROOM POSSIBLE.

EXACT LOCATION OF GRILLES & CEILING OUTLETS SHALL BE DETERMINED ON THE JOB. COORDINATE WITH LIGHTS AND ARCHITECTURAL REQUIREMENTS TO PROVIDE A UNIFORM & SYMMETRICAL APPEARANCE. REFER TO ARCHITECTURAL & ELECTRICAL DRAWINGS & DETAILS.

CUTTING AND REPAIRING: THE HVAC CONTRACTOR SHALL DO ALL CUTTING AND REPAIRING OF WALLS, FLOORS, CEILINGS, ETC. NECESSARY FOR THE INSTALLATION OF THE WORK BUT HE SHALL NOT CUT INTO ANY STRUCTURAL MEMBER WITHOUT THE PERMISSION OF THE ARCHITECT.

PROVIDE UNION OR FLANGE CONNECTIONS IN PIPING AT ALL EQUIPMENT & AS REQUIRED FOR SERVICE.

GENERAL CONTRACTOR TO PROVIDE ACCESS PANELS FOR ALL INACCESSIBLE. ABOVE CEILING DAMPERS AND EQUIPMENT. COORDINATE LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.

METAL DUCT: ALL DUCTWORK SHALL BE INSTALLED IN STRICT COMPLIANCE WITH SMACNA, NFPA BULLETIN 90A, AND ASHRAE GUIDES. UNLESS OTHERWISE NOTED, DUCTWORK SHALL BE GALVANIZED SHEET STEEL. FIBERGLASS DUCTWORK IS NOT ACCEPTABLE.

MINIMUM DUCTWORK STATIC PRESSURE CLASS SHALL BE 1-INCH W.G. MINIMUM DUCT SEAL CLASS SHALL BE CLASS "A".

ALL DUCT DIMENSIONS ARE CLEAR INSIDE DIMENSIONS. ON RECTANGULAR DUCTS. DIMENSIONS GIVEN FIRST IS DIMENSION SEEN. DUCT DIMENSIONS MAY BE ALTERED AS LONG AS SAME DUCT CROSS SECTIONAL AREA IS MAINTAINED, IN ORDER TO AVOID INTERFERENCES AS NEEDED.

LOW PRESSURE FLEXIBLE DUCT: FACTORY FABRICATED ASSEMBLY, UL-181, CLASS 1 LISTED, HAVING A MINIMUM R-VALUE OF 6.0, EQUAL TO THERMAFLEX "KM". CONNECT DIFFUSERS TO DUCTS WITH MAXIMUM 60-INCH LENGTHS OF FLEXIBLE DUCT CLAMPED OR STRAPPED IN PLACE.

MANUAL VOLUME DAMPERS: DAMPERS SHALL BE SAME MATERIAL AS DUCTWORK, PER SMACNA. PROVIDE AXLES FULL LENGTH OF DAMPER BLADES AND BEARINGS AT BOTH ENDS OF OPERATING SHAFT. PROVIDE MANUAL VOLUME DAMPERS IN ALL BRANCH DUCTS (ONE PER SUPPLY AND RETURN OUTLET). FLEXIBLE CONNECTIONS: GLASS FABRIC DOUBLE COATED WITH NEOPRENE, 26 OZ. PER SQUARE YARD, COMPLYING WITH UL 181, CLASS 1. PROVIDE FLEXIBLE CONNECTION BETWEEN ALL EQUIPMENT AND RIGID DUCTWORK. FABRIC CONNECTIONS SHALL BE AT LEAST 3.5 INCHES WIDE AND HAVE A METAL-EDGED CONNECTOR AT EACH END. PROVIDE METAL COMPATIBLE WITH CONNECTED DUCTS.

TURNING VANES: GALVANIZED STEEL, COMPLYING WITH SMACNA. VANES SHALL BE SINGLE WALL FOR DUCTS UP TO 48 INCHES WIDE AND DOUBLE WALL FOR LARGER DIMENSIONS. ALL 90 DEGREE SQUARE ELBOWS AND TEES SHALL HAVE TURNING VANES (SUPPLY & RETURN DUCT).

DUCT INSULATION: ALL CONCEALED SUPPLY AND RETURN DUCTS SHALL BE INSULATED WITH 2.2 INCH THICK MINERAL-FIBER BLANKET INSULATION, ASTM C553 TYPE II AND ASTM C1290 TYPE III, WITH FACTORY-APPLIED FSK JACKET AND 3/4 LB. NOMINAL DENSITY, EQUAL TO CERTAINTEED "SOFTTOUCH DUCT WRAP".

ACOUSTIC DUCT LINER SHALL BE 1 INCH THICK FLEXIBLE FIBROUS-GLASS, TYPE I DUCT LINER, COMPLYING WITH ASTM C1071 AND NFPA 90A OR NFPA 90B, EQUAL TO JOHNS MANVILLE "LINACOUSTIC RC".

TYPE I KITCHEN HOOD EXHAUST DUCTS: EXHAUST DUCTWORK CONNECTED TO COMMERCIAL KITCHEN HOODS SHALL BE TYPE 304, STAINLESS-STEEL SHEET; NO. 2B FINISH FOR CONCEALED DUCT; NO. 4 FINISH FOR EXPOSED DUCT; WELDED SEAMS AND JOINTS; POSITIVE OR NEGATIVE 2 INCH WG PRESSURE CLASS: AIRTIGHT/WATERTIGHT.

DUCTS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 96. INSTALL ALL DUCTS WITHOUT DIPS AND TRAPS THAT MAY HOLD GREASE, AND SLOPE A MINIMUM OF 2 PERCENT TO DRAIN GREASE BACK TO THE HOOD. INSTALL FIRE-RATED ACCESS PANEL ASSEMBLIES AT EACH CHANGE IN DIRECTION AND AT MAXIMUM INTERVALS OF 20 FEET IN HORIZONTAL DUCTS, AND AT EVERY FLOOR FOR VERTICAL DUCTS. DUCTS SHALL HAVE A CLEARANCE TO COMBUSTIBLE CONSTRUCTION OF NOT LESS THAN 18 INCHES AND SHALL HAVE A CLEARANCE TO NONCOMBUSTIBLE CONSTRUCTION OF NOT LESS THAN 3 INCHES. WHERE REQUIRED CLEARANCES ARE NOT ACHIEVABLE, CONTINUOUSLY COVER DUCTS ON ALL SIDES WITH TWO LAYERS OF FIRE BARRIER DUCT WRAP, 3M FIRE BARRIER DUCT WRAP615+ OR EQUAL, TO REDUCE REQUIRED CLEARANCES TO COMBUSTIBLE/NONCOMBUSTIBLE CONSTRUCTION TO ZERO INCHES.

REFRIGERANT PIPING: PROVIDE AND INSTALL REFRIGERANT PIPING IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND IN SUCH A WAY AS TO BE INCONSPICUOUS AND FREE FROM ANY POSSIBLE CONDENSATION.

REFRIGERANT PIPING SHALL BE COPPER, TYPE ACR, ANNEALED-TEMPER TUBING AND WROUGHT-COPPER FITTINGS WITH SOLDERED JOINTS SUITABLE FOR CONNECTION WITH SILVER SOLDER.

ALL INDOOR REFRIGERANT SUCTION AND HOT GAS PIPING SHALL BE INSULATED WITH 1 INCH THICK FLEXIBLE CLOSED-CELL ELASTOMERIC INSULATION, EQUAL TO ARMACELL "AP ARMAFLEX".

ALL OUTDOOR REFRIGERANT SUCTION AND HOT GAS PIPING SHALL BE INSULATED WITH 2 INCH THICK FLEXIBLE CLOSED-CELL ELASTOMERIC INSULATION, EQUAL TO ARMACELL "AP ARMAFLEX".

CONDENSATE DRAIN PIPING:

ALL CONDENSATE DRAIN PIPING AND FITTINGS SHALL BE SCHEDULE 40 PVC WITH SOLVENT WELD JOINTS, CONFORMING TO ASTM D 1785, ASTM D 2466, AND ASTM 2564. ALL CONDENSATE DRAIN PIPING LOCATED IN RETURN AIR PLENUMS SHALL BE DRAWN-

TEMPER COPPER TUBING, TYPE DWV, CONFORMING TO ASTM B306, WITH WROUGHT-COPPER FITTINGS AND SOLDERED JOINTS, CONFORMING TO ASME B16.22.

WITH 1 INCH THICK FLEXIBLE CLOSED-CELL ELASTOMERIC INSULATION, EQUAL TO ARMACELL "AP ARMAFLEX".

THERMAL HANGER SHIELD INSERTS:

INSTALL THERMAL HANGER SHIELD INSERT IN PIPE HANGER FOR INSULATED PIPING. WITH PROTECTIVE SADDLE. FOR COLD PIPING, INSERT MATERIAL SHALL BE ASTM C552, TYPE II CELLULAR GLASS WITH 100-PSI OR ASTM C591, TYPE VI, GRADE 1 POLYISOCYANURATE WITH 125-PSI MINIMUM COMPRESSIVE STRENGTH AND VAPOR BARRIER. FOR HOT PIPING. INSERT MATERIAL SHALL BE WATER-REPELLENT-TREATED, ASTM C533, TYPE I CALCIUM SILICATE WITH 100-PSI, ASTM C552, TYPE II CELLULAR GLASS WITH 100-PSI, OR ASTM C591, TYPE VI. GRADE 1 POLYISOCYANURATE WITH 125-PSI MINIMUM COMPRESSIVE STRENGTH.

DESIGN CONDITIONS							
	SUMMER WINTER COMMENTS						
INDOORS	72°Fdb 50%RH	70°Fdb	1,2				
OUTDOORS	95°Fdb / 76°Fwb	23°Fdb	1,2				

1. OUTDOOR AIR QUANTITIES BASED ON ASHRAE 62.1-2016 2. BASED ON GEORGIA ENERGY CODE

ALL COPPER TUBING USED FOR INDOOR CONDENSATE DRAIN PIPING SHALL BE INSULATED

SLEEVES AND SLEEVE SEALS:

INSTALL SLEEVES FOR PIPING PASSING THROUGH PENETRATIONS IN FLOORS, PARTITIONS, ROOFS, AND WALLS. INSTALL SLEEVES IN CONCRETE FLOORS, CONCRETE ROOF SLABS, AND CONCRETE WALLS AS NEW SLABS AND WALLS ARE CONSTRUCTED; CUT SLEEVES TO LENGTH FOR MOUNTING FLUSH WITH BOTH SURFACES; USING GROUT OR SILICONE SEALANT, SEAL OUTSIDE OF SLEEVES IN SLABS AND WALLS WITHOUT SLEEVE-SEAL SYSTEM. INSTALL SLEEVES THAT ARE LARGE ENOUGH TO PROVIDE 1/4-INCH ANNULAR CLEAR SPACE BETWEEN SLEEVE AND PIPE OR PIPE INSULATION; SEAL ANNULAR SPACE BETWEEN SLEEVE AND PIPING OR PIPING INSULATION. FOR SLEEVES THAT WILL HAVE SLEEVE-SEAL SYSTEM INSTALLED, SELECT SLEEVES OF SIZE LARGE ENOUGH TO PROVIDE 1-INCH ANNULAR CLEAR SPACE BETWEEN PIPING AND CONCRETE SLABS AND WALLS; SLEEVES ARE NOT REQUIRED FOR CORE-DRILLED HOLES. MAINTAIN INDICATED FIRE OR SMOKE RATING OF WALLS, PARTITIONS, CEILINGS, AND FLOORS AT PIPE PENETRATIONS THROUGH RATED CONSTRUCTION; SEAL PIPE PENETRATIONS WITH FIRE- AND SMOKE-STOP MATERIALS.

USE SLEEVES AND SLEEVE SEALS FOR THE FOLLOWING PIPING-PENETRATION APPLICATIONS:

- 1. EXTERIOR CONCRETE WALLS ABOVE GRADE: STEEL PIPE SLEEVES, ASTM A 53, TYPE E, GRADE B, SCHEDULE 40, GALVANIZED, WITH PLAIN ENDS AND INTEGRAL WATESTOP COLLAR
- 2. CONCRETE SLAB-ON-GRADE: CAST-IRON PIPE SLEEVES, WITH PLAIN ENDS AND INTEGRAL WATERSTOP COLLAR WITH SLEEVE-SEAL SYSTEM.
- 3. CONCRETE SLABS ABOVE GRADE: STACK-SLEEVE FITTINGS.
- 4. INTERIOR PARTITIONS: STEEL PIPE SLEEVES, ASTM A 53, TYPE E, GRADE B, SCHEDULE 40, GALVANIZED, WITH PLAIN ENDS AND INTEGRAL WELDED WATERSTOP COLLAR FOR PIPING SMALLER THAN NPS 6; GALVANIZED-STEEL SHEET SLEEVES, 0.0239-INCH MINIMUM THICKNESS, ROUND TUBE CLOSED WITH WELDED LONGITUDINAL JOINT FOR PIPING NPS 6 AND LARGER.

CONTROLS: PROVIDE AND INSTALL CONTROL WIRING AND 7-DAY PROGRAMMABLE THERMOSTATS AS REQUIRED UNLESS OTHERWISE SPECIFIED. MOUNT THERMOSTATS 4'-0" A.F.F.

CONCRETE PADS PROVIDE 3000 PSI CONCRETE PAD FOR ALL GROUND AND FLOOR MOUNTED HVAC EQUIPMENT. PADS OUTDOORS ON GRADE SHALL BE 6 INCHES THICK AND EXTEND 4 INCHES ABOVE THE ADJACENT GRADE. PADS INDOORS SHALL BE NOMINALLY 4" THICK. PADS SHALL BE REINFORCED WITH 6"x6" 1010 WIRE AND SHALL HAVE CHAMFERED EDGES. CONCRETE PADS SHALL EXTEND 3 INCHES BEYOND ALL SIDES OF UNIT.

ELECTRICAL

ALL EQUIPMENT FURNISHED SHALL COMPLY WITH THE CURRENT EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) AND THE REQUIREMENTS OF DIVISION 26. ALL POWER WIRING AND FINAL POWER CONNECTIONS TO THE SYSTEM SHALL BE PROVIDED PER THE ELECTRICAL DRAWINGS AND UNDER DIVISION 26. CONTROL WIRING (120V AND LESS) SHALL BE PROVIDED UNDER DIVISION 23 AND EXTEND FROM THE INDICATED 120V POWER CIRCUIT INDICATED ON THE ELECTRICAL DRAWINGS. ALL ELECTRICAL CHARACTERISTICS SHALL BE TAKEN FROM THE ELECTRICAL DRAWINGS AND SPECIFICATIONS AND COORDINATED PRIOR TO ORDERING THE EQUIPMENT. ALL WIRING IN THE CEILING PLENUM SHALL BE PLENUM-RATED CABLE OR INSTALLED IN CONDUIT.

MOTORS AND STARTERS:

PROVIDE MOTORS, STARTERS, VARIABLE FREQUENCY DRIVES, PUSH BUTTONS, THERMAL OVERLOAD SWITCHES, AND CONTACTORS FOR EQUIPMENT COVERED HEREIN UNLESS OTHERWISE SPECIFIED. INSTALLATION OF STARTERS. PUSH BUTTONS. THERMAL OVERLOAD SWITCHES, AND CONTACTORS (NOT FACTORY INSTALLED) IS SPECIFIED ON THE ELECTRICAL DRAWINGS AND UNDER DIVISION 26.

CLEANING AND ADJUSTING:

CLEAN ALL GREASE, OIL, PAINT, AND OTHER CONSTRUCTION DEBRIS FROM THE EXTERIOR SURFACES OF ALL MECHANICAL EQUIPMENT, PIPING, AND DUCTS. CLEAN ALL DUCTS. PLENUMS, AND CASINGS OF DEBRIS AND BLOWN FREE OF ALL PARTICLES OF RUBBISH AND DUST PRIOR TO INSTALLATION OF OUTLET FACES.

BEARINGS THAT REQUIRE LUBRICATION SHALL BE LUBRICATED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ALL CONTROL EQUIPMENT SHALL BE ADJUSTED TO THE SETTINGS INDICATED OR REQUIRED FOR PERFORMANCE AS SPECIFIED. REMOVE ALL STICKERS, RUST, STAINS, LABELS, AND TEMPORARY COVERS BEFORE FINAL ACCEPTANCE. REMOVE FOREIGN MATTER FROM EQUIPMENT, PIPING AND DUCTWORK SYSTEMS AND APPURTENANCES. CLEAN AND POLISH IDENTIFICATION PLATES.

REMOVE ALL TRASH AND DEBRIS FROM THE JOBSITE ON A DAILY BASIS.

TESTING, ADJUSTING, AND BALANCING: ALL WORK SHALL BE TESTED AND BALANCED BY AN INDEPENDANT CERTIFIED TAB SPECIALIST. TAB SPECIALIST SHALL BE CERTIFIED BY AABC, NEBB, OR TABB.

SUBMIT FINAL TEST AND BALANCE REPORT FOR REVIEW AND APPROVAL PRIOR TO TURN-OVER OF FINAL PROJECT.

	HVAC LEGEND				
SYMBOL	DESCRIPTION				
	SUPPLY DIFFUSER				
	RETURN GRILLE				
	EXHAUST GRILLE				
<u>SD-7</u> 150	MARK/CFM (SEE AIR DISTRIBUTION DEVICE SCHEDULE)				
30x14	DUCT SIZE (WIDTHxHEIGHT)				
	MANUAL VOLUME DAMPER				
T AHU-1	THERMOSTAT, WALL MOUNTED, UNIT SERVED				
H DOAS-1	HUMIDISTAT, WALL MOUNTED, UNIT SERVED				
© ^{HVLS-1}	CONTROLLER, WALL MOUNTED, UNIT SERVED				
© ^{EF-1}	GAS MONITOR, WALL MOUNTED, UNIT SERVED				
Ø	ROUND (DIAMETER)				
	AIR FLOW DIRECTION				
	3/4" DOOR UNDER CUT				
	NEW DUCTWORK				
++++++	FLEX DUCT (LOW PRESSURE)				
SA	SUPPLY AIR				
RA	RETURN AIR				
EA	EXHAUST AIR				
OA	OUTDOOR AIR				
U.N.O.	UNLESS NOTED OTHERWISE				

APPLICABLE CODES AND ST	ANDARDS
CODES AND STANDARDS	EDITION
INTERNATIONAL BUILDING CODE (IBC)	2018
INTERNATIONAL MECHANICAL CODE (IMC)	2018
INTERNATIONAL ENERGY CONSERVATION CODE (IECC)	2015
ASHRAE 62.1	2016
NFPA 13	2019
NFPA 90A	2018
NFPA 90B	2018
NFPA 96	2017
NATIONAL ELECTRICAL CODE (NEC)	2023







-18x20

16x14



DEDICATED OUTSIDE AIR INDOOR AIR HANDLING UNIT SCHEDULE	
BASIS OF DESIGN COOLING COIL HOT GAS REHEAT COIL HEATING COIL ELECTRICAL E.S.P. TOTAL SENSIBLE FAT LAT CAPACITY TOTAL FLECTRIC ELECTRICAL	
MARK MANUFACTURER MODEL (IN WC) NOM. CFM (MBH) (DB/WB) (MBH) LAT (DB) (MBH) EAT (DB) HEATER (KW) MCA MOCP VOLTAGE PHASE HZ DOAS-1 AAON H3-ARB-8-0-461C-7BS 0.5 550 43.5 24.8 95/76 52/52 13.1 72 32.8 23 70 10.5 39.0 40 208 3 60	NOTES 1,2,3,4,5,6,7
1. FIELD ROUTE REFRIGERANT 3. MODULATING HOT GAS REHEAT 5. PROVIDE TEMPERATURE/ HUMIDITY 7. SEE DECON DOAS UNIT SEQUENCE PIPING TO DOHP-1 SENSOR OF OPERATIONS ON THIS SHEET	
4. HORIZONTAL UNIT WITH LEFT 2. MIN. MERV 8 FILTER HAND CONNECTIONS 6. FIELD ROUTE CONDENSATE DRAIN PIPING TO HUB DRAIN IN MEZZANINE	
DEDICATED OUTSIDE AIR OUTDOOR HEAT PUMP UNIT SCHEDULE	LOUVER SCHEDULE
BASIS OF DESIGN COUING TOTAL TOTAL TOTAL MIN.	BASIS OF DESIGN BOTTOM OF MIN. FREE LOUVER ELEV. (FT
MARK MANUFACTURER MODEL (MBH) (MBH) ISMRE MCA MOCP VOLTAGE PHASE HZ NOTES DOHP-1 AAON CFA-004-A-A-8-LJOOH 43.5 24.8 32.8 5.6 24.0 40 208 3 60 1,2,3	MARKMANUFACTURERMODELTYPENOM. CFMLOUVER SIZEAREA (SQFT)A.F.F.)NOTESEL-1GREENHECKESD-635XEXHAUST3,40040"x40"6.3718'-8"1,2,3,4,5EL-2GREENHECKESD-635XEXHAUST25040"x40"6.3714'-0"1.2.3.4
1. PROVIDE WITH 2. VARIABLE CAPACITY 3. SEE DECON DOAS UNIT SEQUENCE DISCONNECT SCROLL COMPRESSOR OF OPERATIONS ON THIS SHEET	EL-2 GREENHECK ESD-035X EXHAUST 230 40 x40 6.37 14-0 1,2,3,4 EL-3 GREENHECK ESD-635X EXHAUST 550 20"x16" 0.74 16'-1" 1,2,3,4,5 IL-1 GREENHECK ESD-635X INTAKE 3,400 40"x32" 4.78 4'-5" 1,2,3,4,6,7
	IL-2 GREENHECK ESD-635X INTAKE 250 40"x16" 1.60 8'-5" 1,2,3,4,5 IL-3 GREENHECK ESD-635X INTAKE 945 24"x20" 1.37 17'-11" 1,2,3,4
SPLIT SYSTEM AIR HANDLING UNIT SCHEDULE	IL-4 GREENHECK ESD-635X INTAKE 550 24"x20" 1.37 17'-11" 1,2,3,4 1. PROVIDE 3. FLANGED FRAME 5. PROVIDE BACKDRAFT 7. SEE EXHAUST FAN EF-1
BASIS // DESIGN E.S.P. ELS.P. ELECTRIC MARK MANUFACTURER MODEL (IN WC) NOM. CFM OA CFM ELECTRIC	BIRDSCREEN DAMPER DAMPER SEQUENCE OF OPERATION 4. PREFINISH WITH BAKED ON THIS SHEET 2. WELDED ON THIS SHEET
AHU-1 TRANE 5TEM6D06AV41 0.5 1,400 140 10.80 45.0 45 208 3 60 1,2,3,4 AHU-2 TRANE 5TEM6D06AV41 0.5 1,400 210 10.80 45.0 45 208 3 60 1,2,3,4 AHU-2 TRANE 5TEM6D06AV41 0.5 1,400 210 10.80 45.0 45 208 3 60 1,2,3,4 AHU-2 TRANE 5TEM6D06AV41 0.5 1,400 210 10.80 45.0 45.0 208 3 60 1,2,3,4	CONSTRUCTION CONSTRUCTION 6. PROVIDE MOTORIZED CONSTRUCTION DAMPER INTERLOCKED WITH EXHAUST FAN EF-1
AHU-3 I RANE 51 EM6D04AV31 0.5 1,000 195 5.77 40.0 40 208 1 60 1,2,3,4 AHU-4 TRANE 5TEM6D07AV51 0.5 1,600 100 10.80 45.0 45 208 3 60 1,2,3,4 AHU-5 TRANE 5TEM6B02AV21 0.5 600 90 3.60 25.0 208 1 60 1,2,3,4	
1. PROVIDE 2. MIN. MERV 3. FIELD ROUTE REFRIGERANT 4. FIELD ROUTE CONDENSATE THERMOSTAT 8. FILTER DIDING TO CORDESPONDING DRAIN DIDING TO HIR DRAIN	
OHP, U.N.O. IN MEZZANINE	
BASIS OF DESIGN COOLING CARACITY TOTAL HEATING REEPIC OD	
MARK MANUFACTURER MODEL TOTAL (MBH) SENSIBLE (MBH) (MBH) LIQUID SUCTION MIN. SEER MCA MOCP VOLTAGE PHASE HZ NOTES OHP-1 TRANE 5TWR4042A1 40.6 30.5 38.5 5/16 7/8 14.3 24.0 40 208 1 60	
OHP-2 TRANE 5TWR4042A1 40.6 30.5 38.5 5/16 7/8 14.3 24.0 40 208 1 60 OHP-3 TRANE 5TWR4030A1 29.0 22.7 25.6 5/16 3/4 14.3 16.0 25 208 1 60	
OHP-4 TRANE 5TWR4048A1 46.1 36.2 39.5 5/16 7/8 14.3 25.0 40 208 1 60 OHP-5 TRANE 5TWR4018A1 18.4 13.3 18.3 5/16 3/4 14.3 12.0 208 1 60	
DUCTLESS INDOOR HEAT PUMP SCHEDULE	
BASIS OF DESIGN COOLING TOTAL ELECTRICAL TOTAL SENSIBLE HEATING I I	
MARKMANUFACTURERMODELNOM. CFMOA CFM(MBH)(MBH)(MBH)MCAMOCPVOLTAGEPHASEHZNOTESIHP-6MITSUBISHIMSY-GX24NL765-22.317.4-1.0NOTE 22081601,2,3,4,5IHP-7MITSUBISHIMOTOURIUMMOTOURIUMMOTOURIUM14.014.014.014.014.014.014.0	
IHP-/ MITSUBISHI MSZ-GX15NL 585 - 14.0 11.5 15.5 1.0 NOTE 2 208 1 60 1,2,3,4,5,6 1. PROVIDE WALL MOUNTED, 3. PROVIDE FILTER 5. FIELD ROUTE CONDENSATE DRAIN	
WIRED CONTROLLER PIPING TO WALL DRAIN BOX 106 I.T. 4. FIELD ROUTE REFRIGERANT PIPING 2. INDOOR UNIT RECEIVES POWER TO CORRESPONDING OHP, U.N.O. 6. PROVIDE 208V MINI-CONDENSATE	
FROM OUTDOOR UNIT PUMP	
BASIS OF DESIGN TOTAL COOLING TOTAL HEATING REFRIG. O.D. ELECTRICAL	
MARKMANUFACTURERMODEL(MBH)(MBH)LIQUIDSUCTIONMIN. SEERMCAMOCPREC. FUSE SIZEVOLTAGEPHASEHZNOTESOHP-6MITSUBISHIMUY-GX24NL22.3-1/45/821.523.04025208160	
OHP-7 MITSUBISHI MUZ-GX15NL 14.0 15.5 1/4 1/2 22.0 16.0 28 20 208 1 60 1 1. INSTALL ON WALL BRACKET, ABOVE OHP-6. Image: March and the second secon	
INSTALL PER MANUFACTURER INSTRUCTIONS	DECON DOAS UNIT SEQUENCE OF OPERATIONS
	IMPLEMENT THE FOLLOWING AIR SYSTEM CONTROL STRATEGIES IN THE CONTROLLER FOR DOAS-1, DOHP-1, AND
EXHAUSI FAN SCHEDULE BASIS OF DESIGN FSP ELECTRICAL	EF-9. OCCUPIED MODE:
MARK MANUFACTURER MODEL TYPE (IN WC) NOM. CFM SONES FRPM MAX MOTOR POWER VOLTAGE PHASE HZ NOTES EF-1 GREENHECK AER-24-02-0320-VG SIDEWALL 0.125 3,400 8.5 800 1/2 HP 208 1 60 2,4,5,7,8,9	THE SPACE TEMPERATURE SHALL BE MAINTAINED AT 72°F (ADJUSTABLE) WITH A MAXIMUM RELATIVE HUMIDITY OF 50% (ADJUSTABLE) IN THE SUMMER AND 70°F (ADJUSTABLE) IN THE WINTER.
EF-2 GREENHECK AER-20-02-0605-VG SIDEWALL 0.125 250 5.0 500 1/4 HP 208 1 60 1,2,4,5,6 EF-3 GREENHECK SP-A90 CEILING 0.25 70 0.8 900 15 M 115 1 60 3,4	THE SUPPLY FAN SHALL RUN CONTINUOUSLY. THE COOLING/HEATING COIL, HOT GAS REHEAT COIL, AND ELECTRIC HEATER WILL CYCLE ON/OFF AS REQUIRED TO MAINTAIN SPACE TEMPERATURE AND HUMIDITY LEVEL.
EF-4 GREENHECK SP-A390-VG CEILING 0.25 120 2.7 912 15 W 115 1 60 3,4,6 EF-5 GREENHECK SP-A390-VG CEILING 0.25 120 2.7 912 15 W 115 1 60 3,4,6 EF-6 OPEENHECK SP A300 V/C OFH INC 0.25 100 0.7 0.40 115 1 60 3,4,6	EF-9 IS INTERLOCKED WITH THE SUPPLY FAN FOR DOAS-1 TO RUN CONTINUOUSLY.
EF-6 GREENHECK SP-A390-VG CEILING 0.25 120 2.7 912 15 W 115 1 60 3,4,6 EF-7 GREENHECK SP-A390-VG CEILING 0.25 120 2.7 912 15 W 115 1 60 3,4,6 EF-8 GREENHECK SP-A90 CEILING 0.25 75 0.8 900 15 W 115 1 60 3,4,6	UNOCCUPIED MODE: THE SPACE TEMPERATURE SHALL BE MAINTAINED AT 72°F (ADJUSTABLE) WITH A MAXIMUM RELATIVE HUMIDITY
EF-9 GREENHECK SQ-95-VG INLINE 0.0 550 8.4 1,636 1/6 HP 115 1 60 5,4 EF-9 GREENHECK SQ-95-VG INLINE 0.50 8.4 1,636 1/6 HP 115 1 60 5,7,9 EF-10 ATMOSPHERE VORTEX VTX600L INLINE 0.25 210 - 2,950 70 W 115 1 60 10	OF 50% (ADJUSTABLE) IN THE SUMMER AND 70°F (ADJUSTABLE) IN THE WINTER. THE SUPPLY FAN, COOLING/HEATING COIL, HOT GAS REHEAT COIL, AND ELECTRIC HEATER WILL CYCLE ON/OFF
1. CONTINUOUS 4. PROVIDE BACKDRAFT 7. EC MOTOR WITH H.O.A. CONTROLLER 9. SEE DECON DOAS UNIT SEQUENCE OPERATION DAMPER	AS REQUIRED TO MAINTAIN SPACE TEMPERATURE AND HUMIDITY LEVEL.
2. WALL HOUSING 5. PROVIDE DISCONNECT 8. CONTROLLED BY GAS DETECTOR (S&P 10. CONTROLLED BY PRESSURE	
SEE EXHAUST FAN EF-1 SEQUENCE OF SWITCH 3. INTERLOCK WITH 6. EC MOTOR WITH SPEED OPERATIONS ON THIS SHEET LIGHTS CONTROLLER	EYUALIST EAN EE 4 SEALIENCE OF ODEDATIONS.
	IMPLEMENT THE FOLLOWING AIR SYSTEM CONTROL STRATEGIES FOR EXHAUST FAN EF-1 USING AN HOA
	IMPLEMENT THE FOLLOWING AIR SYSTEM CONTROL STRATEGIES FOR EXHAUST FAN EF-1 USING AN HOA CONTROLLER. SEE IMC SECTION 404.1.

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UPON DETECTION OF CARBON MONOXIDE (25 PPM OR MORE) AND/OR NITROGEN DIOXIDE (2 PPM OR MORE) AT THE VENTILATION GAS DETECTOR, EF-1 SHALL TURN ON TO OPERATE AT AN AIRFLOW RATE OF 3,400 CFM AND THE MOTORIZED DAMPER INSTALLED IN INTAKE LOUVER IL-1 SHALL FULLY OPEN.

ONS

ONCE THE CARBON MONOXIDE EXPOSURE CONCENTRATION IS BELOW 25 PPM AND THE NITROGREN DIOXIDE EXPOSURE CONCENTRATION IS BELOW 2 PPM, EF-1 SHALL TURN OFF AND THE MOTORIZED DAMPER INSTALLED IN INTAKE LOUVER IL-1 SHALL FULLY CLOSE.



_	1	2	3	4	
		КІТС	HEN HOOD SCHEDULE		
F	BASIS OF DESIGN MARK MANUFACTURER MODEL	HOOD TYPE CFM LENGTH (IN.)	T HOOD S WIDTH (IN.) HEIGHT (IN.) CFM LENGTI	UPPLY PLENUM H (IN.) WIDTH (IN.) HEIGHT (IN.) C	MATERIAL OF CONSTRUCTION NOTES
	KH-1 GREENHECK GHEW 1. NFS LABEL 3. COMPLY WITH	TYPE I 550 48 5. 120V CFL LIGHTS 7.	42 36 440 60 PROVIDE WITH HOOD MOUNTED 9. FURNIS	H WITH WET CHEMICAL	430 SS 1,2,3,4,5,6,7,8,9
	NFPA 96 2. UL LABEL 4. HOOD MOUNTE	6. EXTERNAL SUPPLY	TEMPERATURE INTERLOCK FIRE SU ANSUL	IPPRESSION SYSTEM, R-102 OR EQUAL	
	UTILITY CABINE	ET	CONTROL CENTER		
_		KITCHEN EXHALIST			
	BASIS OF DESIGN				
	KEF-1 GREENHECK CUE-099-V	G ROOF 0.624 550 6.8	Implementation Impleme	BE HZ NOTES 60 1,2,3,4	
	1. INTERLOCK WITH 2. PROV KITCHEN HOOD, KH-1 DISC	VIDE 3. EC MOTOR W/SPEED ONNECT CONTROLLER	4. PROVIDE VENTED ROOF CURB		
Е					
	BASIS OF DESIGN		ELECTRICAL		
	MARK MANUFACTURER MODEL KSF-1 GREENHECK KSQ-9-M1-	TYPE E.S.P. NOM. CFM SONE -VG ROOF 0.26 440 5.5	FRPM MAX MOTOR POWER VOLTAGE PH/ 1,108 1/4 HP 208 7	ASE HZ NOTES 1 60 1,2,3,4,5,6,7	
	1. INTERLOCK WITH3. PROVKITCHEN HOOD, KH-1DISC	VIDE 5. ALUMINUM MESH CONNECT WEATHERHOOD	7. PROVIDE ROOF CURB		
	2. DOWNFLOW 4. PROV CONFIGURATION DAME	VIDE BACKDRAFT 6. EC MOTOR W/SPE PER CONTROLLER	ED		
	_				
		HIGH VOLUME LOW SPEE	D FAN SCHEDULE		
	BASIS OF DESIGN MARK MANUFACTURER MODEL	FAN DIA. FAN WEIGHT FAN SPEED - (FT) (LB) RPM E 01 V 12/2 115 126	FAN ELECTRICAL LEVATION MOTOR POWER VOLTAGE PHASE 27' 4" 2/4 HP 208 2	HZ NOTES	
	I. PROVIDE 2. PROVIDE MOUNTING KIT DISCONNEG	3. PROVIDE DIGITAL	27 -4 3/4 FIF 200 3	00 1,2,5	
D) MOUNTING KIT DISCONNED	ST CONTROLLER			
	ELECTRIC	INFRARED RADIANT HE	TER SCHEDULE		
	BASIS OF DESIGN	HEATING CAPACITY CAPACITY ELEVAT	ION		
	MARK MANUFACTURER MOD RH-1 QMARK BRM13	EL (KW) (MBH) (FT A.F 3583 13.5 46.1 27'-0 46.1 27'-0 27'-0	F.) VOLTAGE PHASE HZ NOTES " 208 1 60 1,2		
	RH-2QMARKBRM13RH-3QMARKBRM13RH-4QMARKBRM13	3583 13.5 46.1 27-0 3583 13.5 46.1 27'-0 3583 13.5 46.1 27'-0 3583 13.5 46.1 27'-0	208 1 60 1,2 "208 1 60 1,2 "208 1 60 1,2 "208 1 60 1,2	_	
	1. PROVIDE 2. PROVIDE PO THERMOSTAT DISCONNEC	DWER DT SWITCH			
		WALL HEATER SCHEI	DULE		
	BASIS OF DESIGN MARK MANUFACTURER MODE WH-1 OMARK CWH1208	HEATING L KW BTU/HR AMPS RDSE 2.0 6.826 9.6	ELECTRICAL VOLTAGE PHASE HZ N 208 1 60 1	OTES	
С	1. SURFACE MOUNTING 2. DIS	CONNECT SWITCH 3. INTERNAL THER!	/OSTAT	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
		AIR DIST	RIBUTION DEVICE SCHEDUI	E	
	SIZE (INCHES)MARKFACENECK	MOUNTING CEILING DUCT SIDEWALL T	HROW STEEL ALUMINUM 1	EVICE CONNECTION 2 3 MANUE	BASIS OF DESIGN ACTURER MODEL NOTES
	EG-1 12x12 6x6 EG-2 24x24 6x6		- X - X		TUS PAR 1,3 ITUS PAR 1,3 ITUS PAR 1,3
	RG-1 24x24 6x6 RG-2 24x24 8x8		- X - X		TUSPAR1ITUSPAR1
	RG-3 24x24 10x10 RG-4 24x24 12x12	X	- X - X	X TI X TI	TUSPAR1ITUSPAR1TUSPAR1
	RG-5 24x24 22x22 SD-1 12x12 6"Ø SD-2 12x12 6"Ø		- X X 4 X X 4 X X		TUS PAR 4 ITUS TMS 1,2,3 ITUS TMS 1.2
Б	SD-3 24x24 6"Ø SD-4 24x24 6"Ø	X	4 X X 4 X X	TI TI	TUS TMS 1,2,3 ITUS TMS 1,2
D	SD-5 24x24 8"Ø SD-6 24x24 10"Ø SD-7 12x8 12x8		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		TUS TMS 1,2 ITUS TMS 1,2 ITUS TMS 1,2
	TG-1 12x12 6"Ø LEGEND 1		- X X		TUS PAR 1
	1. SYMBOL KEY - FIRST LETTER: S-SUPPLY,	R-RETURN, E-EXHAUST, T-TRANSFER AND D-DOOI	٩.		
	2. CONNECTIONS - 1. ROUND DUCT TO ROUND	D NECK.			
	(DEVICE CONN. 2. ROUND DUCT TO RECTA COLUMN) 3. RECTANGULAR DUCT TO	ANGULAR NECK. O RECTANGULAR NECK.			
	3. FIELD PAINT ALL SUPPLIES AND RETURNS 1 4. 1, 2, 3 AND 4-WAY AND DOUBLE DEFLECTION	TO MATCH CEILING AND/OR WHITE FINISH OTHERV	VISE. OLUMN. 0°, 22.5°, AND 45° REPRESENT BLADE DEFLEC	ΓΙΟΝ ANGLES.	
	1. DUCT RUNOUT SIZE SAME AS NECK CONNECTION SIZE UN O	2. PROVIDE R-6 FOIL 3. OPPOSE BACKED INSULATION DAMPER	D BLADE 4. SEE DETAIL 5. BOTT 7/M-301 10'-10	FOM OF GRILLE D" A.F.F.	
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<u>GEN</u>

<u>CON</u>

<u>GENERAL</u> THESE GENERAL NOTES PRESENT AND/OR SUMMARIZE KEY PRODUCT INFORMATION FOR THE PLAN READER'S CONVENIENCE. SEE PLANS AND SPECIFICATIONS FOR FURTHER REQUIREMENTS.	<u>GROUNDING</u> GROUNDING AND BONDING COMPONENTS SHALL COMPLY WITH UL 467. AN INSULATED EQUIPMENT- GROUNDING CONDUCTOR SHALL BE INSTALLED WITH CIRCUIT CONDUCTORS FOR ALL FEEDER AND	\bigotimes
WORK COVERED BY THIS DOCUMENT SHALL INCLUDE ALL LABOR, MATERIAL, PRODUCTS, AND SERVICES FOR, AND INCIDENTAL TO, INSTALLATION OF COMPLETE AND OPERATING ELECTRICAL SYSTEMS DRAWN OR SPECIFIED.	BRANCH CIRCUITS. EXOTHERMIC-WELDED CONNECTIONS SHALL BE USED FOR ATTACHMENT TO STRUCTURAL STEEL AND UNDERGROUND CONNECTIONS. GROUNDING ELECTRODES SHALL BE 3/4" x 10' COPPERWELD TYPE.	
ALL WORK SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES INCLUDING, BUT NOT LIMITED TO, THE NATIONAL ELECTRICAL CODE (NFPA 70). ALL MATERIALS SHALL BE NEW AND UL LISTED/LABELED AS APPROPRIATE. FINAL LOCATIONS FOR ROUGH-INS SHALL BE VERIFIED WITH ACTUAL EQUIPMENT BEING CONNECTED. AFTER COMPLETING INSTALLATION, REMOVE BURRS, DIRT, AND CONSTRUCTION DEBRIS FROM ALL FLECTRICAL WORK	SERVICE GROUNDING INSTALL TWO (2) GROUND RODS FOR SERVICE ENTRANCE UNLESS INSTALLED PRIMARY GROUND ROD IS TESTED AND FOUND TO HAVE A RESISTANCE TO GROUND OF 25 OHMS OR LESS IN ACCORDANCE WITH NFPA 70 250.53(2). FOUIPMENT GROUNDING	○ ④
COORDINATE OUTLET LOCATIONS WITH ARCHITECTURAL PLANS, ELEVATIONS AND DETAILS.	FOR INDICATED EQUIPMENT (OTHER THAN SERVICE ENTRANCE EQUIPMENT) INSTALL ONE (1) GROUND ROD TO ACT AS AN AUXILIARY GROUNDING ELECTRODE AND BOND TO THE EQUIPMENT GROUNDING	\bigcirc
COORDINATE HVAC AND PLUMBING EQUIPMENT LOCATIONS WITH MECHANICAL PLANS, ELEVATIONS AND DETAILS.	CONDUCTOR (EGC) FOR THAT EQUIPMENT, IN ACCORDANCE WITH NEPA 70 250.54 AND 250.118.	
COORDINATE SITE LIGHTING AND SITE UTILITIES WITH LANDSCAPING/CIVIL PLANS AND DETAILS.	TRANSFORMERS TRANSFORMERS SHALL COMPLY WITH NEMA ST 20 AND UL 1561. ENCLOSURES SHALL BE INDOOR VENTILATED TYPE TRANSFORMERS SHALL HAVE AN INSULATION CLASS OF 220 DECREES C. THE RATED	۹ 🗖
CONTRACTOR TO COORDINATE SERVICE AND METERING INSTALLATION REQUIREMENTS, AIC RATING, AND PANEL SCCR WITH UTILITY COMPANY PRIOR TO BID AND INSTALLATION.	TEMPERATURE RISE SHALL BE 150 DEGREES C. MAXIMUM RISE OVER A 40 DEGREE C. AMBIENT.	S
COORDINATE SIGNAL SERVICE REQUIREMENTS WITH SERVING UTILITY.	<u>PANELBOARDS</u> PANELBOARDS SHALL COMPLY WITH NEMA PB 1. SHOP DRAWINGS FOR EACH PANELBOARD SHALL BE SUBMITTED AND SHALL INCLUDE BUS CONFIGURATION AND CURRENT RATINGS. OVERCURRENT DEVICE	°,
CONSULT MANUFACTURERS' SHOP DRAWINGS FOR REQUIREMENTS AND EXACT LOCATION OF ELECTRICAL CONNECTIONS FOR EQUIPMENT FURNISHED BY OTHERS. COORDINATE AND VERIFY MANUFACTURES RECOMMENDED BRANCH CIRCUIT WIRING AND CONDUIT SIZE FOR EQUIPMENT PRIOR TO ROUGH IN. IF MANUFACTURES RECOMMENDED BRANCH WIRING AND CONDUIT SIZE IS DIFFERENT FROM SPECIFIED.COORDINATE WITH ENGINEER OF RECORD.	ARRANGEMENT AND SETTINGS, AND PANELBOARD SHORT CIRCUIT RATING. PHASE AND NEUTRAL BUSSES SHALL BE COPPER. AN EQUIPMENT GROUND BUS SHALL BE PROVIDED AND SHALL BE BONDED TO THE PANEL BOX. PANELBOARDS WITH A MAIN SERVICE DISCONNECT SHALL BE LISTED FOR USE AS SERVICE EQUIPMENT. PANELBOARD TRIM SHALL BE BOLT-ON TYPE. CIRCUIT BREAKERS SHALL BE BOLT- ON TYPE. CIRCUIT BREAKERS SHALL BE LISTED FOR SWD. HID OR HACR USE AS APPROPRIATE. MULTI-	S _D S ₄
SIZE DISCONNECT SWITCHES AND OVERCURRENT PROTECTION IN ACCORDANCE WITH THE EQUIPMENT	POLE CIRCUIT BREAKERS SHALL HAVE A COMMON TRIP. TANDEM CIRCUIT BREAKERS SHALL NOT BE USED. FILLER PLATES SHALL BE INSTALLED IN UNUSED SPACES. A TYPED CIRCUIT DIRECTORY SHALL BE INSTALLED ON THE INSIDE OF THE DANEL BOARD DOOD. ALL OVERCHEDENT DEVICES AND DANELS SHALL	8
SIZE FUSES IN ACCORDANCE WITH THE EQUIPMENT MANUFACTURERS' RECOMMENDATIONS AND THE	BE RATED FOR THE FULL AVAILABLE FAULT CURRENT AS INDICATED ON PANEL SCHEDULE AND SHALL NOT BE SERIES RATED. IN FRONT OF ALL ELECTRICAL PANELS IN ELECTRICAL ROOMS PROVIDE A 2" WIDE	<u>S</u>
INSTALL JUNCTION BOXES, CONDUIT BODIES, AND HANDHOLE ENCLOSURES SUCH THAT WIRING WITHIN IS ACCESSIBLE IN ACCORDANCE WITH NEC 314 29	FUSES FUSES SHALL BE NEMA FULL CARTRIDGE TYPE, VOLTAGE RATING SHALL BE CONSISTENT WITH CIRCUIT	ŧ
MOUNTING HEIGHT DIMENSIONS FOR WIRING DEVICES ARE FROM THE FINISHED FLOOR UP TO THE CENTER OF THE OUTLET BOX	VOLTAGE. ARRANGE FUSES IN FUSIBLE DEVICES SO FUSE RATINGS ARE READABLE WITHOUT REMOVING FUSE. INSTALL TYPEWRITTEN LABELS ON INSIDE DOOR OF EACH FUSIBLE DEVICE TO INDICATE FUSE REPLACEMENT INFORMATION	ပ ြ
CENTER OUTLETS HORIZONTALLY IN ARCHITECTURAL FEATURES.	MOTOR FEEDER AND BRANCH CIRCUITS: UL CLASS RK5, TIME DELAY	°₽
DO NOT SCALE DRAWINGS. DEVICE LOCATIONS ARE APPROXIMATE UNLESS DIMENSIONED. ACTUAL	OTHER FEEDER AND BRANCH CIRCUITS: UL CLASS RK1, NON-TIME DELAY	⋛₽
INSTALL PHOTO CELL(S) ABOVE ROOF. ORIENT TO NORTHERN EXPOSURE AND SHIELD FROM EXTRANEOUS LIGHT. PROVIDE FLASHING AND SEAL ROOF PENETRATION(S).	SWITCHES SHALL BE FUSED OR NONFUSED NEMA KS 1 TYPE HD. SWITCHES SHALL BE HANDLE LOCKABLE AND INTERLOCKED WITH COVER IN CLOSED POSITION. ENCLOSURES SHALL BE NEMA TYPE 1 IN INDOOR LOCATIONS AND NEMA TYPE 3R IN OUTDOOR LOCATIONS. HVAC EQUIPMENT DISCONNECTS ARE TO BE	୰⊖⊨
INSTALL ADDITIONAL BRANCH-CIRCUIT CONDUCTORS TO PROVIDE UN-SWITCHED CONNECTION TO EACH	CONSIDERED ELECTRICAL EQUIPMENT AND SHALL BE INSTALLED TO MAINTAIN WORKING SPACE PER NEC ARTICLE 110.26.	
EMERGENCY FIXTURE BATTERY.	INTERIOR LIGHTING FIXTURE MOUNTING HARDWARE AND TRIM SHALL BE COORDINATED WITH THE CEILING SYSTEM	₩-
ALL CONDUCTORS SHALL BE NO SMALLER THAN #12.	RECESSED CEILING AREAS: RECESSED FIXTURES SHALL BE SUPPORTED FROM THE BUILDING	
ALL RACEWAYS SHALL BE 3/4" DIA. MIN. UNLESS OTHERWISE NOTED.	STRUCTURAL SYSTEM.	(#)
GENERAL CONTRACTOR TO PROVIDE ACCESS PANELS FOR ALL INACCESSIBLE, ABOVE-CEILING ELECTRICAL EQUIPMENT AND JUNCTION BOXES PER NEC SECTION 314.29. COORDINATE LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.	EXPOSED CEILING AREAS: CONDULT FOR LIGHTING FIXTURES INSTALLED IN AREAS WITH EXPOSED STRUCTURE SHALL BE ROUTED TIGHT TO STRUCTURAL BEAMS AND COLUMNS. WHERE APPROVED, CONDUIT AND JUNCTION BOXES MOUNTED TO ROOF DECK SHALL HAVE 1.5" SEPARATIONS FROM LOWEST PORTION OF DECK. COORDINATE ALL CONDUIT ROUTING WITH ARCHITECT BEFORE INSTALLATION.COLUMNS. WHERE APPROVED, CONDUIT AND JUNCTION BOXES MOUNTED TO ROOF DECK SHALL HAVE 1.5" SEPARATIONS FROM LOWEST PORTION OF DECK. COORDINATE ALL CONDUIT ROUTING	
CONDUCTORS INSULATION SHALL COMPLY WITH NEMA WC 5. CONDUCTORS #8 AWG AND LARGER SHALL BE	WITH ARCHITECT BEFORE INSTALLATION.	TB
TYPE AND INSULATION SERVICE: COPPER, TYPE THWN FEEDER: COPPER, TYPE THHN/THWN	<u>FIRE ALARM SYSTEM</u> SYSTEM COMPONENTS AND INSTALLATION SHALL CONFORM TO THE NATIONAL FIRE ALARM CODE. ALL EXPOSED WIRING SHALL BE INSTALLED IN METALLIC RACEWAY. ALL CONCEALED WIRING SHALL BE INSTALLED IN METALLIC RACEWAY STUBBED ABOVE ACCESSIBLE CEILING.	FACP
BRANCH: COPPER, TYPE THHN/THWN COPPER, TYPE MC FOR CONNECTIONS TO LIGHT FIXTURES ONLY IN LENGTHS NOT TO EXCEED 6FT. (UNLESS APPROVED BY ENGINEER OF RECORD)	<u>VOICE AND DATA SYSTEMS</u> SYSTEM COMPONENTS AND INSTALLATION SHALL CONFORM TO CITY OF AUGUSTA'S 2020 NEW BUILDING AND CABLING GUIDELINES, EIA/TIA 568-B AND 569-A. MAIN DISTRIBUTION FRAME, INTERMEDIATE DISTRIBUTION FRAME, AND CROSS-CONNECT RACKS SHALL BE	FAA
COLOR CODING (208/120 V, 3Ø): A-BLACK, B-RED, C-BLUE, N-WHITE, G-GREEN	WALL MOUNTED TYPE WITH "66" OR "110" STYLE TERMINALS. WORKSTATION JACKS SHALL BE TYPE RJ-45.	
RACEWAYS CONDUIT BODIES AND FITTINGS FOR RIGID METAL CONDUIT SHALL BE CAST THREADED TYPE. CONDUIT FITTINGS FOR ELECTRICAL METALLIC TUBING SHALL BE COMPRESSION TYPE. INSTALL 200 Ib NYLON PULL CORD IN ALL EMPTY RACEWAYS FOR FUTURE USE. APPLY FIRESTOPPING TO ELECTRICAL PENETRATIONS OF FIRE-RATED FLOOR AND WALL ASSEMBLIES TO RESTORE ORIGINAL FIRE-RESISTANCE RATING OF ASSEMBLY.	<u>TELEPHONE BOARD</u> TELEPHONE BOARD 48" X 96" X 3/4" SHEET OF FIRE TREATED PLYWOOD. PROVIDE BACKBOARD ON WALLS AS INDICATED ON PLANS. PROVIDE GROUNDING BAR BURNDY BBB14210A OR EQUIVALENT. BOND TO SERVICE ENTRANCE PANEL USING CU #6 AWG INSULATED WIRE.	X s
OUTDOORS EXPOSED: RIGID GALVANIZED STEEL CONFORMING TO ANSI C80.5 OUTDOORS UNDERGROUND: RIGID NONMETALLIC CONDUIT (SCHEDULE 40 PVC) CONFORMING TO NEMA TC 2 OUTDOORS CONNECTED TO VIBRATING OR MOTORIZED EQUIPMENT: LIQUIDTIGHT FLEXIBLE METAL	<u>TRANSFER SWITCH</u> SWITCH SHALL COMPLY WITH U.L. 1008-89. SWITCH SHALL BE SIZED TO MATCH THE GENERATOR. SWITCH SHALL HAVE A SOLID NEUTRAL, EXERCISER TIME CLOCK AND BATTERY CHARGER.	(H) FS
CONDUIT CONFORMING TO UL 360 INDOORS CONCEALED: ELECTRICAL METALLIC TUBING CONFORMING TO ANSI C80.3 INDOORS EXPOSED: RIGID GALVANIZED STEEL CONFORMING TO ANSI C80.5 INDOORS CONNECTED TO VIBRATING OR MOTORIZED EQUIPMENT: FLEXIBLE METALLIC CONDUIT CONFORMING TO UL 1	ENGINE GENERATOR THE EMERGENCY POWER SUPPLY SYSTEM SHALL BE LEVEL 2 IN ACCORDANCE WITH NFPA 110. ENGINE GENERATOR SHALL BE COMPLETE WITH WEATHERPROOF HOUSING, FUEL TANK, STARTING BATTERIES AND OUTPUT CIRCUIT BREAKER.	TS
OUTLET BOXES BOXES SHALL COMPLY WITH NEMA OS 1 AND SHALL BE SHEET METAL TYPE WITH PLASTER RING IN DRY LOCATIONS. BOXES SHALL COMPLY WITH NEMA FB 1 AND SHALL BE CAST METAL TYPE FD WITH GASKETED COVER IN DAMP OR WET LOCATIONS.	<u>KITCHEN EQUIPMENT</u> ALL KITCHEN EQUIPMENT SERVED BY CORD AND PLUG SHALL HAVE GROUND FAULT PROTECTION, IN ACCORDANCE NEC SECTION 210.8(B)(2). ALL ELECTRIC KITCHEN EQUIPMENT THAT PRODUCES HEAT SHALL BE PROVIDED WITH MEANS TO AUTOMATICALLY SHUTOFF POWER IN ACCORDANCE NFPA 96.10.4. ACCEPTABLE DISCONNECTING MEANS INCLUDE SHUT TRIP BREAKER, RELAY, OR SHUNTED DISCONNECT SWITCH.	
<u>PULL AND JUNCTION BOXES</u> BOXES SHALL BE HOT-DIPPED GALVANIZED STEEL. BOX COVERS SHALL BE GASKETED TYPE WITH SCREWED OR BOLTED FASTENERS.	LIGHTNING PROTECTION SYSTEM PROVIDE AND INSTALL COMPLETE LIGHTNING PROTECTION SYSTEM. SYSTEM	
WIRING DEVICES DEVICES SHALL COMPLY WITH NEMA WD 1 AND WD 6. DEVICES SHALL BE COMMERCIAL SPECIFICATION	ROUTED IN WALLS THROUGH PVC CONDUIT.	

<u>PULL</u> BOXE

<u>WIRII</u>

DEVI GRADE OR BETTER. ALL DEVICES SHALL BE OF THE GROUNDING TYPE. DEVICES SHALL BE MOUNTED FLUSH WITH THE LONG DIMENSION VERTICAL AND GROUNDING TERMINAL OF RECEPTACLES ON TOP. SWITCHES SHALL BE QUIET TYPE, RATED 20 AMPERES AT 120/277 VOLTS. GROUND FAULT CIRCUIT INTERRUPTERS SHALL BE FEED-THROUGH TYPE. WEATHERPROOF COVERS SHALL BE PROVIDED IN DAMP OR WET LOCATIONS. PROGRAM OCCUPANCY SENSORS FOR FIFTEEN MINUTES WITH MEDIUM SENSITIVITY. TRAIN OWNER TO ADJUST TIME AND SENSITIVITY.

DEVICE COLOR: SELECTED BY ARCHITECT. DEVICE COVER: SMOOTH PLASTIC WITH COLOR TO MATCH DEVICE COLOR

ELECTRICAL IDENTIFICATION

IN ADDITION TO CODE-REQUIRED LABELING, ALL PANELBOARDS, ELECTRICAL ENCLOSURES, TRANSFORMERS, AND DISCONNECT SWITCHES SHALL BE IDENTIFIED WITH AN ENGRAVED PLASTIC LAMINATED NAMEPLATE. LETTERING SHALL BE 1/2" INCHES HIGH AND SHALL BE WHITE ON A BLACK BACKGROUND. NAMEPLATES SHALL BE ATTACHED TO EQUIPMENT WITH STAINLESS STEEL SELF-TAPPING SCREWS. CONTRACTOR TO COORDINATE WITH THE UTILITY COMPANY TO DETERMINE THE AVAILABLE FAULT CURRENT AT THE PANEL LOCATION SHOWN ON THE DRAWINGS. CONTRACTOR TO PROVIDE ELECTRICAL EQUIPMENT WITH AIC RATING OVER THE CALCULATED FAULT CURRENT. CALCULATED FAULT CURRENT SHALL BE LISTED ON EACH PIECE OF ELECTRICAL EQUIPMENT. CONTRACTOR TO PROVIDE AND AFFIX ARC FLASH WARNING LABELS ON ALL ELECTRICAL SWITCHBOARDS, PANELBOARDS, MOTOR CONTROL CENTERS, LOAD CENTERS, DISCONNECTS AND ENCLOSED CIRCUIT BREAKERS PER NEC ARTICLE 110.16.

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APPLICABLE CODES AND STAN	DARDS
CODES AND STANDARDS	EDITION
INTERNATIONAL BUILDING CODE (IBC)	2018
NFPA 70 NATIONAL ELECTRICAL CODE (NEC)	2023
INTERNATIONAL ENERGY CONSERVATION CODE (IECC)	2015
NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE	2019
NFPA 780 INSTALLATION OF LIGHTNING PROTECTION SYSTEMS	2020

4

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2' x 4' FIXTURE

WALL SCONCE

DT-300 OR EQUAL.

UW-100 OR EQUAL.

ELECTRICAL PANEL









0124

7

SCALE: 1/8" = 1'-0"

8

A ICIO

AS NOTED

SCALE

24 FT

RAWING NO.

E-101









E-201

A

- PROVIDE ARC FAULT INTERRUPTING TYPE CIRCUIT PROTECTION FOR ALL

- INFRASTRUCTURE WILL BE APPROVED BY THE INFORMATION TECHNOLOGY
- DEVICES, LABELING, CONDUIT AND CERTIFICATIONS WILL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR AS PART OF THE OVERALL BUILDING COST
- 3. CONTRACTOR TO VERIFY LOCATION OF EXISTING UTILITIES PRIOR TO BID

LIGHTING PROTECTION PLAN CONSTRUCTION NOTES

- 2. DOWN CONDUCTORS SHALL BE ROUTED IN WALLS THROUGH PVC CONDUIT.

- 6. ALL MAIN CONDUCTORS SHALL MAINTAIN A HORIZONTAL OR DOWNWARD COURSING, AND ALL BENDS SHALL HAVE AT LEAST AN 8" RADIUS AND SHALL
- INSTANCE SHALL THEY BE LESS THAN 1'-0" BELOW FINISHED GRADE AND 2'-0" FROM FOUNDATION WALL. DRIVEN RODS SHALL PENETRATE THE EARTH AT
- HANDRAILS, LADDERS, HVAC UNITS, SKYLIGHTS, ETC. OR ANY LARGE METAL
- 9. METAL BODIES OF INDUCTANCE LOCATED WITHIN 6'-0" OF MAIN CONDUCTOR STANDARDS. THESE OBJECTS INCLUDE BUT ARE NOT LIMITED TO FASCIAS, SPOUTS, ETC. OR ANY METAL BODY AT OR BELOW THE MAIN ROOF LEVEL
- COMPONENT SHALL NOT BE INSTALLED DIRECTLY ON ALUMINUM SURFACES INSTALLED ON OR IN CONTACT WITH ALUMINUM ROOFING, ALUMINUM SIDING,





LIGHTING FIXTURE SCHEDULE										
TYPE MARK	MANUFACTURER	MODEL NUMBER	VOLTAGE	WATTAGE	LAMP TYPE	MOUNTING	DESCRIPTION			
А	LITHONIA	CLX L48 SEF FDL ND MVOLT GZ10 40K 80CRI EPNKO	120 V	32 VA	4000K LED	SURFACE	LED STRIP LIGHT WITH DECORATIVE END PLATES			
AE	LITHONIA	CLX L48 SEF FDL ND MVOLT GZ10 40K 80CRI EPNKO E10W	120 V	22 VA	4000K LED	RECESSED	LED STRIP LIGHT WITH DECORATIVE END PLATES, EMERGENCY BATTERY			
В	LITHONIA	STAKS 2X4 AL06 SWW7	120 V	27 VA	4000K LED	RECESSED	SELECTABLE 4000/5000/6000 LUMEN LEVEL AND SWITCHABLE COLOR TEMPERATURE			
BE	LITHONIA	STAKS 2X4 AL06 SWW7 ILB CP10A	120 V	27 VA	4000K LED	RECESSED	SELECTABLE 4000/5000/6000 LUMEN LEVEL AND SWITCHABLE COLOR TEMPERATURE WITH EMERGENC BATTERY			
С	LITHONIA	STAKS 2X2 AL06 SWW7	120 V	29 VA	4000K LED	RECESSED	SELECTABLE 3000/4000/5000 LUMEN LEVEL AND SWITCHABLE COLOR TEMPERATURE			
D	LITHONIA	STAKS 2X2 AL06 SWW7 ILB CP10A	120 V	21 VA	4000K LED	RECESSED	SELECTABLE 3000/4000/5000 LUMEN LEVEL AND SWITCHABLE COLOR TEMPERATURE WITH EMERGENC BATTERY			
DE	LITHONIA	LDN6 40/15 LO6BR	120 V	21 VA	4000K LED	RECESSED	6" LED DOWN LIGHT WITH BATTERY BACKUP			
E	LITHONIA	JCBL 30000LM ACCR 40K 80 CRI	120 V	200 VA	4000K LED	PENDANT	HIGH BAY LIGHT WITH 30000LM			
EE	LITHONIA	JCBL 30000LM ACCR 40K 80 CRI	120 V	200 VA	4000K LED	PENDANT	HIGH BAY LIGHT WITH 24000LM. PROVIDE EMERGENCY LIGHTING INVERTER.			
GE	LITHONIA	ARC2 LED P4 40K MVOLT	120 V	25 VA	4000K LED	WALL MOUNT	LED WALL MOUNTED LIGHT WITH BATTERY BACKUP			
Н	LITHONIA	LDN6CYL 40/20 LO6 AR 120 FCM	120 V	23 VA	4000K LED	CEILING MOUNT	CEILING MOUNTED CYLINDER LIGHT WITH AJUSTABE BASE FOR ANGLES			
HE	LITHONIA	LDN6CYL 40/20 LO6 AR 120 FCM NPP16D	120 V	23 VA	4000K LED	CEILING MOUNT	CEILING MOUNTED CYLINDER LIGHT WITH AJUSTABE BASE FOR ANGLES WITH BATTERY BACKUP			
J	LITHONIA	OLLWD LED P1 4000K MVOLT	120 V	9 VA	4000K LED	WALL MOUNT	WALL MOUNTED CYLINDER LIGHT			
К	BASELITE	SBHR20 E8 LED 75W 3K 120 LWTM	120 V	80 VA	3000K LED	WALL MOUNT	WALL MOUNTED LED OUTSIDE LIGHT			
L	LITHONIA	DSX2 LED P3 40K 80CRI T2M	208 V	222 VA	4000K LED	POLE MOUNT	PROVIDE CONCRETE BASE PER DETAIL 2 / ES100. PROVIDE 5" SQUARE STEEL POLE. 25FT MOUNTING HEIGHT.			
М	LITHONIA	DSXF2 LED 6 P2 40K 70CRI NSP MVOLT IS FINISH	208 V	80 VA	4000K LED	GROUND	FLAG POLE LIGHT. PROVIDE 18" STANCHION MOUNT AND CONCRETE BASE PER DETAIL 3 / ES100.			
MS	LITHONIA	DSXF2 LED 6 P2 40K 70CRI WFL MVOLT IS FINISH	208 V	80 VA	4000K LED	GROUND	SIGN LIGHT. PROVIDE 18" STANCHION MOUNT AND CONCRETE BASE PER DETAIL 3 / ES100.			
N	LITHONIA	LDN6 40/15 LO6BR	120 V	21 VA	4000K LED	RECESSED	6" LED DOWN LIGHT EXTERIOR			
NE	LITHONIA	LDN6 40/15 LO6BR	120 V	21 VA	4000K LED	RECESSED	6" LED DOWN LIGHT EXTERIOR WITH BATTERY BACKUP			
U	LITHONIA	UCES LED	120 V	10 VA	4000K LED	SURFACE	UNDERCABINET LIGHT			
Х	LITHONIA	LQM S W RG MVOLT	120 V	4 VA	LED	WALL MOUNT	LED EXIT SIGN WITH BATTERY BACKUP			

NUTES.

1. COORDINATE ALL FINISH OPTIONS WITH ARCHITECT.

	SPECIAL OUTLET SCHEDULE
ID	DESCRIPTION
1	CORD REEL
2	ELECTRIC HAND DRYER
3	LEGRAND RFB-4 SERIES FLOORBOX. PROVIDE TWO (2) DUPLEX AND TWO (2) DATA IN BOX.
4	FOOD DISPOSER
5	DISH WASHER
6	RANGE
7	KITCHEN HOOD LIGHTS AND CONTROLS
8	WASHER EXTRACTOR IN DECON
9	AIR COMPRESSOR
10	LEGRAND TWO GANG WALL BOX TVMW. INSTALL CAT 5 BACK TO IT ROOM. COORDINATE TV AND AV REQUIREMENTS WITH OWNER
11	PROVIDE JUNCTION BOX AND SG10B-115RG-LED BY TRILITE OR APPROVED EQUAL COORDINATE CONTROLS WITH DOOR INSTALLER
12	ICE MACHINE
13	PROVIDE NEMA L5-20R DUPLEX RECEPTACLE
14	DRYER
15	GLOVE AND BOOT DRYER
16	GEAR RACK DRYER
17	MINI CONDENSATE PUMP
18	GENERATOR CASE HEATER
19	GENERATOR BATTERY
20	EWH-1
21	PMP-1
22	ACCESS CONTROL (SEE DETAIL #4)

		MOTOR	SC
ID			DES
1A	BAY DOOR		
1B	BAY DOOR		
2	RH-1		
3	RH-2		
4	RH-3		
5	RH-4		
6	AHU-1		
7	AHU-2		
8	AHU-3		
9	AHU-4		
10	AHU-5		
12	IHP-7.1		
13	IHP-6		
14	OHP-1		
15	OHP-2		
16	OHP-3		
17	OHP-4		
18	OHP-5		
19	OHP-6		
20	OHP-7		
21	HVLS-1		
22	EF-1		
23	EF-1		
24	EF-3		
25	EF-4		
26	EF-5		
27	EF-6		
28	EF-7		
29	EF-8		
30	EF-9		
31	EF-10		
32	WH-1		
33	KEF-1		
34	KSF-1F		
35	DOPH-1		
36	DOAS-1		
37	IL-1		

SPECIAL OUTLET SCHEDULE NOTES:

1

PROVIDE LOCAL DISCONNECTING FOR DEVICES WITHOUT RECEPTACLE. COORDINATE WITH MOCP.

2

PROVIDE DUPLEX RECEPTACLE FOR POWER. PROVIDE JUNCTION BOX WITH BRUSH COVERPLATE AND 3/4" EMPTY CONDUIT FOR DATA.

MOTOR SCHEDULE NOTES:

3

PROVIDE LOCAL FUSIBLE DISCONNECTING MEANS FOR EACH MOTOR. COORDINATE WITH MOTOR MOCP.



BOND TO LIGHTNING PROTECTION SYSTEM	
STEEL COLUMN-	
EXOTHERMIC WELD CONNECTION. LOCATE WHERE ACCESSIBLE.	1-6" MIN.

STOP/GO LIGHT. COORDINATE WITH

OWNER FOR LOCATION AND MOUNTING HEIGHT.-SG10B-115RG-LED

TRILITE OR

APPROVED EQUAL

BY















E-401

8

A

				F	PAN	EL:		LP	1				
LOCATION	ELEC 126				MAI	N AMPS		1000	A		F	REC	EF
MOUNTING	SURFACE				V			120/208	Wye			ŀ	KIT
MAIN	MCB					PHASE	3	N	/IRE	4		L	IGH
FEED FROM	UTILITY					S.C.C.	SEE NO	TE 1.	35kA	MIN.			0
											Ľ	VA	PE
												A 	MF PH
/IN. WIRE/CONDUIT SIZE	Load Name	AMPS	Р	СКТ		A		В	C	;	СК	т	Р
2#12, #12G, 3/4"C	FACP *	20 A	1	1	1000 VA	2880 VA					2	2	2
3#8, #10g, 3/4"C	EXTRACTOR	40 A	3	3			1382 VA	2880 VA			4	,	
				5					1382 VA	2880 VA	6	;	2
				7	1382 VA	2880 VA					8	;	
2#10, #10G, 3/4"C	OHP-3	25 A	2	9			1920 VA	3000 VA			10	<u></u>	2
				11					1920 VA	3000 VA	12	2	
2#10, #10G, 3/4"C	OHP-5	20 A	2	13	1440 VA	2760 VA					14	4	2
				15			1440 VA	2760 VA			16	6	
2#10, #10G, 3/4"C	OHP-7	20 A	2	17					1920 VA	6750 VA	18	8	2
				19	1920 VA	6750 VA					20	5	
2#2, #6G, 1"C	RH-1	20 A	2	21			6750 VA	6750 VA			22	2	2
				23					6750 VA	6750 VA	24	4	
2#2, #6G, 1"C	RH-2	20 A	2	25	6750 VA	1656 VA					26	3	3
				27			6750 VA	1656 VA			28	8	
3#8, #10g, 3/4"C	DOHP-1	40 A	3	29					2880 VA	1656 VA	30	5	
				31	2880 VA						32	2	1
				33			2880 VA	0 VA			34	4	3
3#4, #8g, 1 1/4"C	ELECTRIC RANGE	60 A	3	35					5766 VA	0 VA	36	3	
				37	5766 VA	0 VA					38	3	
				39			5766 VA				40	з	1
	SHUNT		1	41							42	2	1
SEE RISER	PANEL LP2	100 A	3	43	8583 VA						44	4	1
				45			9544 VA				46	3	1
				47					10789 VA		48	3	1
SEE RISER	PANEL LP4	400 A	3	49	49583 VA	14276 VA					50	ว	3
				51			48237 VA	17284 VA			52	2	
				53					48136 VA	18198 VA	54	4	

<u>NOTE 1.</u>

CONTRACTOR TO COORDINATE SERVICE AND METERING INSTALLATION REQUIREMENTS, AIC RATING, AND PANEL SCCR WITH UTILITY COMPANY PRIOR TO BID AND INSTALLATION.

				F	PAN	EL:		LP	3				
LOCATION	ELEC 126				MAI	N AMPS		200 /	A		R	ECEF	2
MOUNTING	SURFACE				VC	DLTAGE		120/208	Wye			KIT	(
MAIN	MLO					PHASE	3	W	IRE	4		LIG	1
FEED FROM	PANEL LP1					S.C.C.	SEE NOT	E 1.	22kA	MIN.		0	
													-
												Pł	-
MIN. WIRE/CONDUIT	Load Nama		Р	СКТ		٨		5	-		СКТ		-
312E		20 4	P	1	1302 \/A	A 1200 \/A		5	L	,	2	1	4
2#12, #120, 3/4 0	RITCHENTANS	20 A	2	2	1392 VA	1200 VA	12021/4	1045 \/A			2		-
				5			1392 VA	1945 VA	4450 \/A	1045 \/A	4	2	Ē
3#0, #10G, 1 C	GEAR DRIER CADINEI	40 A	3	5	4152 \/A	71 \/A			4152 VA	1945 VA	0		-
				0	4152 VA	71 VA	4152 \/A	1206 \/A			0		-
				9			4152 VA	1290 VA	2400.1/4	000.1/4	10		-
3#10, 10G, 3/4 C	DRIER	30 A	2	11	2400.1/4	190 \/A			2400 VA	900 VA	12		Ē
				15	2400 VA	100 VA	1500 \/A	1500 \/A			14		Ē
2#12, #12G, 3/4 C		20 A	1	15			1500 VA	1500 VA	1500.1/4	1001 \/A	10		-
2#12, #12G, 3/4 C		20 A	1	17	2001/4	700 \/A			1500 VA	1001 VA	10		Г
2#12, #12G, 3/4 C		20 A	1	19	360 VA	720 VA	2001/4	400.1/4			20		Ē
2#12, #12G, 3/4 C		20 A		21			360 VA	180 VA	4440.1/4	4000.1/4	22		Г
2#12, #12G, 3/4 C		20 A		23	4500.1/4	0.)/4			1140 VA	1080 VA	24		Г
2#12, #12G, 3/4°C		20 A	1	25	1500 VA	0 VA	4500.1/4	4500.1/4			26		Г
2#12, #12G, 3/4"C		20 A	1	27			1500 VA	1500 VA			28		Г
2#12, #12G, 3/4"C	RECEPTACLES	20 A	1	29					1080 VA	1500 VA	30	1	F
2#12, #12G, 3/4"C	EXERCISE TV	20 A	1	31	360 VA	180 VA					32	1	-
2#10, #10G, 3/4"C	SITE LIGHTING	20 A	2	33			240 VA	498 VA			34	1	F
	-			35					0 VA	1500 VA	36	1	⊦
2#12, #12G, 3/4"C	RECEPTACLES	20 A	1	37	540 VA	1221 VA					38	2	⊦
	SPARE	20 A	1	39			0 VA	1221 VA			40		⊦
	SPARE	20 A	1	41					0 VA	0 VA	42	1	⊦
	SPARE	20 A	1	43	0 VA	0 VA					44	1	⊢
	SPARE	20 A	1	45			0 VA	0 VA			46	1	⊢
	SPARE	20 A	1	47					0 VA	0 VA	48	1	₽
	SPARE	20 A	1	49	0 VA	0 VA					50	1	+
	SPARE	20 A	1	51			0 VA	0 VA			52	1	Ļ
	SPARE	20 A	1	53					0 V A	0 VA	54	1	i

		Α	В	С		TOTAL	DEMAND		
ACLE	Ε					24900 VA	17450 VA		
	VA					0705 \/A	0705 \/A		
	VA				_	8765 VA	8765 VA		
	VA OF	110506 \/A	110000 \/A	440777 \/	/ ^	117900 VA	117900 VA		
	3E	110500 VA	110999 VA	1000 A	A	347202 VA	339032 VA		
SE		921 A	1002 A	1000 A	_				
					_				
MPS		Lo	ad Name			MIN. WIRE/ SIZ	CONDUIT E		
0 A			OHP-1			2#8, #10g	g, 3/4"C		
0 A			OHP-2			2#8, #10g	g, 3/4"C		
0 A			OHP-4			2#8, #10g	g, 3/4"C		
5 A	OHP-6					2#10, #10g, 3/4"C			
0 A			RH-3			2#2, #6G, 1"C			
0 A			RH-4			2#2, #6G, 1"C			
0 A			HVLS-1		3#12, #12G, 3/4"C				
			SHUNT						
0 A			SPARE						
		:	SPACE						
			SPACE						
	SPACE								
	SPACE								
		:	SPACE						
00 A	PANEL LP3					SEE R	ISER		

		Α	В	С	TOTAL	DEMAND		
ACLE					3600 VA	3600 VA		
HEN	VA				_			
ΓING	VA				240 VA	240 VA		
HER	VA				42343 VA	42343 VA		
	SE	14276 VA	17284 VA	18198 VA	49758 VA	49758 VA		
S PEF Ase	۲ ۲	119 A	148 A	156 A				
					MIN. WIRE	CONDUIT		
MPS		Lo	ad Name		SIZ	2E		
20 A	GE	NERATOR	BATTERY C	HARGER	2#12, #12	2G, 3/4"C		
30 A		AIR CO	OMPRESSO	R	2#10, #10	G, 3/4"C		
20 A			EF-10		2#12, #12	G, 3/4"C		
20 A		ICE	MACHINE		2#12, #12	G, 3/4"C		
20 A		GLOVE AN	ND BOOT DI	RYER	2#12, #12	G, 3/4"C		
20 A		REC	EPTACLES		2#12, #12G, 3/4"C			
20 A		ELECTRI	C HAND DR	YER	2#12, #12G, 3/4"C			
20 A		DISI	H WASHER		2#12, #12G, 3/4"C			
20 A		REC	EPTACLES		2#12, #12	G, 3/4"C		
20 A		REC	EPTACLES		2#12, #12G, 3/4"C			
20 A		REC	EPTACLES		2#12, #12G, 3/4"C			
20 A			SPARE					
20 A		ELECTRI	C HAND DR	YER	2#12, #12	G, 3/4"C		
20 A		ELECTRI	C HAND DR	YER	2#12, #12G, 3/4"C			
20 A		REC	EPTACLES		2#12. #12G. 3/4"C			
20 A		RAN			2#12 #12	PG 3/4"C		
20 A		FLECTRI		YFR	2#12 #12	PG 3/4"C		
20 A		SITE			2#10 #10	G 3/4"C		
					2/10, 110			
20 4			SPARE					
20 ^								
20 A								
20 A								
20 A								
20 A								
20 A			SPARE					
20 A			SPARE					

		F	EL:	LP2							А	В	С	TOTAL	DEMAND				
LOCATION	ELEC 126		MAI	N AMPS	100 A 120/208 Wye					CE	PTACLE	E			20040 VA	15020 VA			
MOUNTING	SURFACE		V							KIT		/A							
MAIN	MLO			PHASE	3	3 WIRE		4		LIGHTING		/A			4766 VA	4766 VA			
FEED FROM	PANEL LP1		S.C.C		SEE NOTE 1.		22kA	22ka Min.					0544344	40700.1/4	3300 VA	3300 VA			
									V			5E 8583 VA	9544 VA	10789 VA	28916 VA	23896 VA			
										PHASE				91 A					
MIN. WIRE/CONDUIT SIZE	Load Name	AMPS P		A	E	3	c	СКТ		AMPS	Load Name			MIN. WIRE/CONDUIT					
2#12, #12G, 3/4"C	LIGHTING	20 A 1 1	835 VA	985 VA					2	1	20 A	L	IGHTING		2#12, #12	2G, 3/4"C			
2#12, #12G, 3/4"C	LIGHTING	20 A 1 3			768 VA	775 VA			4	1	20 A	L	IGHTING		2#12, #12G, 3/4"C				
2#12, #12G, 3/4"C	LIGHTING	20 A 1 5					1029 VA	120 VA	6	2	20 A		EF-2		2#12, #12G, 3/4"C				
2#12, #12G, 3/4"C	LIGHTING	20 A 1 7	464 VA	120 VA					8										
2#12, #12G, 3/4"C	RECEPTACLES AFIC	20 A 1 9			720 VA	720 VA			10	1	20 A	RECE	PTACLES A	FCI	2#12, #12G, 3/4"C				
2#12, #12G, 3/4"C	RECEPTACLES AFIC	20 A 1 11					720 VA	1340 VA	12	1	20 A	RECE	PTACLES A	FCI	2#12, #12G, 3/4"C				
2#12, #12G, 3/4"C	RECEPTACLES	20 A 1 13	720 VA	720 VA					14	1	20 A	RECE	PTACLES A	FCI	2#12, #12G, 3/4"C				
2#12, #12G, 3/4"C	RECEPTACLES	20 A 1 15			180 VA	800 VA			16	1	20 A	١	WASHER		2#12, #12G, 3/4"C				
2#12, #12G, 3/4"C	RECEPTACLES	20 A 1 17					1080 VA	720 VA	18	1	20 A	REG	CEPTACLES	3	2#12, #12G, 3/4"C				
2#12, #12G, 3/4"C	RECEPTACLES AFCI	20 A 1 19	900 VA	540 VA					20	1	20 A	REG	CEPTACLES	3	2#12, #12G, 3/4"C				
2#12, #12G, 3/4"C	RECEPTACLES	20 A 1 21			900 VA	900 VA			22	1	20 A	REG	CEPTACLES	3	2#12, #12G, 3/4"C				
2#12, #12G, 3/4"C	EWC	20 A 1 23					800 VA	360 VA	24	1	20 A	REG	CEPTACLES	3	2#12, #12G, 3/4"C				
2#12, #12G, 3/4"C	RECEPTACLES	20 A 1 25	180 VA	180 VA					26	1	20 A	REG	CEPTACLES	3	2#12, #12G, 3/4"C				
2#12, #12G, 3/4"C	RECEPTACLES	20 A 1 27			180 VA	360 VA			28	1	20 A	REG	CEPTACLES	3	2#12, #12G, 3/4"C				
2#12, #12G, 3/4"C	RECEPTACLES	20 A 1 29					900 VA	180 VA	30	1	20 A	REG	CEPTACLES	3	2#12, #12G, 3/4"C				
2#12, #12G, 3/4"C	RECEPTACLES	20 A 1 31	180 VA	180 VA					32	1	20 A	REG	CEPTACLES	3	2#12, #12G, 3/4"C				
2#12, #12G, 3/4"C	RECEPTACLES	20 A 1 33			180 VA	720 VA			34	1	20 A	REG	CEPTACLES	3	2#12, #12G, 3/4"C				
2#12, #12G, 3/4"C	RECEPTACLES	20 A 1 35					180 VA	180 VA	36	1	20 A	REG	CEPTACLES	3	2#12, #12	2G, 3/4"C			
2#12, #12G, 3/4"C	RECEPTACLES	20 A 1 37	540 VA	720 VA					38	1	20 A	REG	CEPTACLES	3	2#12, #12	2G, 3/4"C			
2#12, #12G, 3/4"C	RECEPTACLES AFCI	20 A 1 39			720 VA	540 VA			40	1	20 A	REG	CEPTACLES	3	2#12, #12	2G, 3/4"C			
2#12, #12G, 3/4"C	RECEPTACLES AFCI	20 A 1 41					720 VA	720 VA	42	1	20 A	RECE	PTACLES A	FCI	2#12, #12	2G, 3/4"C			
2#12, #12G, 3/4"C	RECEPTACLES	20 A 1 43	180 VA	720 VA					44	1	20 A	FLOOF	R OUTLET E	OX	2#12, #12	2G, 3/4"C			
2#12, #12G, 3/4"C	RECEPTACLES	20 A 1 45			180 VA	720 VA			46	1	20 A	FLOOF	R OUTLET E	OX	2#12, #12	2G, 3/4"C			
2#12, #12G, 3/4"C	GENERATOR CASE HEATER	20 A 1 47					1500 VA	240 VA	48	2	20 A		EF-1		2#12, #12	2G, 3/4"C			
2#12, #12G, 3/4"C	RECEPTACLES	20 A 1 49	180 VA	240 VA					50										
2#12, #12G, 3/4"C	RECEPTACLES	20 A 1 51			180 VA	0 VA			52	1	20 A		SPARE						
	SPARE	20 A 1 53					0 VA	0 VA	54	1	20 A		SPARE						
REMARKS:																			

				F	PAN	EL:	LP4							۸	D	C	TOTAL		
	MEZZANINE 201						400 A 120/208 Wye					-CF					1260 VA		
MOUNTING	SURFACE													/A			1200 VA	1200 VA	
MAIN	MCB	PHASE			PHASE	3 W		VIRE	<u> </u>		LIC	SHTING V	/A			3760 VA	3760 VA		
FEED FROM	PANEL LP1					S.C.C.	SEE NO	TE 1.	22kA	MIN.		(OTHER V	/A			50868 VA	50868 VA	
											V	A P	ER PHAS	SE 49583 VA	48237 VA	48136 VA	145955 VA	A 145955 VA	
												٨N	IPS PER	413 A	402 A	401 A			
												F	PHASE						
MIN. WIRE/CONDUIT SIZE	Load Name	AMPS	Р	СКТ	-	АВ		В	С		CKT P AMPS		Load Name			MIN. WIRE/CONDUIT			
2#12, #12G, 3/4"C	MEZZANINE RECEPTACLES	20 A	1	1	1548 VA	419 VA					2 1 20 A			MEZZANINE LIGHTING			2#12, #12G, 3/4"C		
3#4, #4G, 1/4"C	AHU-1	45 A	3	3			5400 VA	5400 VA					45 A	AHU-2					
				5					5400 VA	5400 VA	6					, , , ,			
				7	5400 VA	5400 VA					8								
2#8. #10g. 3/4"C	AHU-3	40 A	2	9			4800 VA	5400 VA			10	3	45 A		AHU-4				
				11					4800 VA	5400 VA	12							-	
2#10, #10G, 3/4"C	AHU-5	25 A	2	13	3000 VA	5400 VA					14								
				15			3000 VA	13500 VA			16	3	140 A		EWH-1		3#1/0, #6G, 2"C		
3#8. #10g. 3/4"C	DOAS-1	40 A	3	17					4680 VA	13500 VA	18						-		
				19	4680 VA	13500 VA					20								
				21			4680 VA	125 VA			22	1	20 A	LIGHT	ING EXTER	IOR	2#12, #12	2G, 3/4"C	
3#10, #10g, 3/4"C	BAY DOORS	20 A	3	23					1656 VA	1000 VA	24	2	20 A		WH-1		2#12, #12G, 3/4"C		
				25	1656 VA	1000 VA					26						-	-	
				27			1656 VA	1500 VA			28	1	20 A	В	AY DOOR		2#12, #12G, 3/4"C		
2#12, #12G, 3/4"C	BAY DOOR	20 A	1	29					1500 VA	120 VA	30	1	20 A		EF-9		2#12, #12G, 3/4"C		
2#12, #12G, 3/4"C	BAY DOOR	20 A	1	31	1500 VA	800 VA					32	1	20 A	BA	Y LIGHTING	i	2#12, #12	2G, 3/4"C	
	SPARE	20 A	1	33			0 VA	800 VA			34	1	20 A	BA	Y LIGHTING	i	2#12, #12	2G, 3/4"C	
2#12, #12G, 3/4"C	CORD REEL GFCI	20 A	1	35					1440 VA	1440 VA	36	1	20 A	CORD REEL GFCI			2#12, #12G, 3/4"C		
2#12, #12G, 3/4"C	CORD REEL GFCI	20 A	1	37	1440 VA	1440 VA					38	1	20 A	COR	D REEL GF	CI	2#12, #12G, 3/4"C		
2#12, #12G, 3/4"C	OHD LIGHT	20 A	1	39			360 VA	816 VA			40	1	20 A	BA	Y LIGHTING	i	2#12, #12	2G, 3/4"C	
2#12, #12G, 3/4"C	CORD REEL GFCI	20 A	1	41					1440 VA	360 VA	42	1	20 A	0	HD LIGHT		2#12, #12G, 3/4"C		
2#12, #12G, 3/4"C	CORD REEL GFCI	20 A	1	43	1440 VA	960 VA					44	1	20 A	REG	CEPTACLES	3	2#12, #12	2G, 3/4"C	
2#12, #12G, 3/4"C	BAY LIGHTING	20 A	1	45			800 VA	0 VA			46	1	20 A		SPARE				
	SPARE	20 A	1	47					0 VA	0 VA	48	1	20 A		SPARE				
	SPARE	20 A	1	49	0 VA	0 VA					50	1	20 A		SPARE				
	SPARE	20 A	1	51			0 VA	0 VA			52	1	20 A		SPARE				
	SPARE	20 A	1	53					0 VA	0 VA	54	1	20 A		SPARE				

