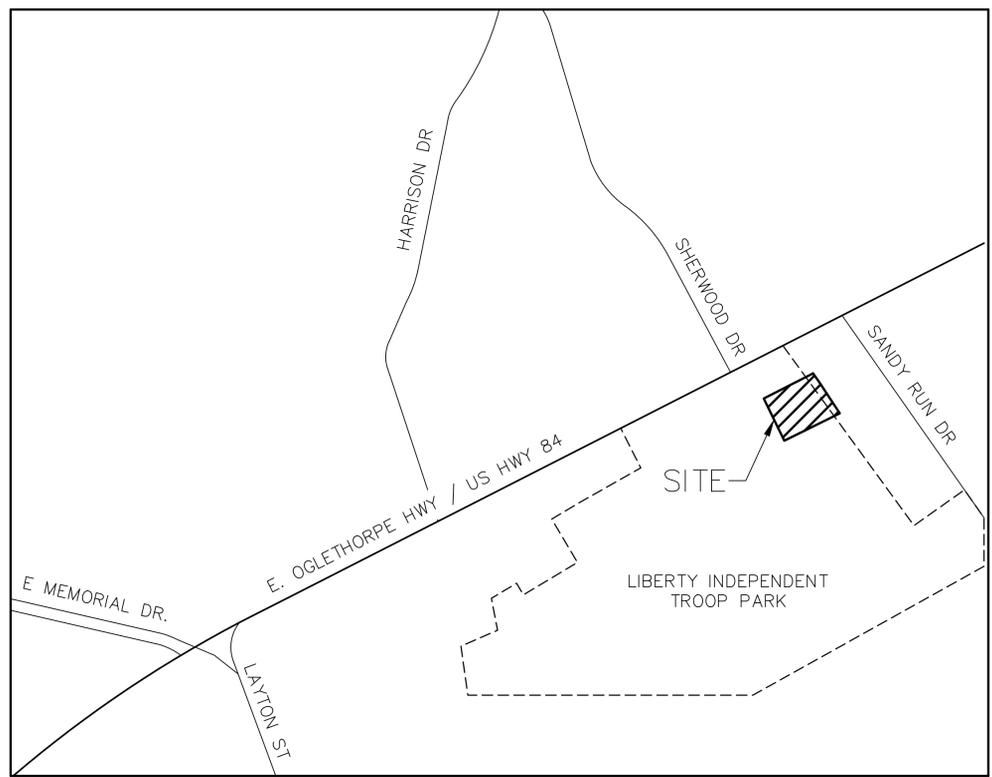


# SITE DEVELOPMENT PLAN PICKLEBALL COURTS LIBERTY INDEPENDENT TROOP PARK HINESVILLE, GEORGIA

**OWNER**  
LIBERTY COUNTY  
112 N MAIN STREET  
HINESVILLE, GEORGIA 31313  
(912) 876-2164

**24-HOUR CONTACT**  
TRENT R. LONG  
(912)-610-1294  
TRLONG@TRLONGENG.COM

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C3.1	STAKING PLAN
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C5.1	UTILITY PLAN
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C8.3	SITE DETAILS
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E1.1	SITE LIGHTING PLAN



VICINITY MAP N.T.S.

LOCATION: N31° 50' 58.87", W81° 35' 01.89"  
(N31.849686, W-81.583858)  
DISTURBED ACREAGE: 0.80 AC.  
TOTAL SITE ACREAGE: 35.00 AC.

DRAWING LEGEND		
DESCRIPTION	PROPOSED	EXISTING
RIGHT OF WAY	— R/W	— R/W
EDGE OF PAVEMENT	—	—
DITCH CENTERLINE	—	—
SANITARY SEWER	— 8" S	—
WATER LINE	— 10" W	— 10" W
FORCE MAIN	— FM	— FM
UNDERGROUND GAS LINE	— 8" G	— 8" G
CONTOURS	— 81	— 81
STORM DRAINAGE PIPE	—	—
ELEVATION	⊕ FG: 78.15	X 81.90
SILT FENCE NON-SENSITIVE	⊕ S1-N	
SILT FENCE SENSITIVE	⊕ S1-S	
INLET PROTECTION	⊕ Sd1-P	
CHECK DAM - HAY BALE	⊕ Cd-Hb	
CHECK DAM - RIP RAP	⊕ Cd-Rp	
CONSTRUCTION EXIT	⊕ Co	
STORM OUTLET PROTECTION	⊕ S1	
SILT FENCE	—	
MULCHING	⊕ Ds1	
TEMPORARY GRASSING	⊕ Ds2	
PERMANENT GRASSING	⊕ Ds3	
FIRE HYDRANT	⊕	⊕
SEWER MANHOLE	⊕	⊕
WATER VALVE	⊕	⊕
DRAINAGE FLOW	⊕	⊕
WATER METER	⊕	⊕
BENCHMARK	⊕	⊕
WELL	⊕	⊕
GUY POLE	⊕	⊕
IRON PIN	⊕ I.P.S	⊕ I.P.F
TELEPHONE PEDESTAL	⊕	⊕
POWER POLE	⊕	⊕



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THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS CONTAINED WITHIN THIS SET OF DOCUMENTS AND SHALL REPORT ANY DISCREPANCIES TO T. R. LONG ENGINEERING, P.C. FOR IMMEDIATE RESOLUTION.



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(912) 368-5664

POOLER:  
1000 Towne Center Blvd  
Suite 304  
Pooler, Georgia 31322  
(912) 335-1046



SITE DEVELOPMENT PLAN  
PICKLEBALL COURTS  
LIBERTY INDEPENDENT TROOP PARK

TAX PARCEL 079A022 - CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA

SHEET NAME:  
COVER SHEET

REVISIONS:	
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INITIAL DATE: 05/31/2024  
DRAWN BY: FPGD  
CHECKED BY: TRL  
PROJECT #: 2024-40

SHEET NUMBER:  
**C1.1**

Drawing File: C:\ACTIVE PROJECTS\2024-40 - Liberty Independent Troop Park Pickleball Courts\DRAWINGS\DWG\2024-40.dwg  
Plotted Date: Jul 19, 2024 - 11:39am

Paving Notes

- All work shall comply with all applicable codes, regulations, and/or local standards imposed by local utility, city, county, and state. It is the contractor's responsibility that all the construction be in accordance with the City of Hinesville and GDOT standard details and specifications.
- Contractor shall comply with all pertinent provisions of the "Manual of Accident Prevention in Construction" issued by AGC of American Inc., and the safety and health regulations for construction issued by the U.S. Department of Labor.
- Contractor shall provide all necessary barricades, sufficient lights, signs and other traffic control methods as may be necessary for the protection and safety of the public and shall be provided and maintained throughout all construction adjacent to and within all roadways. Contractor shall submit traffic control plan to city for approval.
- The contractor shall take necessary measures to separate work areas from pedestrian traffic and to insure safe pedestrian passage at all times.
- All signs, pavement markings, and other traffic control devices shall conform to the Manual of Uniform Traffic Control Devices. A minimum clearance of two feet shall be maintained between the face of curb and any part of a traffic sign or light pole. Contractor shall coordinate installation of all signs, pavement markings, and other traffic control devices with other contractors on signs or light poles.
- Contractor shall saw-cut to provide smooth transitions at tie-ins to existing edges of pavement and at cold joints of recently paved asphalt.
- Joints or score marks are to be sharp and clean without showing edges of jointing tool.
- Contractor shall saw-cut tie-ins at existing curbs as necessary to ensure smooth transitions, contractor shall saw-cut and transition to meet existing pavement as necessary and as directed by inspector to insure positive drainage. (Typical at all intersections)
- Paving contractor shall install paper breakaway edges at cold joints or saw-cut as required to insure a straight, full-depth joint face immediately prior to installing abutting hot asphalt.
- All dimensions are to back of curb unless indicated otherwise.
- Contractor shall be responsible for cost of pavement replacement where utility lines are extended across existing asphalt.
- Asphalt surface course shall be laid with the direction of traffic in all drive lanes within parking fields.
- Base and asphalt thickness are minimum required. Refer to specifications for type of paving and base to be used.
- All concrete shall be Class A 4000 P.S.I. unless noted otherwise. Do not pour any concrete before forms are inspected and approved by the Inspector.
- All ramps constructed are not to exceed a slope of 1:12. All sidewalks shall not have a cross-slope greater than 1:50
- Concrete dumpster pads to be flush with pavement unless indicated otherwise.
- See Detail sheets for additional details on striping, signs, etc.

Inspection notes

- 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.
- 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.
- Certified personnel (provided by the primary permittee) shall inspect the following 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 (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): (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. 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 submitted.
- Certified personnel (provided by the primary permittee) shall inspected 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 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).
- 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.
- 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 project 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 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 the erosion, sedimentation and pollution control plan. The report shall be signed in accordance with part v.g.2. Of this permit

Site Grading Notes

- Dimensions on buildings are for grading purposes only and are not to be used to lay-out footings. Refer to Structural Drawings for foundation information.
- Grading contractor shall notify and cooperate with all utility companies or firms having facilities on or adjacent to the site before disturbing, altering, removing, relocating, adjusting or connecting to said facilities. Contractor shall pay all costs in connection with the alteration or relocation of the facilities. Contractors shall raise or lower tops of existing manholes to remain as required to match finished grades.
- Grading contractor shall cooperate and work with all other contractors performing work on this project to insure proper and timely completion of this project.
- The grading contractor shall use whatever measures are required to prevent silt and construction debris from flowing onto adjacent properties. Contractor shall comply with all local erosion, conservation, and siltation ordinances. Contractors shall remove all temporary erosion control structures upon completion of permanent drainage facilities and not before the establishment of a stand of grass sufficient to prevent erosion.
- For any work on the state or city right-of-way, the grading contractor shall:
  - Not store material, excess dirt, or equipment in the right-of-way. The pavement shall be kept free from any mud or excavation waste from trucks or other equipment. On completion of the work, all excess material shall be removed from the right-of-way.
  - Provide all necessary and adequate safety precautions such as signs, flags, light barricades, and flag-men as required by the local authorities and in accordance with solely responsible for and hold harmless the City, State, Architect, Engineer, and Owner from any claims for damage done to existing private property, public utilities, or to the traveling public.
  - Complete work to the satisfaction of the City Public Works Department and obtain a letter from the Department stating that the work is acceptable.
- Grading contractor shall take all available precautions to control dust. Contractor shall control dust by sprinkling, or by other methods as directed by Engineer and/or Owner's representative, at no additional cost to Owner.
- Site grading contractor shall terminate all storm drain pipes five feet maximum from building unless otherwise noted.
- Storm sewer lead-ins to building shall not be installed until building plans are completed and locations established on the architectural plans. Lead-ins may change 15' horizontally and 3' vertically prior to installation at no additional cost to the owner. Contractor shall request and receive written approval from prime contractor prior to installation of lead-ins. Contractor shall coordinate locations, size, and invert elevations of storm sewers with approved building plumbing plans.
- All excavating is unclassified and shall include all materials encountered.
- Before any machine work is done, contractor shall stake out and mark the items established by the site plan, control points shall be preserved at all times during the course of the project. Lack of proper working points and grade stakes may require satisfaction owner must approved staked items prior to construction.
- Temporary erosion control devices to be installed prior to beginning of grading. Contractor shall maintain all temporary erosion control devices and shall remove silt contractor at least once a week.
- Contractor to coordinate all work with other utility installations not covered in these plans, (Electric, Telephone, Gas, Cable, Etc.) and allow for their operations and construction to be performed.
- Cut and fill slopes are not to exceed 3:1 unless otherwise noted.
- In no case shall any paved areas be less than a slope of 1.0%. All accessible sidewalks and aisle slopes not to exceed 2% cross-slope.
- Contractor shall repair or replace in-kind any damage that occurs as result of his work.
- All linear footage for all utility pipes are approximate, actual installed quantities may vary.
- Grading contractor shall restore to grade and compaction all areas disturbed by building construction prior to base and paving operations commencing.
- Grading contractor shall maintain all weather construction access roads as required by general contractor.

Site Utility Notes

- The site utility plan is for sanitary sewer and water line construction only. Do not use for grading or storm sewer construction.
- All pipe lengths are horizontal distances and are approximate.
- All domestic water and sanitary sewer stubs to be terminated 5 feet outside of the building unless otherwise noted. The end of these service lines shall be tightly plugged or capped and marked until such time as connection is made inside building by plumbing contractor.
- Site utility contractor shall provide all the materials and appurtenances necessary for the complete installation of the utilities. All pipe and fittings shall be inspected by the Water Department Inspector prior to being covered. The inspector must also be present during pressure testing and disinfection of laterals and his signature of approval is required.
- All work shall comply with all applicable codes, regulations, and/or local standards imposed by local utility and City of Hinesville.
- The site utility contractor shall make arrangements with the local utility authorities for connection to the existing mains and pay all applicable fees.
- All water lines shall have a minimum cover of 36" above top of pipe.
- Contractor shall adjust location of proposed water lines as required to avoid conflicts with storm sewer or other utilities at no extra cost.
- Based on the current edition of the international plumbing code, cleanouts are required at a maximum spacing of 100 feet on utility lead-ins to building. Contractor to provide a cleanout within 5 feet of building and at all bends.
- The site utility contractor shall cooperate and work with all other contractors on the site.
- All materials shall be U.L. listed and approved by the local utility company unless directed otherwise by the Engineer.
- The existing utility facilities and locations shown on the drawings are taken from readily available information. The actual locations of the utility facilities may vary somewhat from the locations shown or indicated on the drawings. The site utility contractor shall contact all agencies with utility facilities in the vicinity of the work and shall locate all underground facilities before beginning work. The contractor shall project all utility facilities and repair any damages resulting from their work, in conformance with the contract documents and specifications and relocate if required.
- All sanitary sewer pipe shall be SDR-26 meeting ASTM D3034 with gasket type joints meeting ASTM F477.
- Utility lead-ins to building shall not be installed until building plans are completed and locations established on the architectural plumbing plans. Lead-ins may change 15' horizontally and 3' vertically prior to installations at no additional cost to the owner. Utility contractor shall request and receive written approval from prime contractor prior to installation of lead-ins. Location, size and invert elevations of sanitary sewer shall be coordinated with the approved plumbing plans for the building.
- Building plumbing contractor shall pay all cost for water meters, meter boxes, valves, etc. to provide a complete job per local authority requirements.
- Thrust blocks shall be provided at all tees, elbows, and bends of sufficient size to comply with minimum standards of N.F.P.A. - Existing soil conditions.
- Should latent soil conditions necessitate, contractor shall install special supports for piping and/or appurtenances including the removal of unsuitable material and backfilling with gravel or other material. Contractor shall perform any such work as directed by the civil engineer and/or soils engineer at no cost to owner.
- Contractor to coordinate all work with other utility installations not covered in these plans (Electric, Telephone, Gas, Cable, etc.) and allow for their operations and construction to be prepared.
- The site utility contractor shall coordinate and pay for all sanitary sewer connections. Sanitary sewer connection final tie-in to the existing manhole(s) shall not be made until completion of the proposed system and all manholes have been brought above ground to insure sediment does not enter system. Lines shall be properly cleaned, if needed.
- Site utility contractor to coordinate with irrigation contractor to provide power in conduit to irrigation controller per manufacturers recommendations. Verify exact location of controller with owner prior to installation.



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 POOLER: 1000 Towne Center Blvd Suite 304 Pooler, Georgia 31322 (912) 335-1046



SITE DEVELOPMENT PLAN  
 PICKLEBALL COURTS  
 LIBERTY INDEPENDENT TROOP PARK

SHEET NAME:  
 GENERAL NOTES

REVISIONS:
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INITIAL DATE: 05/31/2024  
 DRAWN BY: FHGD  
 CHECKED BY: TRL  
 PROJECT #: 2024-40

SHEET NUMBER:  
**C1.2**

GEORGIA811.COM DIAL 811  
 GSWC# 0000002134  
 www.trlongeng.com  
 TAX PARCEL 070A02 - CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA



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Suite 304  
Pooler, Georgia 31322  
(912) 335-1046



SITE DEVELOPMENT PLAN  
PICKLEBALL COURTS  
LIBERTY INDEPENDENT TROOP PARK

SHEET NAME:  
DEMOLITION PLAN

REVISIONS:

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INITIAL DATE: 05/31/2024  
DRAWN BY: FPGD  
CHECKED BY: TRL  
PROJECT #: 2024-40

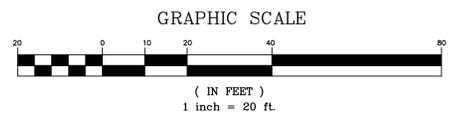
SHEET NUMBER:  
**C2.1**

N/F LIBERTY COUNTY INDEPENDENT TROOP CORP  
PARCEL # 070A022

N/F IRIS ASSOCIATES, LP  
PARCEL # 070A023

N/F UNION GL PARK, LLC  
PARCEL # 070A024

N/F LIBERTY COUNTY INDEPENDENT TROOP CORP  
PARCEL # 070A022



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Plotted Date: Jul 19, 2024 - 11:39am





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Plotted Date: Jul 19, 2024 - 11:39am

N/F LIBERTY COUNTY INDEPENDENT TROOP CORP  
PARCEL # 070A022

N/F IRIS ASSOCIATES, LP  
PARCEL # 070A023

N/F UNION GL PARK, LLC  
PARCEL # 070A024

N/F LIBERTY COUNTY INDEPENDENT TROOP CORP  
PARCEL # 070A022



**PROJECT DESCRIPTION & GENERAL NOTES:**  
 PROJECT NAME: PICKLEBALL COURTS  
 LIBERTY INDEPENDENT TROOP PARK  
 OWNER/DEVELOPER: LIBERTY COUNTY  
 112 N MAIN STREET  
 HINESVILLE, GEORGIA 31313

**BUILDING PROPERTIES / SITE DATA:**  
 TOTAL SITE ACREAGE: 35.00 ACRES  
 DISTURBED AREA: 0.80 ACRES  
 ZONING: R-20  
 CONSTRUCTION TYPE: PICKLEBALL COURT

**TOPOGRAPHY:**  
 TOPOGRAPHIC CONTOURS AREA SHOWN AT ONE FOOT INTERVALS.

**WETLANDS:**  
 BASED ON A REVIEW OF THE NATIONAL WETLANDS INVENTORY MAP AND A SITE VISIT. THERE ARE NO WETLANDS LOCATED ON THIS SITE OR WITHIN 200' OF THIS SITE.

**FLOODPLAIN:**  
 BASED ON A REVIEW OF THE FLOOD INSURANCE RATE MAPS FOR LIBERTY COUNTY (MAP PANEL 13179C0227F) THIS PROPERTY IS A FLOOD ZONE "X".



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Suite 304  
Pooler, Georgia 31322  
(912) 335-1046



**SITE DEVELOPMENT PLAN  
PICKLEBALL COURTS  
LIBERTY INDEPENDENT TROOP PARK**

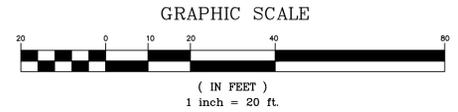
SHEET NAME:  
STAKING PLAN

REVISIONS:

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INITIAL DATE: 05/31/2024  
DRAWN BY: FPGD  
CHECKED BY: TRL  
PROJECT #: 2024-40

SHEET NUMBER:  
**C3.1**



GEORGIA 070A022  
TAX PARCEL 070A022 - CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA  
GSMCC# 0000002134



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SITE DEVELOPMENT PLAN  
PICKLEBALL COURTS  
LIBERTY INDEPENDENT TROOP PARK

SHEET NAME:  
GRADING &  
DRAINAGE PLAN

REVISIONS:

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INITIAL DATE: 05/31/2024  
DRAWN BY: FPGD  
CHECKED BY: TRL  
PROJECT #: 2024-40

SHEET NUMBER:  
**C4.1**



Drawing File: C:\ACTIVE PROJECTS\2024-40 H - Liberty Independent Troop Park Pickleball\00-DRAWINGS\DWG\2024-40.dwg  
Plotted Date: Jul 19, 2024 - 11:39am

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 Plotted Date: Jul 19, 2024 - 11:39am



CORNER  
 N: 673482.5211  
 E: 837178.1673

CORNER  
 N: 673375.3534  
 E: 837232.1587

CORNER  
 N: 673321.3620  
 E: 837124.9910

INSTALL 218 LF  
 8" PVC SEWER MAIN  
 @ 3.17% SLOPE

CONNECT TO EXISTING  
 WATER LINE  
 INSTALL 1" WATER METER  
 WITH BOX  
 1.5" WATER VALVE

INSTALL 10 LF  
 1.5" WATER LINE

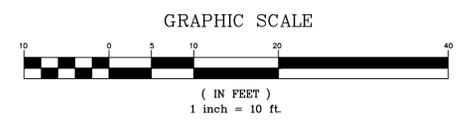
CORE AND  
 CONNECT TO  
 EX-BACKWASH  
 CONCRETE TANK  
 AT BOTTOM OF  
 TANK  
 INSTALL CLEAN  
 OUT

INSTALL 66 LF  
 8" PVC SEWER MAIN  
 @ 1.00% SLOPE

SMH-1  
 RIM = 33.75  
 INV IN = 33.75  
 INV OUT = 33.65

NOTE:  
 CONTRACTOR TO VERIFY SEWER MAIN  
 SIZE, MATERIAL, LOCATION AND DEPTH  
 PRIOR TO ORDERING MATERIALS FOR  
 SEWER DOGHOUSE

DOGHOUSE SMH-2  
 RIM 30.75  
 INSIDE DROP  
 INV IN = 26.75  
 INV OUT = 20.75



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 RESOLUTION.



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POOLER:  
 1000 Towne Center Blvd  
 Suite 304  
 Pooler, Georgia 31322  
 (812) 335-1046



SITE DEVELOPMENT PLAN  
 PICKLEBALL COURTS  
 LIBERTY INDEPENDENT TROOP PARK

TAX PARCEL 070A02 - CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA

SHEET NAME:  
 UTILITY PLAN

REVISIONS:

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INITIAL DATE: 05/31/2024  
 DRAWN BY: FPGD  
 CHECKED BY: TRL  
 PROJECT #: 2024-40

SHEET NUMBER:  
**C5.1**



PLANT SCHEDULE								
SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	CONTAINER	LQP	MATURE HEIGHT	REMARKS
<b>SHRUBS</b>								
	ILE BU3	32	Ilex cornuta 'Burfordii' / Burford Holly	3 GAL	CONTAINER	5.0	10'-15'	
	LOR RU2	21	Loropetalum chinense rubrum / Purpleleaf Fringe Flower	3 GAL	CONTAINER	5.0	4'-6'	
<b>GROUND COVERS</b>								
	ERE OPH	4,442	Eremochloa ophiuroides / Centipede Sod					



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114 North Commerce Street  
Hinesville, Georgia 31313  
(912) 368-5664

POOLER:  
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Suite 304  
Pooler, Georgia 31322  
(912) 335-1046



**SITE DEVELOPMENT PLAN**  
**PICKLEBALL COURTS**  
**LIBERTY INDEPENDENT TROOP PARK**

TAX PARCEL 070A02 - CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA

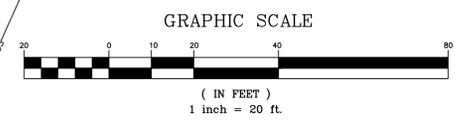
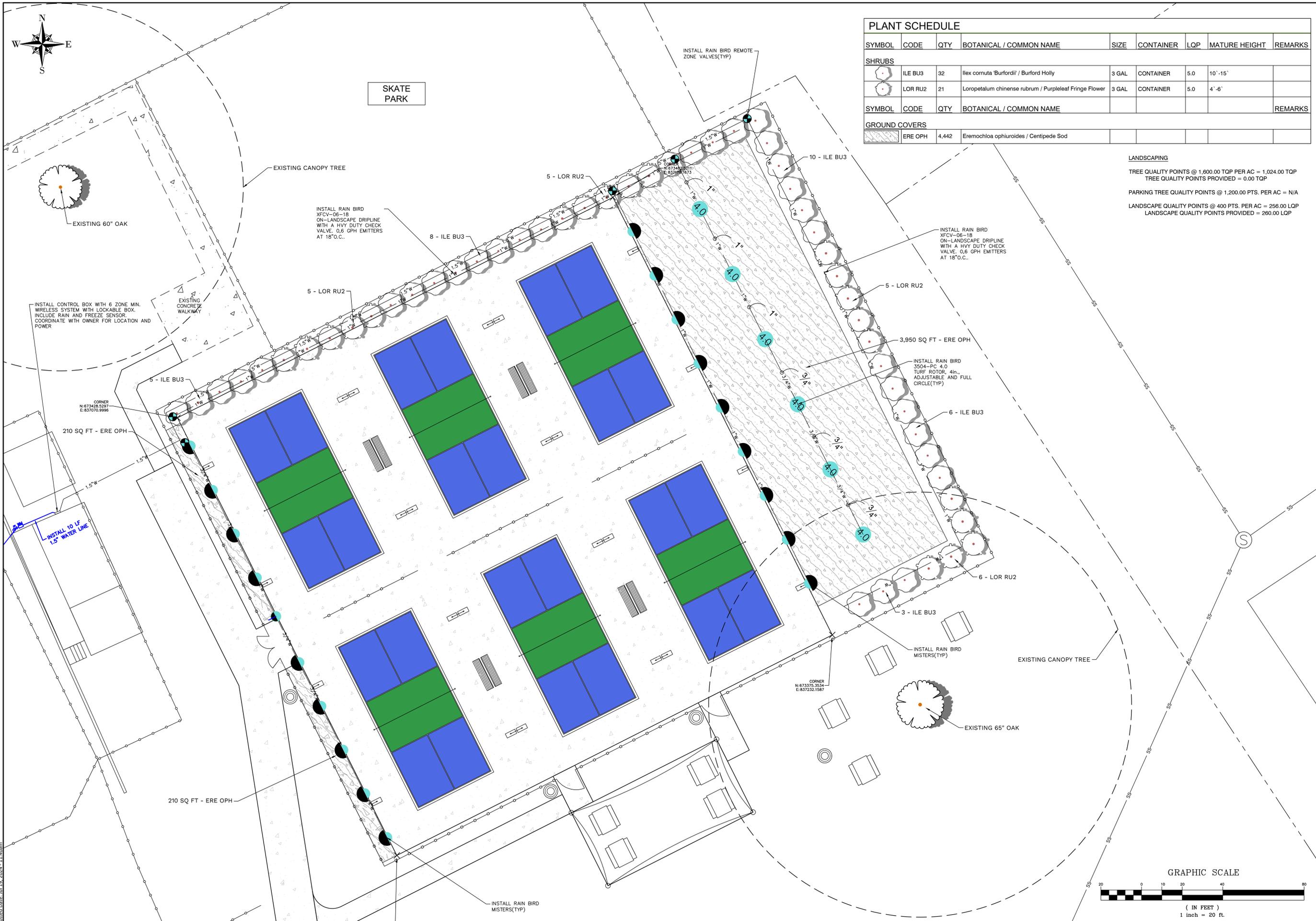
SHEET NAME:  
LANDSCAPE PLAN

REVISIONS:

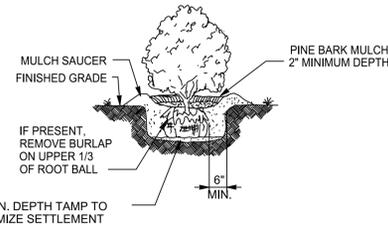
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INITIAL DATE: 05/31/2024  
DRAWN BY: FPGD  
CHECKED BY: TRL  
PROJECT #: 2024-40

SHEET NUMBER:  
**C6.1**

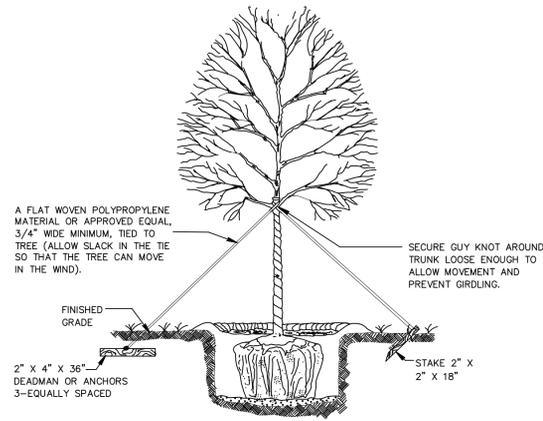


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 Plotted Date: Jul 19, 2024 - 11:40am



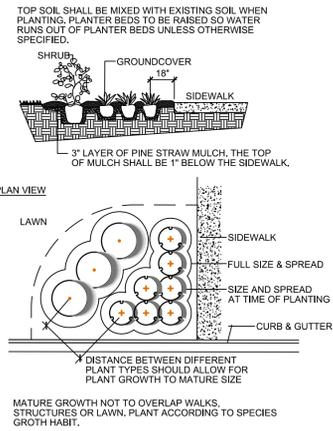
- NOTES
- CLEANLY PRUNE ONLY DAMAGED, DISEASED AND OR WEAK BRANCHES IF NECESSARY.
  - FINISHED GRADE AROUND PLANT TO BE THE SAME AS ORIGINAL GRADE OF PLANT WHEN GROWN.

### SHRUB PLANTING

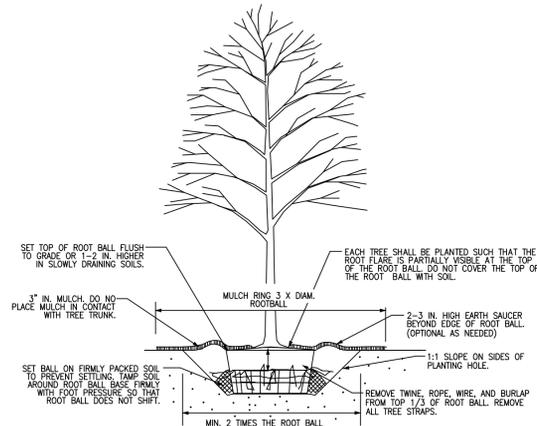


- NOTES
- SELECT DEADMAN, ANCHORS OR STAKES TO SECURE TREE.
  - STAKE TREES ONLY WHEN NECESSARY. STAKES SHALL BE REMOVED 6 MONTHS AFTER PLANTING.
  - TREES LARGER THAN 2" CALIPER SHOULD BE STAKED BY THREE GUY STRAPS WHEN NECESSARY.

### TREE STAKING

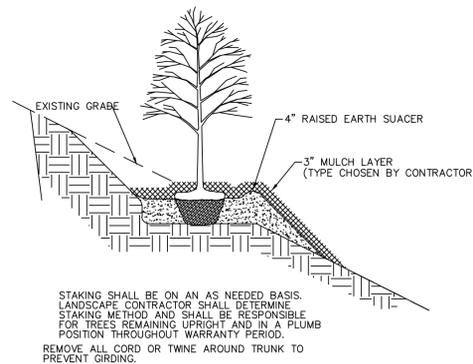


### SHRUB & GROUND COVER SPACING



- NOTES
- PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS, AND BROKEN OR DEAD BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED; HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN. ALL PRUNING SHALL CONFORM TO ANSI A300 STANDARDS. IMPROPERLY PRUNED TREES MAY BE REJECTED BY THE CITY.
  - STAKE TREES ONLY WHEN NECESSARY. SEE CITY TREE STAKING DETAILS.

### TREE PLANTING



### TREE PLANTING ON SLOPE

### PLANTING NOTES

- GENERAL
- CONTRACTOR SHALL BE KNOWLEDGEABLE OF ALL OTHER SITE IMPROVEMENTS PRIOR TO STARTING LANDSCAPE WORK AND SHALL PROMPTLY REPORT ANY DISCREPANCIES.
  - CONTRACTOR SHALL USE CAUTION WHILE EXCAVATING TO AVOID DISTURBING ANY EXISTING UTILITIES. IF ANY ARE ENCOUNTERED, CONTRACTOR IS TO PROMPTLY ADVISE THE GENERAL CONTRACTOR, LANDSCAPE ARCHITECT, AND OWNER.
  - GENERAL SITE CONTRACTOR SHALL PROVIDE SUBGRADE TO WITHIN 1:10" OF FINISH GRADE.
  - ALL PLANTING SHALL ADHERE TO THE STANDARDS AS SPECIFIED IN THE HINESVILLE, GEORGIA LANDSCAPE ORDINANCE.

### PLANT QUALITY

- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL TREES, SHRUBS, GROUND COVER, VINES AND SOD AS SHOWN ON LANDSCAPE PLAN. ALL PLANT MATERIALS SHALL CONFORM TO THE STANDARDS SET FORTH IN THE CURRENT EDITION OF "AMERICAN STANDARD FOR NURSERY STOCK", PUBLISHED BY THE ASSOCIATION OF NURSERYMEN, 1250 I STREET, N.W. SUITE 500, WASHINGTON D.C. 20005, (202) 789-2900.
- ALL PLANT MATERIAL SHALL HAVE A ONE-YEAR WARRANTY UPON ACCEPTANCE BY THE OWNER.
- PLANTS SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY, AND HAVE A NORMAL WELL-DEVELOPED BRANCHING STRUCTURE AND A VIGOROUS FIBROUS ROOT SYSTEM. PLANTS SHALL BE HEALTHY, VIGOROUS, AND FREE FROM INSECTS AND DISEASE. TREE TRUNKS NOT LOWER THAN FOUR FEET ABOVE THE GROUND, DEPENDENT ON THE SPECIES. TRUNKS AND STEMS SHALL BE FIRM WITH NO INDICATION OF FUNGAL CANKERS, GALLS, INSECT BORERS, DIE BACK, FROST CRACKS, SUN SCALD, OR OTHER DEFECTS THAT WOULD CAUSE THE TREE TO DECLINE OR BECOME STRUCTURALLY UNSOUND. TREES SHALL BE DENSELY FOLIATED WHEN IN LEAF.
- ALL PLANTS SHALL BE COMMERCIAL GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE OF HINESVILLE, GEORGIA (A.H.S. PLANT ZONE 8).
- ALL PLANTS SHALL EQUAL OR EXCEED THE MINIMUM SIZE AS SHOWN IN THE PLANT LIST, AND ALL METHODS OF PLANT MEASUREMENT SHALL CONFORM TO THE "AMERICAN STANDARD FOR NURSERY STOCK".
- CALIPER OF MULTI-TRUNK TREES SHALL BE DETERMINED BY MEASURING THE LARGEST TRUNK ONLY.
- PLANTS SHALL BE SUBJECT TO INSPECTION FOR CONFORMITY TO SPECIFICATIONS AND REQUIREMENTS. SUCH APPROVAL SHALL NOT IMPAIR THE RIGHT OF INSPECTION AND REJECTION DURING PROGRESS OF THE WORK. ACCEPTANCE AT THE NURSERY, IN WHICH THE PLANT IS GROWING PRIOR TO TRANSPLANTING, DOES NOT PRECLUDE REJECTION AT THE SITE FOR JUST CAUSE.

### ROOT SYSTEM

- ALL TREE SHALL BE BALLED AND BURLAPPED (B&B) OR CONTAINER GROWN. NO BARE ROOT TREES SHALL BE ACCEPTABLE.
- ALL SHRUBS SHALL BE BALLED AND BURLAPPED (B&B) OR CONTAINER GROWN. NOR BARE ROOT SHRUBS SHALL BE ACCEPTABLE.
- THE MINIMUM SIZE OF BALLS, BALL DEPTHS, AND BALL DIAMETER SHALL CONFORM TO BALLING AND BURLAPPING SPECIFICATIONS AS SET FORTH IN THE "AMERICAN STANDARD FOR NURSERY STOCK".
- ALL BALLED AND BURLAPPED PLANTS SHALL HAVE THE TOP 1/3 OF THE BURLAP REMOVED FROM THE BALL AFTER THE POSITION OF THE PLANT IS STABILIZED. NO BURLAP SHALL BE REMOVED FROM UNDER THE BALL, AND ALL WIRE AND SURPLUS FROM THE TOP OF THE BALL SHALL BE REMOVED.

### SEEDING AND SODDING

- ALL EXTERIOR GROUND AREA NOT OCCUPIED BY BUILDINGS, STRUCTURES, PAVEMENT, PLANT MATERIAL, AND MULCH SHALL BE SEEDED OR SODDED IN AN ACCEPTABLE MANNER IN ACCORDANCE WITH LOCAL NURSERY STANDARDS, UNLESS OTHERWISE NOTED.
- ALL SEED SHALL BE PURCHASED FROM A REPUTABLE SUPPLIER AND SHALL BEAR THE CURRENT SEASON'S CERTIFICATES OF WEIGHT, PURITY AND GERMINATION.
- ALL SOD SHALL BE COMMERCIAL GROWN IN GEORGIA OR NEIGHBORING AREAS, STRONGLY ROOTED AND FREE FROM WEEDS.
- ALL SOD SHALL BE LAYED WITHIN 48 HOURS AFTER BEING CUT AT THE NURSERY.
- SOD SHALL BE LAYED OUT SO THAT NO Voids OCCUR AND IN SUCH A MANNER THAT THE END JOINTS BETWEEN INDIVIDUAL SOD PIECES OF ADJOINING ROW DO NOT COINCIDE. SOD SHALL BE LAID ON TOPSOIL AT THE REQUIRED FINISH GRADE AND SHALL BE FLUSH WITH ADJACENT PAVEMENT, CURBS, AND PLANTING BED EDGES.

### TOPSOIL

- CONTRACTOR SHALL PROVIDE A MINIMUM 3" DEPTH OF TOPSOIL IN ALL PLANTING AREAS.
- ALL TOPSOIL SHALL BE FREE FROM ROCKS, DEBRIS, NOXIOUS WEEDS, EXCESSIVE WEEDS, PLANT WASTE, SUBSOIL, HEAVY CLAY, ROOTS, STUMPS, AND ANY OTHER MATERIAL HARMFUL TO PLANT GROWTH
- TOPSOIL SHALL BE NATURAL, FERTILE, SANDY LOAM POSSESSING CHARACTERISTICS COMMON TO PRODUCTIVE SOILS IN THE SOUTHEASTERN REGION, AND IT SHALL NOT CONTAIN ANY TOXIC SUBSTANCES.

### PLANTING

- GROUND COVER SHALL BE PLANTED AS SPECIFIED BELOW:
  - GROUND COVER SHALL BE PLANTED IN AN EQUILATERAL TRIANGULAR SPACING PATTERN AT THE ON-CENTER DISTANCES SHOWN ON THE PLANT LIST.
  - WHERE GROUND COVER ABUTS CURBS, PAVEMENT, SIGNS AND POLES, MINIMUM PLANTING DISTANCE SHALL BE 12" FROM CENTER OF PLANT TO SAID OBJECT.
  - GROUND COVER SHALL BE PLANTED A MINIMUM OF 14" FROM CENTER OF ALL TREES.
- SHRUBS AND GRASSES SHALL BE PLANTED A MINIMUM OF 4' FROM CENTER OF ALL LARGE TREES.
- SHRUBS AND TREES SHALL BE PLANTED A MINIMUM OF 36" FROM CURBS AT CAR PARKING AREAS TO ALLOW FOR OVERHANG, UNLESS WHEEL STOPS ARE PROVIDED.
- NO LARGE OR MEDIUM TREE SPECIES SHALL BE PLANTED WITHIN TEN (10) FEET OF ANY UNDERGROUND UTILITY LINE OR UNDERNEATH ANY OVERHEAD POWER LINES. SMALL TREE SPECIES MUST MAINTAIN A MINIMUM FIVE (5) FOOT SEPARATION FROM UNDERGROUND UTILITY LINES.
- TREES SHALL BE PLANTED AT PROPER DEPTH OR SHALL BE REJECTED AT TIME OF INSPECTION.
- STAKE TREES ONLY WHEN NECESSARY.

### FERTILIZER

- CONTRACTOR SHALL PERFORM A SOIL TEST ON ALL PROPOSED LANDSCAPE AREAS BEFORE INSTALLING ANY PROPOSED PLANT MATERIAL.
- IF A SOIL TEST DETERMINES THAT ADDITIONAL SOIL AMENDMENTS ARE REQUIRED, CONTRACTOR SHALL APPLY AN APPROPRIATE FERTILIZER IN CONFORMANCE WITH INSTRUCTIONS ON THE CONTAINER.

### MULCH

- ALL TREES AND SHRUBS SHALL BE MULCHED IMMEDIATELY FOLLOWING INSTALLATION WITH A MINIMUM 3" LAYER OF ACCEPTABLE MATERIAL.
- ALL GROUND COVER SHALL BE MULCHED IMMEDIATELY FOLLOWING INSTALLATION WITH A MINIMUM 2" LAYER OF ACCEPTABLE MATERIAL.
- ACCEPTABLE MULCHING MATERIAL INCLUDES PINE NEEDLES, SHREDDED BARK, AND WOOD CHIPS.

### WATERING

- ALL PLANTS INCLUDING TREES, SHRUBS, AND GROUND COVER SHALL BE THOROUGHLY WATERED IMMEDIATELY FOLLOWING INSTALLATION.
- ALL SEEDED AND SODDED AREAS SHALL BE THOROUGHLY WATERED IMMEDIATELY FOLLOWING INSTALLATION.

### MAINTENANCE

- CONTRACTOR SHALL INSPECT PLANTS ON A WEEKLY BASIS; MAINTAIN AND WATER ALL SODDED AREAS AND PLANT MATERIALS; AND WEED, PRUNE, AND RE-MULCH PLANTING BEDS AS NECESSARY MAINTAIN HEALTHY GROWING CONDITIONS UNTIL LANDSCAPE INSTALLATION IS COMPLETE.
- OWNER IS RESPONSIBLE FOR ON-GOING MAINTENANCE OF ALL PLANT MATERIAL UPON COMPLETION OF LANDSCAPE INSTALLATION.
- GUYING AND STAKING SHALL BE REMOVED NO LATER THAN 6 MONTHS AFTER INSTALLATION.

### PLANT ALTERATIONS AND SUBSTITUTIONS

- ANY CHANGE IS PLANT QUANTITY, PLANT SPECIES, PLANT SIZE, OR PLANT LOCATION IS UNACCEPTABLE WITHOUT SPECIFIC APPROVAL OF THE PROJECT LANDSCAPE ARCHITECT.



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POOLER: 1000 Towne Center Blvd, Suite 304, Pooler, Georgia 31322 (912) 335-1046



SITE DEVELOPMENT PLAN  
PICKLEBALL COURTS  
LIBERTY INDEPENDENT TROOP PARK

SHEET NAME:  
LANDSCAPE DETAILS

REVISIONS:

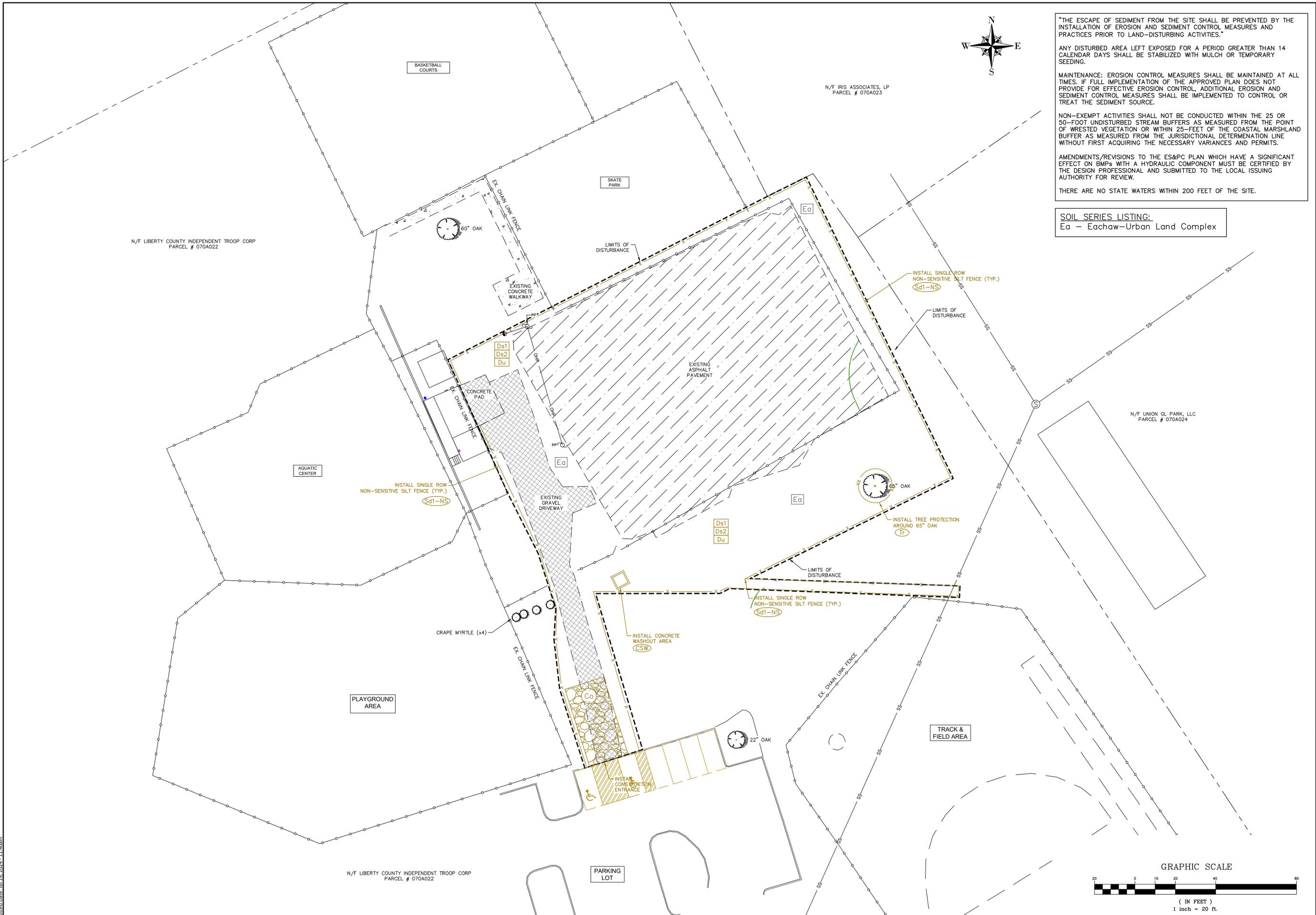
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INITIAL DATE: 05/31/2024  
DRAWN BY: FHGD  
CHECKED BY: TRL  
PROJECT #: 2024-40

SHEET NUMBER:

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 Plotted Date: Jul 19, 2024 - 11:40am



"THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND-DISTURBING ACTIVITIES."

ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 CALENDAR DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.

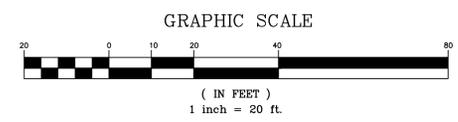
MAINTENANCE: EROSION CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.

NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.

AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPs WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL AND SUBMITTED TO THE LOCAL ISSUING AUTHORITY FOR REVIEW.

THERE ARE NO STATE WATERS WITHIN 200 FEET OF THE SITE.

**SOIL SERIES LISTING:**  
 Ea - Eachaw-Urban Land Complex



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 Suite 304  
 Pooler, Georgia 31322  
 (912) 335-1046



**SITE DEVELOPMENT PLAN**  
**PICKLEBALL COURTS**  
**LIBERTY INDEPENDENT TROOP PARK**

TAX PARCEL 070A022 - CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA

SHEET NAME:  
 EROSION CONTROL  
 PLAN (INITIAL)

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INITIAL DATE: 05/31/2024  
 DRAWN BY: FPGD  
 CHECKED BY: TRL  
 PROJECT #: 2024-40

SHEET NUMBER:  
**C7.1**



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**SITE DEVELOPMENT PLAN  
PICKLEBALL COURTS  
LIBERTY INDEPENDENT TROOP PARK**

TAX PARCEL 070A022 - CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA

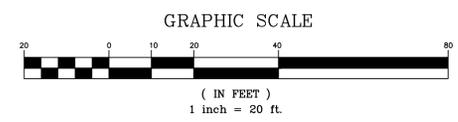
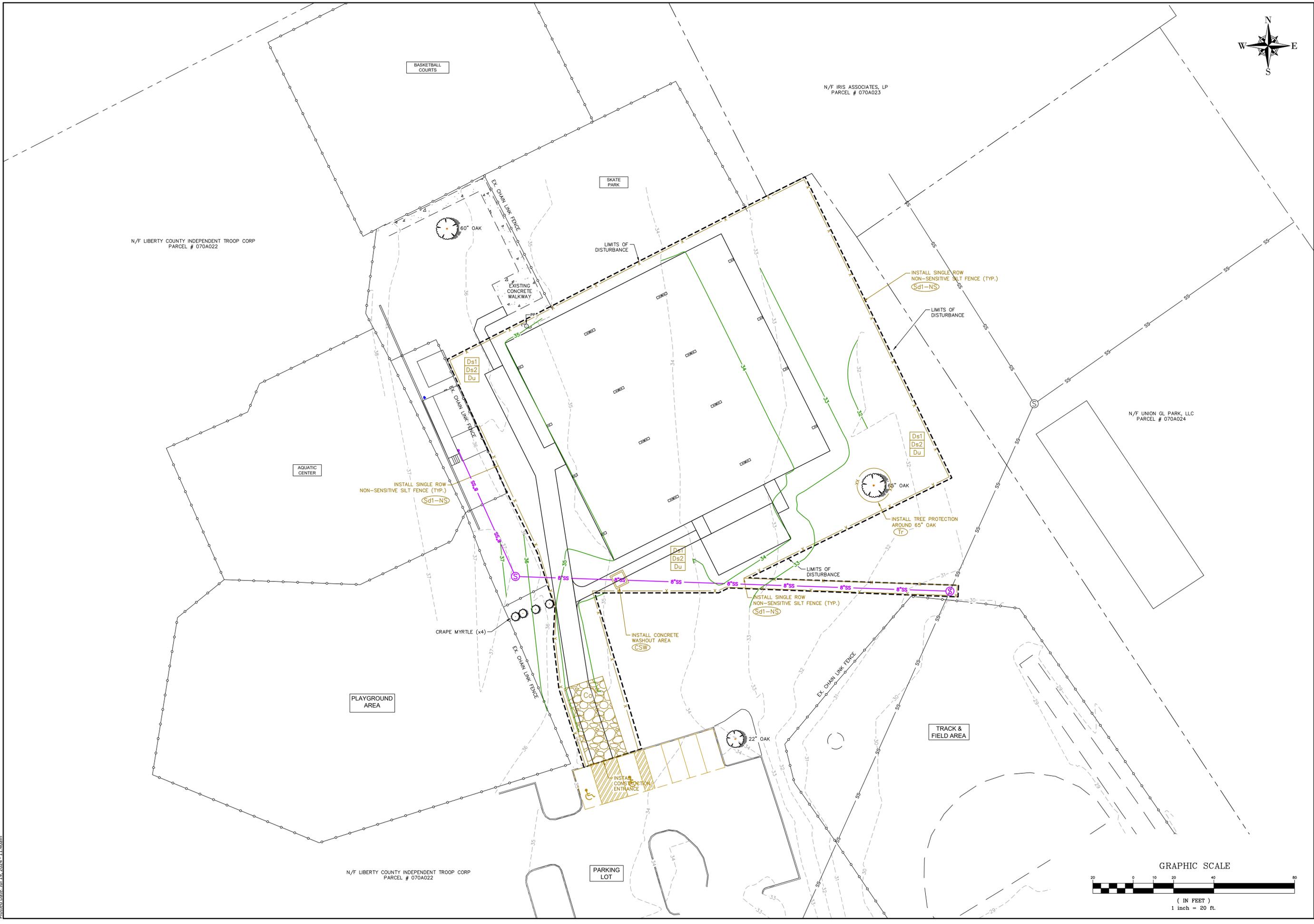
SHEET NAME:  
EROSION CONTROL PLAN  
(INTERMEDIATE)

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INITIAL DATE: 05/31/2024  
DRAWN BY: FPGD  
CHECKED BY: TRL  
PROJECT #: 2024-40

SHEET NUMBER:  
**C7.2**

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Plotted Date: Jul 19, 2024 - 11:40am



N/F LIBERTY COUNTY INDEPENDENT TROOP CORP  
PARCEL # 070A022

N/F IRIS ASSOCIATES, LP  
PARCEL # 070A023

N/F UNION GL PARK, LLC  
PARCEL # 070A024

N/F LIBERTY COUNTY INDEPENDENT TROOP CORP  
PARCEL # 070A022

PARKING LOT

TRACK & FIELD AREA

AQUATIC CENTER

PLAYGROUND AREA

BASKETBALL COURTS

SKATE PARK

GRAPE MYRTLE (x4)

LIMITS OF DISTURBANCE

LIMITS OF DISTURBANCE

LIMITS OF DISTURBANCE

EXISTING CONCRETE WALKWAY

INSTALL CONCRETE WASHOUT AREA (CSW)

INSTALL TREE PROTECTION AROUND 65" OAK (Tr)

Ds1  
Ds2  
Du

Ds1  
Ds2  
Du

Ds1  
Ds2  
Du

Ds1  
Ds2  
Du

INSTALL CONCRETE ENTRANCE

60" OAK

65" OAK

22" OAK



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**SITE DEVELOPMENT PLAN  
PICKLEBALL COURTS  
LIBERTY INDEPENDENT TROOP PARK**

TAX PARCEL 070A022 - CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA

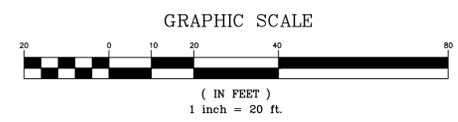
SHEET NAME:  
EROSION CONTROL  
PLAN (FINAL)

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INITIAL DATE: 05/31/2024  
DRAWN BY: FPGD  
CHECKED BY: TRL  
PROJECT #: 2024-40

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Plotted Date: Jul 19, 2024 - 11:40am

PROJECT INFORMATION

PROJECT TITLE: PICKLEBALL COURT LIBERTY INDEPENDENT TROOP PARK
OWNER: LIBERTY COUNTY
24 HOUR CONTACT: TRENT R. LONG (912)-610-1294
ENGINEER: T.R. LONG ENGINEERING, P.C.
GOVERNING AUTHORITY: CITY OF HINESVILLE

EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST STAND ALONE CONSTRUCTION PROJECTS

SWCD: COASTAL GEORGIA
PROJECT NAME: PICKLEBALL COURT, LIBERTY INDEPENDENT TROOP PARK
ADDRESS: 619 E OGLETHORPE HWY
CITY/COUNTY: HINESVILLE, GEORGIA

EROSION, SEDIMENT, & POLLUTION CONTROL PLAN CHECKLIST

- 1. REQUIREMENT: THE APPLICABLE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN CHECKLIST ESTABLISHED BY THE COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED.
2. REQUIREMENT: LEVEL II CERTIFICATION NUMBER ISSUED BY THE COMMISSION, SIGNATURE AND SEAL OF THE CERTIFIED DESIGN PROFESSIONAL.
3. REQUIREMENT: LIMIT OF DISTURBANCE SHALL BE NO GREATER THAN 50 ACRES AT ANY ONE TIME WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE GAEPD DISTRICT OFFICE.

- 20. REQUIREMENT: CLEARLY NOTE STATEMENT THAT "EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL...
21. REQUIREMENT: CLEARLY NOTE THE STATEMENT "ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING."
22. REQUIREMENT: ANY CONSTRUCTION ACTIVITY WHICH DISCHARGES STORM WATER INTO AN IMPAIRED STREAM SEGMENT...

- RESPONSE: CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS AND TARS WILL BE INSPECTED DAILY FOR LEAKS AND SPILLS. THIS INCLUDES ON-SITE VEHICLE AND MACHINERY DAILY INSPECTIONS AND REGULAR PREVENTATIVE MAINTENANCE OF SUCH EQUIPMENT.
23. REQUIREMENT: IF A TMDL IMPLEMENTATION PLAN FOR SEDIMENT HAS BEEN FINALIZED FOR THE IMPAIRED STREAM SEGMENT (IDENTIFIED IN ITEM 22 ABOVE) AT LEAST SIX MONTHS PRIOR TO SUBMITTAL OF NOI, THE ES&PC PLAN MUST ADDRESS ANY SITE RESPONSE. NO TMDL IMPLEMENTATION PLAN IS NEEDED FOR THIS SITE.
24. REQUIREMENT: BMPs FOR CONCRETE WASHDOWN OF TOOLS, CONCRETE MIXER CHUTES, HOPPERS AND THE REAR OF THE VEHICLES. WASHOUT OF THE DRUM AT THE CONSTRUCTION SITE IS PROHIBITED.

- 25. REQUIREMENT: PROVIDE BMPs FOR THE REMEDIATION OF ALL PETROLEUM SPILLS AND LEAKS.
RESPONSE: MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS. TYPICAL MATERIALS AND EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO, BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, CAT LITTER, SAND, SAWDUST AND PROPERLY LABELED PLASTIC AND METAL WASTE CONTAINERS.
26. REQUIREMENT: DESCRIPTION OF THE MEASURES THAT WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS TO CONTROL POLLUTANTS IN STORM WATER THAT WILL OCCUR AFTER CONSTRUCTION OPERATIONS HAVE BEEN COMPLETED.

- 27. REQUIREMENT: DESCRIPTION OF PRACTICES TO PROVIDE COVER FOR BUILDING MATERIALS AND BUILDING PRODUCTS ON SITE.
RESPONSE: PLASTIC SHEETING OR TEMPORARY ROOFS TO BE UTILIZED TO COVER BUILDING MATERIALS, BUILDING PRODUCTS, CONSTRUCTION WASTE, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS IN ORDER TO MINIMIZE EXPOSURE TO PRECIPITATION AND TO STORMWATER.
28. REQUIREMENT: DESCRIPTION OF THE PRACTICES THAT WILL BE USED TO REDUCE THE POLLUTANTS IN STORM WATER DISCHARGES.

- 29. REQUIREMENT: DESCRIPTION AND CHART OR TIMELINE OF THE INTENDED SEQUENCE OF MAJOR ACTIVITIES WHICH DISTURB SOILS FOR THE MAJOR PORTION OF THE SITE (I.E., INITIAL PERIMETER AND SEDIMENT STORAGE BMPs, CLEARING AND GRUBBING ACTIVITIES, EXCAVATION ACTIVITIES, UTILITY ACTIVITIES, TEMPORARY AND FINAL STABILIZATION.
RESPONSE: INFRASTRUCTURE Gantt chart showing construction phases from July to November 2024.
DESIGN PROFESSIONAL'S CERTIFICATION: 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.
DESIGN PROFESSIONAL 7-DAY VISIT CERTIFICATION: I CERTIFY THE SITE WAS IN COMPLIANCE WITH ES&PC PLAN ON THE DATE OF INSPECTION.

- RESPONSE: PLASTIC SHEETING OR TEMPORARY ROOFS TO BE UTILIZED TO COVER BUILDING MATERIALS, BUILDING PRODUCTS, CONSTRUCTION WASTE, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS IN ORDER TO MINIMIZE EXPOSURE TO PRECIPITATION AND TO STORMWATER.
CONCRETE TRUCK WASHING - A CONCRETE WASHOUT AREA HAS BEEN DETAILED FOR THIS SITE.
BUILDING MATERIALS - NO BUILDING OR CONSTRUCTION MATERIALS WILL BE BURIED OR DISPOSED OF ON-SITE. ALL SUCH MATERIAL WILL BE DISPOSED OF IN PROPER WASTE DISPOSAL PROCEDURES.

- OTHER PRACTICES: 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.
A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE AT ALL TIMES.
PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE AND ALL STREAM BUFFERS SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS.

- NO BURN OR BURY PITS SHALL BE PERMITTED ON THE CONSTRUCTION SITE WITHOUT WRITTEN PERMISSION BY THE OWNER AND/OR THE ENGINEER OF RECORD.
ADDITIONAL SILT BARRIERS MUST BE PLACED AS SHOWN ON THE PLAN AS ACCESS IS OBTAINED DURING CONSTRUCTION. NO GRADING SHALL TAKE PLACE UNTIL SILT BARRIER INSTALLATION AND SEDIMENT PONDS ARE CONSTRUCTED AS SHOWN ON THE INITIAL PHASE EROSION CONTROL PLAN.
MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 7 DAYS OF LAND DISTURBANCE.

- SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE.
CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION 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.
CONTRACTOR SHALL INSPECT CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.

- STORM DRAIN OUTLET PROTECTION SHALL BE PLACED AT ALL OUTLET HEADWALLS AS SOON AS THE HEADWALL IS CONSTRUCTED.
MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 7 DAYS OF LAND DISTURBANCE.
SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE.
INSTALL TEMPORARY SEDIMENT TRAP.

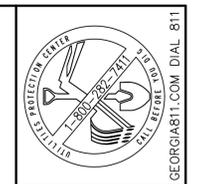
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- OTHER PRACTICES: THE CONTRACTOR SHALL OBSERVE THE PROJECT SEQUENCE SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO INSURE THAT LAND STRIPPED OF ITS NATURAL COVER IS EXPOSED ONLY IN SMALL QUANTITIES.
A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE AT ALL TIMES.
PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE AND ALL STREAM BUFFERS SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS.

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ADDITIONAL SILT BARRIERS MUST BE PLACED AS SHOWN ON THE PLAN AS ACCESS IS OBTAINED DURING CONSTRUCTION. NO GRADING SHALL TAKE PLACE UNTIL SILT BARRIER INSTALLATION AND SEDIMENT PONDS ARE CONSTRUCTED AS SHOWN ON THE INITIAL PHASE EROSION CONTROL PLAN.
MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 7 DAYS OF LAND DISTURBANCE.

- SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE.
CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION 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.
CONTRACTOR SHALL INSPECT CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.

- STORM DRAIN OUTLET PROTECTION SHALL BE PLACED AT ALL OUTLET HEADWALLS AS SOON AS THE HEADWALL IS CONSTRUCTED.
MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 7 DAYS OF LAND DISTURBANCE.
SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE.
INSTALL TEMPORARY SEDIMENT TRAP.



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SITE DEVELOPMENT PLAN
PICKLEBALL COURTS
LIBERTY INDEPENDENT TROOP PARK
TAX PARCEL 070A02 - CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA

SHEET NAME: EROSION CONTROL NOTES

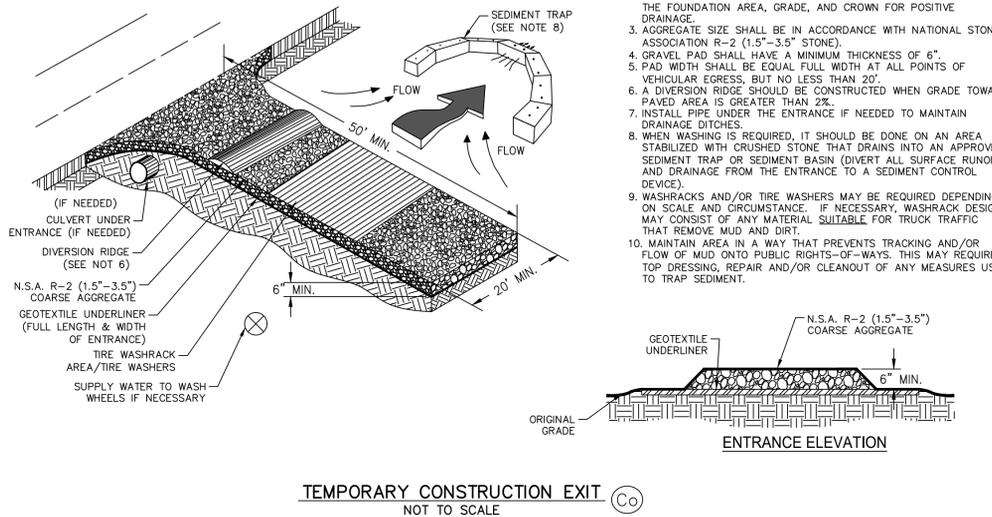
Table with 2 columns: REVISIONS, and 10 rows for tracking changes.

INITIAL DATE: 05/31/2024
DRAWN BY: FHGD
CHECKED BY: TRL
PROJECT #: 2024-40

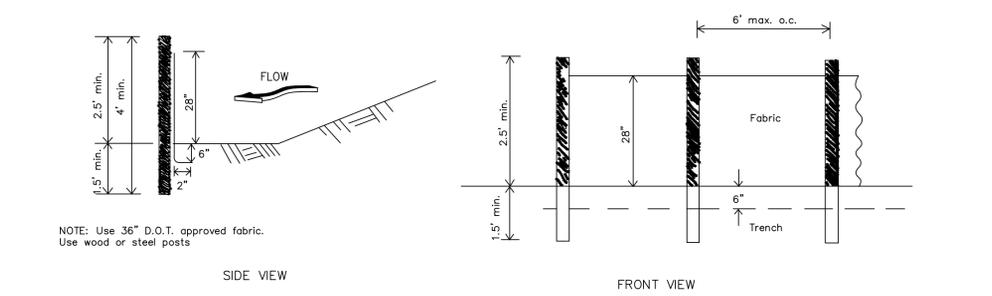
SHEET NUMBER: C7.4

**EROSION, SEDIMENT, & POLLUTION CONTROL PLAN CHECKLIST (CONTINUED)**

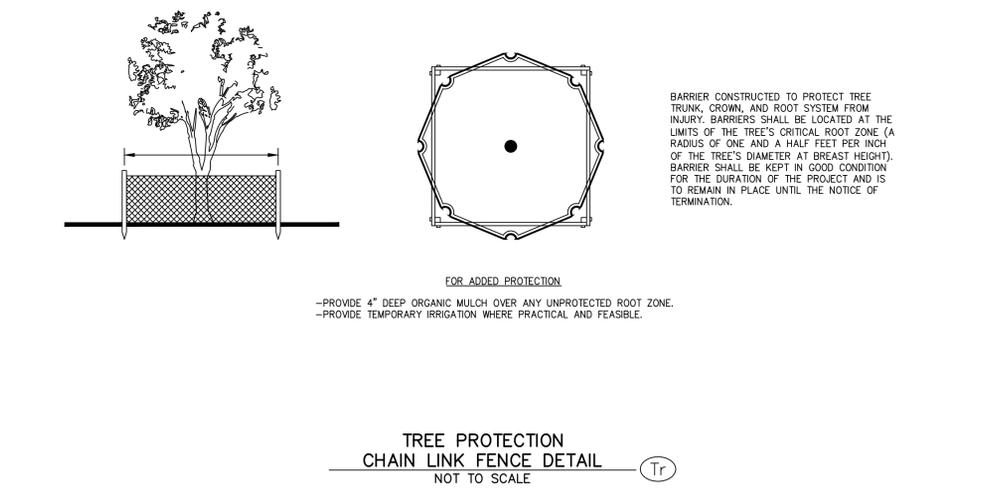
30. **REQUIREMENT: PROVIDE COMPLETE REQUIREMENTS OF INSPECTIONS AND RECORD KEEPING BY THE PRIMARY PERMITEE.\***  
 RESPONSE: RECORD KEEPING IS NOT REQUIRED FOR THIS PROJECT.
31. **REQUIREMENT: PROVIDE COMPLETE REQUIREMENTS OF SAMPLING FREQUENCY AND REPORTING OF SAMPLING RESULTS.\***  
 RESPONSE: SAMPLING IS NOT REQUIRED FOR THIS PROJECT.
32. **REQUIREMENT: PROVIDE COMPLETE DETAILS FOR RETENTION OF RECORDS AS PER PART IV.F. OF THE PERMIT.\***  
 RESPONSE: RETENTION OF RECORDS IS NOT REQUIRED FOR THIS PROJECT.
33. **REQUIREMENT: DESCRIPTION OF ANALYTICAL METHODS TO BE USED TO COLLECT AND ANALYZE THE SAMPLES FROM EACH LOCATION.\***  
 RESPONSE: THE COLLECTION AND ANALYZE'S OF SAMPLES IS NOT REQUIRED FOR THIS PROJECT.
34. **REQUIREMENT: APPENDIX B RATIONALE FOR NTU VALUES AT ALL OUTFALL SAMPLING POINTS WHERE APPLICABLE.\***  
 RESPONSE: NTU VALUES NOT REQUIRED FOR THIS PROJECT.
35. **REQUIREMENT: DELINEATE ALL SAMPLING LOCATIONS IF APPLICABLE, PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES INTO WHICH STORM WATER IS DISCHARGED.\***  
 RESPONSE: SAMPLING LOCATIONS NOT REQUIRED FOR THIS PROJECT.
36. **REQUIREMENT: 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 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.\***  
 RESPONSE: SEE ITEM 29 FOR A DESCRIPTION OF ALL INITIAL AND INTERMEDIATE BMPs AND ITEM 26 FOR A DESCRIPTION OF ALL FINAL BMPs. PLEASE SEE THE EROSION CONTROL PLAN TO SEE WHERE THESE BMPs ARE TO BE IMPLEMENTED.
37. **REQUIREMENT: GRAPHIC SCALE AND NORTH ARROW.**  
 RESPONSE: THE CORRECT GRAPHIC SCALE AND NORTH ARROW ARE SHOWN ON ALL SHEETS WHERE APPLICABLE.
38. **REQUIREMENT: EXISTING AND PROPOSED CONTOUR LINES WITH CONTOUR LINES DRAWN AT AN INTERVAL IN ACCORDANCE WITH THE FOLLOWING:**
- | Map Scale                      | Ground Slope                                | Contour Intervals, ft.          |
|--------------------------------|---|---------------------------------|
| 1 inch = 100ft or larger scale | Flat 0 - 2%<br>Rolling 2 - 8%<br>Steep 8% + | 0.5 or 1<br>1 or 2<br>2.5 or 10 |
- RESPONSE: CONTOURS ARE SHOWN IN 1' INTERVALS.
39. **REQUIREMENT: USE OF ALTERNATIVE BMPs WHOSE PERFORMANCE HAS BEEN DOCUMENTED TO BE EQUIVALENT TO OR SUPERIOR TO CONVENTIONAL BMPs AS CERTIFIED BY A DESIGN PROFESSIONAL (UNLESS DISAPPROVED BY GAEPD OR THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION); PLEASE REFER TO THE ALTERNATIVE BMP GUIDANCE DOCUMENT FOUND AT WWW.GASWCC.ORG.**  
 RESPONSE: NO ALTERNATIVE BMPs WILL BE USED.
40. **REQUIREMENT: USE OF ALTERNATIVE BMP FOR APPLICATION TO THE EQUIVALENT BMP LIST. PLEASE REFER TO APPENDIX A-2 OF THE MANUAL FOR EROSION & SEDIMENT CONTROL IN GEORGIA 2016 EDITION.\***  
 RESPONSE: NO ALTERNATIVE BMPs WILL BE USED.
41. **REQUIREMENT: DELINEATION OF THE APPLICABLE 25-FOOT OR 50-FOOT UNDISTURBED BUFFERS ADJACENT TO STATE WATERS AND ANY ADDITIONAL BUFFERS REQUIRED BY THE LOCAL ISSUING AUTHORITY. CLEARLY NOTE AND DELINEATE ALL AREAS OF IMPACT.**  
 RESPONSE: THERE ARE NO 25-FOOT OR 50-FOOT UNDISTURBED BUFFERS REQUIRED FOR THE SITE. THERE ARE NO STATE WATERS ADJACENT TO THE SITE AND NO ADDITIONAL BUFFERS ARE REQUIRED BY THE LOCAL ISSUING AUTHORITY.
42. **REQUIREMENT: DELINEATION OF ON-SITE WETLANDS AND ALL STATE WATERS LOCATED ON AND WITHIN 200 FEET OF THE PROJECT SITE.**  
 RESPONSE: THERE ARE NO ON-SITE WETLANDS AND STATE WATERS LOCATED ON AND WITHIN 200' OF THE SITE.
43. **REQUIREMENT: DELINEATION AND ACREAGE OF CONTRIBUTING DRAINAGE BASINS ON THE PROJECT SITE.**  
 RESPONSE: ALL DRAINAGE BASIN INFORMATION IS SHOWN IN THE HYDROLOGY STUDY PROVIDED WITH THESE PLANS.
44. **REQUIREMENT: PROVIDE HYDROLOGY STUDY AND MAPS OF DRAINAGE BASINS FOR BOTH THE PRE- AND POST-DEVELOPED CONDITIONS.\***  
 RESPONSE: A HYDROLOGY REPORT INCLUDING A DRAINAGE NARRATIVE, DRAINAGE CALCULATIONS AND DELINEATION OF PRE AND POST DEVELOPED CONDITIONS IS PROVIDED WITH THESE PLANS.
45. **REQUIREMENT: AN ESTIMATE OF THE RUNOFF COEFFICIENT OR PEAK DISCHARGE FLOW OF THE SITE PRIOR TO AND AFTER CONSTRUCTION ACTIVITIES ARE COMPLETED.**  
 RESPONSE: THE PRE-DEVELOPMENT RUNOFF COEFFICIENT IS 73. THE POST-DEVELOPMENT RUNOFF COEFFICIENT IS 70.
46. **REQUIREMENT: STORM-DRAIN PIPE AND WEIR VELOCITIES WITH APPROPRIATE OUTLET PROTECTION TO ACCOMMODATE DISCHARGES WITHOUT EROSION. IDENTIFY/DELINEATE ALL STORM WATER DISCHARGE POINTS.**  
 RESPONSE: THE STORM-DRAIN PIPE AND WEIR VELOCITIES ARE SHOWN ON THE EROSION CONTROL PLAN AS WELL AS APPROPRIATE OUTLET PROTECTION FOR EACH.
47. **REQUIREMENT: SOIL SERIES FOR THE PROJECT SITE AND THEIR DELINEATION**  
 RESPONSE: THE SOIL SERIES IS SHOWN ON THE INITIAL EROSION CONTROL PLAN.
48. **REQUIREMENT: THE LIMITS OF DISTURBANCE FOR EACH PHASE OF CONSTRUCTION.**  
 RESPONSE: THE LIMITS OF DISTURBANCE ARE SHOWN ON EACH EROSION CONTROL SHEET.
49. **REQUIREMENT: PROVIDE A MINIMUM OF 67 CUBIC YARDS OF SEDIMENT STORAGE PER ACRE DRAINED USING A TEMPORARY SEDIMENT BASIN, RETROFITTED DETENTION POND, AND/OR EXCAVATED INLET SEDIMENT TRAPS FOR EACH COMMON DRAINAGE LOCATION. SEDIMENT STORAGE VOLUME MUST BE IN PLACE PRIOR TO AND DURING ALL LAND DISTURBANCE ACTIVITIES UNTIL FINAL STABILIZATION OF THE SITE HAS BEEN ACHIEVED. A WRITTEN JUSTIFICATION EXPLAINING THE DECISION TO USE EQUIVALENT CONTROLS WHEN A SEDIMENT BASIN IS NOT ATTAINABLE MUST BE INCLUDED IN THE PLAN FOR EACH COMMON DRAINAGE LOCATION IN WHICH A SEDIMENT BASIN IS NOT PROVIDED. A WRITTEN JUSTIFICATION AS TO WHY 67 CUBIC YARDS OF STORAGE IS NOT ATTAINABLE MUST ALSO BE GIVEN. WORKSHEETS FROM THE MANUAL INCLUDED FOR STRUCTURAL BMPs AND ALL CALCULATIONS USED BY THE STORAGE DESIGN PROFESSIONAL TO OBTAIN THE REQUIRED SEDIMENT WHEN USING EQUIVALENT CONTROLS, 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.**  
 RESPONSE: THERE IS NO SEDIMENT STORAGE REQUIRED FOR THIS PROJECT.
50. **REQUIREMENT: LOCATION OF BEST MANAGEMENT PRACTICES THAT ARE CONSISTENT WITH AND NO LESS STRINGENT THAN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA. USE UNIFORM CODING SYMBOLS FROM THE MANUAL, CHAPTER 6, WITH LEGEND.**  
 RESPONSE: THE BMPs SHOWN AND DESCRIBED IN THIS PANS ARE CONSISTENT AND NO LESS STRINGENT THAN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA CALLS FOR.
51. **REQUIREMENT: PROVIDE DETAILED DRAWINGS FOR ALL STRUCTURAL PRACTICES. SPECIFICATIONS MUST, AT A MINIMUM, MEET THE GUIDELINES SET FORTH IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.**  
 RESPONSE: DETAILED DRAWINGS ARE PROVIDED ON THE SHEETS LABELED "DETAILS" IN THIS PLAN.
52. **REQUIREMENT: PROVIDE VEGETATIVE PLAN, NOTING ALL TEMPORARY AND PERMANENT VEGETATIVE PRACTICES. INCLUDE SPECIES, PLANTING DATES AND SEEDING, FERTILIZER, LIME AND MULCHING RATES. VEGETATIVE PLAN SHALL BE SITE SPECIFIC FOR APPROPRIATE TIME OF YEAR THAT SEEDING WILL TAKE PLACE AND FOR THE APPROPRIATE GEOGRAPHIC REGION OF GEORGIA.**  
 RESPONSE: PLEASE SEE THE DETAILS SHEET FOR THE VEGETATIVE PLAN.



**TEMPORARY CONSTRUCTION EXIT**  
 NOT TO SCALE



**SILT FENCE - TYPE NS**  
 Non-Sensitive - Type A  
 NOT TO SCALE



**TREE PROTECTION CHAIN LINK FENCE DETAIL**  
 NOT TO SCALE

- NOTES:**
1. 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.



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**SITE DEVELOPMENT PLAN**  
**PICKLEBALL COURTS**  
**LIBERTY INDEPENDENT TROOP PARK**

TAX PARCEL 07W022 - CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA

SHEET NAME:  
**EROSION CONTROL NOTES**

REVISIONS:

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.

INITIAL DATE: 05/31/2024  
 DRAWN BY: FPGD  
 CHECKED BY: TRL  
 PROJECT #: 2024-40

SHEET NUMBER:  
**C7.5**

DS1  
DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)

DEFINITION  
APPLYING PLANT RESIDUES OR OTHER SUITABLE MATERIALS, PRODUCED ON THE SITE IF POSSIBLE, TO THE SOIL SURFACE.

- PURPOSE
1. TO REDUCE RUNOFF EROSION
  2. TO CONSERVE MOISTURE
  3. TO PREVENT SURFACE COMPACTION OR CRUSTING
  4. TO CONTROL UNDESIRABLE VEGETATION
  5. TO INCREASE BIOLOGICAL ACTIVITY IN THE SOIL.

REQUIREMENT FOR REGULATORY COMPLIANCE  
MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTURBANCE. MULCH CAN BE USED AS A SINGULAR EROSION CONTROL DEVICE FOR UP TO SIX MONTHS, BUT IT SHALL BE APPLIED AT THE APPROPRIATE DEPTH, DEPENDING ON THE MATERIAL USED, ANCHORED, AND HAVE A CONTINUOUS 90% COVER OR GREATER OF THE SOIL SURFACE. MAINTENANCE SHALL BE REQUIRED TO MAINTAIN APPROPRIATE DEPTH AND 90% COVER. TEMPORARY VEGETATION MAY BE EMPLOYED INSTEAD OF MULCH IF THE AREA WILL REMAIN UNDISTURBED FOR LESS THAN SIX MONTHS. IF AN AREA WILL REMAIN UNDISTURBED FOR GREATER THAN SIX MONTHS, PERMANENT VEGETATIVE TECHNIQUES SHALL BE EMPLOYED.

SPECIFICATIONS  
MULCHING WITHOUT SEEDING  
THIS STANDARD APPLIES TO GRADES OR CLEARED AREAS WHERE SEEDINGS MAY NOT HAVE A SUITABLE GROWING SEASON TO PRODUCE AN EROSION RETARDANT COVER, BUT CAN BE STABILIZED WITH A MULCH COVER.

- SITE PREPARATION
1. GRADE TO PERMIT THE USE OF EQUIPMENT FOR APPLYING AND ANCHORING MULCH.
  2. INSTALL NEEDED EROSION CONTROL MEASURES AS REQUIRED SUCH AS DIKES, DIVERSIONS, BERMS, TERRACES AND SEDIMENT BARRIERS.
  3. LOOSEN COMPACT SOIL TO A MINIMUM DEPTH OF 3 INCHES.

- MULCHING MATERIALS  
SELECT ONE OF THE FOLLOWING MATERIALS AND APPLY AT THE DEPTH INDICATED:
1. DRY STRAW OR HAY SHALL BE APPLIED AT A DEPTH OF 2 TO 4 INCHES PROVIDING COMPLETE SOIL COVERAGE. ONE ADVANTAGE OF THIS MATERIAL IS EASY APPLICATION.
  2. WOOD WASTE (CHIPS, SAWDUST OR BARK) SHALL BE APPLIED AT A DEPTH OF 2 TO 3 INCHES. ORGANIC MATERIAL FROM THE CLEARING STAGE OF DEVELOPMENT SHOULD REMAIN ON SITE, BE CHIPPED, AND APPLIED AS MULCH. THIS METHOD OF MULCHING CAN GREATLY REDUCE EROSION CONTROL COSTS.
  3. POLYETHYLENE FILM SHALL BE SECURED OVER BANKS OR STOCKPILED SOIL MATERIAL FOR TEMPORARY PROTECTION. THIS MATERIAL CAN BE SALVAGED AND REUSED.

- APPLYING MULCH  
WHEN MULCH IS USED WITHOUT SEEDING, MULCH SHALL BE APPLIED TO PROVIDE FULL COVERAGE OF THE EXPOSED AREA.
1. DRY STRAW OR HAY MULCH AND WOOD CHIPS SHALL BE APPLIED UNIFORMLY BY HAND OR BY MECHANICAL EQUIPMENT.
  2. IF THE AREA WILL EVENTUALLY BE COVERED WITH PERENNIAL VEGETATION, 20-30 POUNDS OF NITROGEN PER ACRE IN ADDITION TO THE NORMAL AMOUNT SHALL BE APPLIED TO OFFSET THE UPTAKE OF NITROGEN CAUSED BY THE DECOMPOSITION OF THE ORGANIC MULCHES.
  3. APPLY POLYETHYLENE FILM ON EXPOSED AREAS.

- ANCHORING MULCH
1. STRAW OR HAY MULCH CAN BE PRESSED INTO THE SOIL WITH A DISK HARROW WITH THE DISK SET STRAIGHT OR WITH A SPECIAL "PACKER DISK." DISKS MAY BE SMOOTH OR SERRATED AND SHOULD BE 20 INCHES OR MORE IN DIAMETER AND 8 TO 12 INCHES APART. THE EDGES OF THE DISK SHOULD BE DULL ENOUGH NOT TO CUT THE MULCH BUT TO PRESS IT INTO THE SOIL LEAVING MUCH OF IT IN AN ERECT POSITION. STRAW OR HAY MULCH SHALL BE ANCHORED IMMEDIATELY AFTER APPLICATION. STRAW OR HAY MULCH SPREAD WITH SPECIAL BLOWER-TYPE EQUIPMENT MAY BE ANCHORED. TACKIFIERS, BINDERS AND HYDRAULIC MULCH WITH TACKIFIERS SPECIALLY DESIGNED FOR TACKING STRAW CAN BE SUBSTITUTED FOR EMULSIFIED ASPHALT. PLEASE REFER TO SPECIFICATION TACKIFIERS, PLASTIC MESH OR NETTING WITH MESH NO LARGER THAN ONE INCH BY ONE INCH SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
  2. NETTING OF THE APPROPRIATE SIZE SHALL BE USED TO ANCHOR WOOD WASTE. OPENINGS OF THE NETTING SHALL NOT BE LARGER THAN THE AVERAGE SIZE OF THE WOOD WASTE CHIPS.
  3. POLYETHYLENE FILM SHALL BE ANCHOR TRENCHED AT THE TOP AS WELL AS INCREMENTALLY AS NECESSARY.

APPLICATION RATE FOR EACH TYPE OF SOIL ENCOUNTERED ON THE SITE.

- MULCHING: MULCHING IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS. MULCHING APPLIED TO SEEDED AREAS SHALL ACHIEVE 75% SOIL COVER. SELECT THE MULCHING MATERIAL FROM THE FOLLOWING AND APPLY AS INDICATED.
1. DRY STRAW OR DRY HAY OF GOOD QUALITY AND FREE OF WEED SEEDS CAN BE USED. DRY STRAW SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE. DRY HAY SHALL BE APPLIED AT A RATE OF 2 1/2 TONS PER ACRE.
  2. WOOD CELLULOSE MULCH OR WOOD PULP FIBER SHALL BE USED WITH HYDRAULIC SEEDING. IT SHALL BE APPLIED AT A RATE OF 500 LBS PER ACRE. DRY STRAW OR DRY HAY SHALL BE APPLIED AFTER HYDRAULIC SEEDING.
  3. ONE THOUSAND POUNDS OF WOOD CELLULOSE OR WOOD PULP FIBER, WHICH INCLUDES A TACKIFIER SHALL BE USED WITH HYDRAULIC SEEDING ON SLOPES GREATER THAN 3/4:1 OR STEEPER.
  4. SERICEA LESPEDEZA HAY CONTAINING MATURE SEED SHALL BE APPLIED AT A RATE OF THREE TONS PER ACRE.
  5. PINE STRAW OR PINE BARK SHALL BE APPLIED AT A THICKNESS OF 3" FOR BEDDING PURPOSES. OTHER SUITABLE MATERIALS IN SUFFICIENT QUANTITIES MAY BE USED WHERE ORNAMENTALS OR OTHER GROUND COVERS ARE PLANTED. THIS IS NOT APPROPRIATE FOR SEEDED AREAS.
  6. WHEN USING TEMPORARY EROSION CONTROL BLANKETS OR BLOCK SOD, MULCHING IS NOT REQUIRED.

MULCHING  
NOT TO SCALE [Ds1]

DS2  
DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)

DEFINITION:  
THE ESTABLISHMENT OF TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDINGS FOR SEASONAL PROTECTION ON DISTURBED OR DENUDED AREAS.

- PURPOSE:
1. TO REDUCE RUNOFF AND SEDIMENT DAMAGE OF DOWN STREAM RESOURCES
  2. TO PROTECT THE SOIL SURFACE FROM EROSION
  3. TO IMPROVE WILDLIFE HABITAT
  4. TO IMPROVE AESTHETICS
  5. TO IMPROVE TILTH, INFILTRATION AND AERATION AS WELL AS ORGANIC MATTER FOR PERMANENT PLANTINGS

REQUIREMENT FOR REGULATORY COMPLIANCE.  
MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTURBANCE. TEMPORARY GRASSING, INSTEAD OF MULCH, CAN BE APPLIED TO ROUGH GRADED AREAS THAT WILL BE EXPOSED FOR LESS THAN SIX MONTHS. IF AN AREA IS EXPECTED TO BE UNDISTURBED FOR LONGER THAN SIX MONTHS, PERMANENT PERENNIAL VEGETATION SHALL BE USED. IF OPTIMUM PLANTING CONDITIONS FOR TEMPORARY GRASSING IS LACKING, MULCH CAN BE USED AS A SINGULAR EROSION CONTROL DEVICE FOR UP TO SIX MONTHS BUT IT SHALL BE APPLIED AT THE APPROPRIATE DEPTH, ANCHORED, AND HAVE A CONTINUOUS 90% COVER OR GREATER OF THE SOIL SURFACE.

CONDITIONS  
TEMPORARY GRASSING, INSTEAD OF MULCH, CAN BE APPLIED TO ROUGH GRADED AREAS THAT WILL BE EXPOSED FOR LESS THAN SIX MONTHS. TEMPORARY VEGETATIVE MEASURES SHOULD BE COORDINATED WITH PERMANENT MEASURES TO ASSURE ECONOMICAL AND EFFECTIVE STABILIZATION. MOST TYPES OF TEMPORARY VEGETATION ARE IDEAL TO USE AS COMPANION CROPS UNTIL THE PERMANENT VEGETATION IS ESTABLISHED.

SPECIFICATIONS  
GRADING AND SHAPING  
EXCESSIVE WATER RUN-OFF SHALL BE REDUCED BY PROPERLY DESIGNED AND INSTALLED EROSION CONTROL PRACTICES SUCH AS CLOSED DRAINS, DITCHES, DIKES, DIVERSIONS, SEDIMENT BARRIERS AND OTHERS. NO SHAPING OR GRADING IS REQUIRED IF SLOPES CAN BE STABILIZED BY HAND-SEEDED VEGETATION OR IF HYDRAULIC SEEDING EQUIPMENT IS TO BE USED.

SEEDBED PREPARATION  
WHEN A HYDRAULIC SEEDER IS USED, SEEDBED PREPARATION IS NOT REQUIRED. WHEN USING CONVENTIONAL OR HANDSEEDING, SEEDBED PREPARATION IS NOT REQUIRED IF THE SOIL MATERIAL IS LOOSE AND NOT SEALED BY RAINFALL. WHEN SOIL HAS BEEN SEALED BY RAINFALL OR CONSISTS OF SMOOTH CUT SLOPES, THE SOIL SHALL BE PITTED, TRENCHED OR OTHERWISE SCARIFIED TO PROVIDE A PLACE FOR SEED TO LODGE AND GERMINATE.

LIME AND FERTILIZER  
AGRICULTURAL LIME IS REQUIRED UNLESS SOIL TESTS INDICATE OTHERWISE. APPLY AGRICULTURAL LIME AT A RATE OF ONE TON PER ACRE. GRADED AREAS REQUIRE LIME APPLICATION. SOILS CAN BE TESTED TO DETERMINE IF FERTILIZER IS NEEDED. ON REASONABLY FERTILE SOILS OR SOIL MATERIAL, FERTILIZER IS NOT REQUIRED. FOR SOILS WITH VERY LOW FERTILITY, 500 TO 700 POUNDS OF 10-10-10 FERTILIZER OR THE EQUIVALENT PER ACRE (12-16 LBS./1,000 SQ. FT.) SHALL BE APPLIED. FERTILIZER SHOULD BE APPLIED BEFORE LAND PREPARATION AND INCORPORATED WITH A DISK, RIPPER OR CHISEL.

SEEDING  
SELECT A GRASS OR GRASS-LEGUME MIXTURE SUITABLE TO THE AREA AND SEASON OF THE YEAR. SEED SHALL BE APPLIED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDRAULIC SEEDER (SLURRY INCLUDING SEED AND FERTILIZER). DRILL OR CULTIPACKER SEEDERS SHOULD NORMALLY PLACE SEED ONE-QUARTER TO ONE-HALF INCH DEEP. APPROPRIATE DEPTH OF PLANTING IS TEN TIMES THE SEED DIAMETER. SOIL SHOULD BE "RAKED" LIGHTLY TO COVER SEED WITH SOIL IF SEED BY HAND.

MULCHING  
TEMPORARY VEGETATION CAN, IN MOST CASES, BE ESTABLISHED WITHOUT THE USE OF MULCH. MULCH WITHOUT SEEDING SHOULD BE CONSIDERED FOR SHORT TERM PROTECTION. REFER TO DS1-DISTURBED AREA STABILIZATION (WITH MULCHING ONLY).

IRRIGATION  
DURING TIMES OF DROUGHT, WATER SHALL BE APPLIED AT A RATE NOT CAUSING RUNOFF AND EROSION. THE SOIL SHALL BE THOROUGHLY WETTED TO A DEPTH THAT WILL INSURE GERMINATION OF THE SEED. SUBSEQUENT APPLICATIONS SHOULD BE MADE WHEN NEEDED.

GRASSING TEMPORARY [Ds2]  
NOT TO SCALE

SEEDING RATES FOR  
TEMPORARY SEEDING.

SPECIES	RATE PER 1,000 SQ.FT.	RATE PER ACRE*	PLANTING DATES**
RYE	3.9 LBS.	3 BU	9/1 - 3/1
RYE GRASS	0.9 LBS.	40 LBS.	8/15 - 4/1
ANNUAL LESPEDEZA	0.9 LBS.	40 LBS.	1/15 -9/15
WEEPING LOVEGRASS	0.1 LBS.	4 LBS.	2/15 - 6/15
SUNDANGRASS	1.4 LBS.	60 LBS.	3/1 - 8/1
BROWN MILLET	0.9 LBS.	40 LBS.	4/1 - 7/15
WHEAT	4.1 LBS.	3 BU	9/15 - 2/1

\* UNUSUAL SITE CONDITIONS MAY REQUIRE HEAVIER SEEDING RATES.  
\*\* SEEDING DATES MAY NEED TO BE ALTERED TO FIT TEMPERATURE VARIATIONS AND CONDITIONS.

DU  
DUST CONTROL ON DISTURBED AREAS

DEFINITION  
CONTROLLING SURFACE AND AIR MOVEMENT OF DUST ON CONSTRUCTION SITES, ROADS, AND DEMOLITION SITES.

CONDITIONS  
THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO SURFACE AND AIR MOVEMENT OF DUST WHERE ON AND OFF-SITE DAMAGE MAY OCCUR WITHOUT TREATMENT.

METHOD AND MATERIALS

- TEMPORARY METHODS
- MULCHES: SEE STANDARD DS1-DISTURBED AREA STABILIZATION (WITH MULCHING ONLY). SYNTHETIC RESINS MAY BE USED INSTEAD OF ASPHALT TO BIND MULCH MATERIAL. REFER TO STANDARD TB-TACKIFIERS AND BINDERS. RESINS SUCH AS CURASOL OR TERRATAK SHOULD BE USED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
  - VEGETATIVE COVER: SEE STANDARD DS2- DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)
  - SPRAY-ON ADHESIVES. THESE ARE USED ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS) KEEP TRAFFIC OFF THESE AREAS. REFER TO STANDARD TB-TACKIFIERS AND BINDERS.
  - TILLAGE. THIS PRACTICE IS DESIGNED TO ROUGHEN AND BRING CLODS TO THE SURFACE. IT IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE WIND EROSION STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.
  - IRRIGATION. THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS WET. REPEAT AS NEEDED.
  - BARRIERS. SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 15 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING WIND EROSION.
  - CALCIUM CHLORIDE. APPLY AT RATE THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.
- PERMANENT METHODS
- PERMANENT VEGETATION. SEE STANDARD DS3-DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION). EXISTING TREES AND LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE.
  - TOPSOILING. THIS ENTAILS COVERING THE SURFACE WITH LESS EROSION SOIL MATERIAL. SEE STANDARD TP-TOPSOILING.
  - STONE. COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL. SEE STANDARD CR-CONSTRUCTION ROAD STABILIZATION.

DUST CONTROL [Du]  
NOT TO SCALE



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DS3  
DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)

DEFINITION  
THE PLANTING OF PERENNIAL VEGETATION SUCH AS TREES, SHRUBS, VINES, GRASSES, OR LEGUMES ON EXPOSED AREAS FOR FINAL PERMANENT STABILIZATION. PERMANENT PERENNIAL VEGETATION SHALL BE USED TO ACHIEVE FINAL STABILIZATION.

CONDITIONS  
PERMANENT PERENNIAL VEGETATION IS USED TO PROVIDE A PROTECTIVE COVER FOR EXPOSED AREAS INCLUDING CUTS, FILLS, DAMS, AND OTHER DENUDED AREAS.

SPECIFICATIONS  
GRADING AND SHAPING  
GRADING AND SHAPING MAY NOT BE REQUIRED WHERE HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS TO BE USED. VERTICAL BANKS SHALL BE SLOPED TO ENABLE PLANT ESTABLISHMENT. WHEN CONVENTIONAL SEEDING AND FERTILIZING ARE TO BE DONE, GRADE AND SHAPE WHERE FEASIBLE AND PRACTICAL, SO THAT EQUIPMENT CAN BE USED SAFELY AND EFFICIENTLY DURING SEEDBED PREPARATION, SEEDING, MULCHING AND MAINTENANCE OF THE VEGETATION.

SEEDBED PREPARATION  
SEEDBED PREPARATION MAY NOT BE REQUIRED WHERE HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS TO BE USED. WHEN CONVENTIONAL SEEDING IS TO BE USED, SEEDBED PREPARATION WILL BE DONE AS FOLLOWS:

- BROADCAST PLANTINGS
1. TILLAGE AT A MINIMUM, SHALL ADEQUATELY LOOSEN THE SOIL TO A DEPTH OF 4 TO 6 INCHES; ALLEVIATE COMPACTION; INCORPORATE LIME AND FERTILIZER; SMOOTH AND FIRM THE SOIL; ALLOW FOR THE PROPER PLACEMENT OF SEED, SPRIGS, OR PLANTS; AND ALLOW FOR THE ANCHORING OF STRAW OR HAY MULCH IF A DISK IS TO BE USED.
  2. TILLAGE MAY BE DONE WITH ANY SUITABLE EQUIPMENT.
  3. TILLAGE SHOULD BE DONE ON THE CONTOUR WHERE FEASIBLE.
  4. ON SLOPES TOO STEEP FOR THE SAFE OPERATION OF TILLAGE EQUIPMENT, THE SOIL SURFACE SHALL BE PITTED OR TRENCHED ACROSS THE SLOPE WITH APPROPRIATE HAND TOOLS TO PROVIDE TWO PLACES 6 TO 8 INCHES APART IN WHICH SEED MAY LODGE AND GERMINATE. HYDRAULIC SEEDING MAY ALSO BE USED.

- INDIVIDUAL PLANTS
1. WHERE INDIVIDUAL PLANTS ARE TO BE SET, THE SOIL SHALL BE PREPARED BY EXCAVATING HOLES, OPENING FURROWS, OR DIBBLE PLANTING.
  2. FOR NURSERY STOCK PLANTS, HOLES SHALL BE LARGE ENOUGH TO ACCOMMODATE ROOTS WITHOUT CROWDING.
  3. WHERE PINE SEEDLINGS ARE TO BE PLANTED, SUBSOIL UNDER THE ROW 36 INCHES DEEP ON THE CONTOUR FOUR TO SIX MONTHS PRIOR TO PLANTING. SUBSOILING SHOULD BE DONE WHEN THE SOIL IS DRY, PREFERABLY IN AUGUST OR SEPTEMBER.

PLANTING  
HYDRAULIC SEEDING  
MIX THE SEED (INCULCATED IF NEEDED), FERTILIZER, AND WOOD CELLULOSE OR WOOD PULP FIBER MULCH WITH WATER AND APPLY IN A SLURRY UNIFORMLY OVER THE AREA TO BE TREATED. APPLY WITHIN ONE HOUR AFTER THE MIXTURE IS MADE.

CONVENTIONAL SEEDING  
SEEDING WILL BE DONE ON A FRESHLY PREPARED AND FIRMED SEEDBED. FOR BROADCAST PLANTING, USE A CULTIPACKER SEEDER, DRILL, ROTARY SEEDER, OR HAND SEEDING TO DISTRIBUTE THE SEED UNIFORMLY OVER THE AREA TO BE TREATED. COVER THE SEED LIGHTLY WITH 1/8 TO 1/4 INCH OF SOIL FOR SMALL SEED AND 1/2 TO 1 INCH FOR LARGE SEED WHEN USING A CULTIPACKER OR OTHER SUITABLE EQUIPMENT.

NO-TILL SEEDING  
NO-TILL SEEDING IS PERMISSIBLE INTO ANNUAL COVER CROPS WHEN PLANTING IS DONE FOLLOWING MATURITY OF THE COVER CROP OR IF THE TEMPORARY COVER STAND IS SPARSE ENOUGH TO ALLOW ADEQUATE GROWTH OF THE PERMANENT (PERENNIAL) SPECIES. NO-TILL SEEDING SHALL BE DONE WITH APPROPRIATE NO-TILL SEEDING EQUIPMENT. THE SEED MUST BE UNIFORMLY DISTRIBUTED AND PLANTED AT THE PROPER DEPTH.

INDIVIDUAL PLANTS

SHRUBS, VINES AND SPRIGS MAY BE PLANTED WITH APPROPRIATE PLANTERS OR HAND TOOLS. PINE TREES SHALL BE PLANTED MANUALLY IN THE SUBSOIL FURROW. EACH PLANT SHALL BE SET IN A MANNER THAT WILL AVOID CROWDING THE ROOTS. NURSERY STOCK PLANTS SHALL BE PLANTED AT THE SAME DEPTH OR SLIGHTLY DEEPER THAN THEY GREW AT THE NURSERY. THE TIPS OF VINES AND SPRIGS MUST BE AT OR SLIGHTLY ABOVE THE GROUND SURFACE. WHERE INDIVIDUAL HOLES ARE DUG, FERTILIZER SHALL BE PLACED IN THE BOTTOM OF THE HOLE, TWO INCHES OF SOIL SHALL BE ADDED AND THE PLANT SHALL BE SET IN THE HOLE.

- MULCHING  
MULCH IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS. MULCH APPLIED TO SEEDED AREAS SHALL ACHIEVE 75% SOIL COVER. SELECT THE MULCHING MATERIAL FROM THE FOLLOWING AND APPLY AS INDICATED.
1. DRY STRAW OR DRY HAY OF GOOD QUALITY AND FREE OF WEED SEEDS CAN BE USED. DRY STRAW SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE. DRY HAY SHALL BE APPLIED AT A RATE OF 2 1/2 TONS PER ACRE.
  2. WOOD CELLULOSE MULCH OR WOOD PULP FIBER SHALL BE USED WITH HYDRAULIC SEEDING. IT SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE. DRY STRAW OR DRY HAY SHALL BE APPLIED (AT THE RATE INDICATED ABOVE) AFTER HYDRAULIC SEEDING.
  3. ONE THOUSAND POUNDS OF WOOD CELLULOSE OR WOOD PULP FIBER, WHICH INCLUDES A TACKIFIER, SHALL BE USED WITH HYDRAULIC SEEDING ON SLOPES 3/4:1 OR STEEPER.
  4. SERICEA LESPEDEZA HAY CONTAINING MATURE SEED SHALL BE APPLIED AT A RATE OF THREE TONS PER ACRE.
  5. PINE STRAW OR PINE BARK SHALL BE APPLIED AT A THICKNESS OF 3 INCHES FOR BEDDING PURPOSES. OTHER SUITABLE MATERIALS IN SUFFICIENT QUANTITY MAY BE USED WHERE ORNAMENTALS OR OTHER GROUND COVERS ARE PLANTED. THIS IS NOT APPROPRIATE FOR SEEDED AREAS.
  6. WHEN USING TEMPORARY EROSION CONTROL BLANKETS OR BLOCK SOD, MULCH IS NOT REQUIRED.
  7. BITUMINOUS TREATED ROVING MAY BE USED ON PLANTED AREAS ON SLOPES, IN DITCHES OR DRY WATERWAYS TO PREVENT EROSION. BITUMINOUS TREATED ROVING SHALL BE APPLIED WITHIN 24 HOURS AFTER AN AREA HAS BEEN PLANTED. APPLICATION RATES AND MATERIALS MUST MEET GEORGIA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.

WOOD CELLULOSE AND WOOD PULP FIBERS SHALL NOT CONTAIN GERMINATION OR GROWTH INHIBITING FACTORS. THEY SHALL BE EVENLY DISPERSED MULCH WHEN AGITATED IN WATER. THE FIBERS SHALL CONTAIN A DYE TO ALLOW VISUAL METERING AND AID IN UNIFORM APPLICATION DURING SEEDING.

APPLYING MULCH  
STRAW OR HAY MULCH WILL BE SPREAD UNIFORMLY WITHIN 24 HOURS AFTER SEEDING AND/OR PLANTING THE MULCH MAY BE SPREAD BY BLOWER-TYPE SPREADING EQUIPMENT, OTHER SPREADING EQUIPMENT OR BY HAND. MULCH SHALL BE APPLIED TO COVER 75% OF THE SOIL SURFACE.  
WOOD CELLULOSE OR WOOD FIBER MULCH SHALL BE APPLIED UNIFORMLY WITH HYDRAULIC SEEDING EQUIPMENT.

ANCHORING MULCH  
ANCHOR STRAW OR HAY MULCH IMMEDIATELY AFTER APPLICATION BY ONE OF THE FOLLOWING METHODS:

1. EMULSIFIED ASPHALT CAN BE (A) SPRAYED UNIFORMLY ONTO THE MULCH AS IT IS EJECTED FROM THE BLOWER MACHINE OR (B) SPRAYED ON THE MULCH IMMEDIATELY FOLLOWING MULCH APPLICATION WHEN STRAW OR HAY IS SPREAD BY METHODS OTHER THAN SPECIAL BLOWER EQUIPMENT.

THE COMBINATION F ASPHALT EMULSION AND WATER SHALL CONSIST OF A HOMOGENEOUS MIXTURE SATISFACTORY FOR SPRAYING. THE MIXTURE SHALL CONSIST OF 100 GALLONS OF GRADE SS-1H OR CSS-1H EMULSIFIED ASPHALT AND 100 GALLONS OF WATER PER TON OF MULCH.  
CARE SHALL BE TAKEN AT ALL TIMES TO PROTECT STATE WATERS, THE PUBLIC, ADJACENT PROPERTY, PAVEMENTS, CURBS, SIDEWALKS, AND ALL OTHER STRUCTURES FROM ASPHALT DISCOLORATION.

2. HAY AND STRAW MULCH SHALL BE PRESSED INTO THE SOIL IMMEDIATELY AFTER THE MULCH IS SPREAD, A SPECIAL "PACKER DISK" OR DISK HARROW WITH THE DISKS SET STRAIGHT MAY BE USED. THE DISKS MAY BE SMOOTH OR SERRATED AND SHOULD BE 20 INCHES OR MORE IN DIAMETER AND 8 TO 12 INCHES APART. THE EDGES OF THE DISKS SHALL BE DULL ENOUGH TO PRESS THE MULCH INTO THE GROUND WITHOUT CUTTING IT, LEAVING MUCH OF IT IN AN ERECT POSITION. MULCH SHALL NOT BE PLOWED INTO THE GROUND.
3. SYNTHETIC TACKIFIERS OR BINDERS APPROVED BY GDOT SHALL BE APPLIED IN CONJUNCTION WITH OR IMMEDIATELY AFTER THE MULCH IS SPREAD. SYNTHETIC TACKIFIERS SHALL BE MIXED AND APPLIED ACCORDING TO MANUFACTURER'S SPECIFICATIONS. REFER TO TB-TACKIFIERS AND BINDERS.
4. RYE OR WHEAT CAN BE INCLUDED WITH FALL AND WINTER PLANTINGS TO STABILIZE THE MULCH. THEY SHALL BE APPLIED AT A RATE OF ONE-QUARTER TO ONE HALF BUSHEL PER ACRE.
5. PLASTIC MESH OR NETTING WITH MESH NO LARGER THAN ONE INCH BY ONE INCH MAY BE NEEDED TO ANCHOR STRAW OR HAY MULCH ON UNSTABLE SOILS AND CONCENTRATED FLOW AREAS. THESE MATERIALS SHALL BE INSTALLED AND ANCHORED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.

IRRIGATION  
IRRIGATION SHALL BE APPLIED AT A RATE THAT WILL NOT CAUSE RUNOFF.

GRASSING PERMANENT [Ds3]  
NOT TO SCALE

TABLE 6-5.1 FERTILIZER REQUIREMENTS

TYPE OF SPECIES	YEAR	ANALYSIS FOR EQUIVALENT N-P-K	RATE	N TOP DRESSING RATE
1. COOL SEASON GRASSES	FIRST	6-12-12	1500 LBS./AC.	50-100 LBS./AC. 1/2/
	SECOND MAINTENANCE	6-12-12 10-10-10	1000 LBS./AC. 400 LBS./AC.	30
2. COOL SEASON GRASSES AND LEGUMES	FIRST	6-12-12	1500 LBS./AC.	0-50 LBS./AC. 1/
	SECOND MAINTENANCE	0-10-10 0-10-10	1000 LBS./AC. 400 LBS./AC.	-
3. GROUND COVERS	FIRST	10-10-10	1300 LBS./AC.	-
	SECOND MAINTENANCE	0-10-10 10-10-10	1000 LBS./AC. 1100 LBS./AC.	-
4. PINE SEEDLINGS	FIRST	0-10-10	ONE 21-GRAM PELLET PER SEEDING PLACED IN THE CLOSING HOLE	-
	SECOND MAINTENANCE	20-10-6	700 LBS./AC.	-
5. SHRUB LESPEDEZA	FIRST	0-10-10	700 LBS./AC.4/	-
	SECOND MAINTENANCE	0-10-10	400 LBS./AC.	-
6. TEMPORARY COVER CROPS SEEDED ALONE	FIRST	10/10/2010	500 LBS./AC.	30 LB./ACRE/ 5/
7. WARM SEASON GRASSES	FIRST	6-12-12	1500 LBS./AC.	50-100 LBS./AC. 2/6/
	SECOND MAINTENANCE	6-12-12 10-10-10	1000 LBS./AC. 400 LBS./AC.	50-100 LBS./AC. 2/
8. WARM SEASON GRASSES AND LEGUMES	FIRST	6-12-12	1500 LBS./AC.	50 LBS./AC./6/
	SECOND MAINTENANCE	0-10-10 0-10-10	1000 LBS./AC. 400 LBS./AC.	-

- 1/ APPLY IN SPRING FOLLOWING SEEDING.
- 2/ APPLY IN SPLIT APPLICATIONS WHEN HIGH RATES ARE USED.
- 3/ APPLY IN 3 SPLIT APPLICATIONS.
- 4/ APPLY WHEN PLANTS ARE PRUNED.
- 5/ APPLY TO GRASS SPECIES ONLY.
- 6/ APPLY WHEN PLANTS GROW TO A HEIGHT OF 2 TO 4 INCHES.

FOR BEST RESULTS TAKE AT LEAST ONE SAMPLE OF SOIL TO THE COUNTY EXTENSION AGENT FOR ANALYSIS TO DETERMINE THE BEST FERTILIZER

1. DRY STRAW OR DRY HAY OF GOOD QUALITY AND FREE OF WEED SEEDS CAN BE USED. DRY STRAW SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE. DRY HAY SHALL BE APPLIED AT A RATE OF 2 1/2 TONS PER ACRE.
2. WOOD CELLULOSE MULCH OR WOOD PULP FIBER SHALL BE USED WITH HYDRAULIC SEEDING. IT SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE. DRY STRAW OR DRY HAY SHALL BE APPLIED (AT THE RATE INDICATED ABOVE) AFTER HYDRAULIC SEEDING.
3. ONE THOUSAND POUNDS OF WOOD CELLULOSE OR WOOD PULP FIBER, WHICH INCLUDES A TACKIFIER, SHALL BE USED WITH HYDRAULIC SEEDING ON SLOPES 3/4:1 OR STEEPER.
4. SERICEA LESPEDEZA HAY CONTAINING MATURE SEED SHALL BE APPLIED AT A RATE OF THREE TONS PER ACRE.
5. PINE STRAW OR PINE BARK SHALL BE APPLIED AT A THICKNESS OF 3 INCHES FOR BEDDING PURPOSES. OTHER SUITABLE MATERIALS IN SUFFICIENT QUANTITY MAY BE USED WHERE ORNAMENTALS OR OTHER GROUND COVERS ARE PLANTED. THIS IS NOT APPROPRIATE FOR SEEDED AREAS. 6. WHEN USING TEMPORARY EROSION CONTROL BLANKETS OR BLOCK SOD, MULCH IS NOT REQUIRED

AGRICULTURAL LIME IS REQUIRED UNLESS SOIL TESTS INDICATE OTHERWISE. APPLY AGRICULTURAL LIME AT A RATE OF ONE TON PER ACRE. GRADED AREAS REQUIRE LIME APPLICATION. SOILS CAN BE TESTED TO DETERMINE IF FERTILIZER IS NEEDED. ON REASONABLY FERTILE SOILS OR SOIL MATERIAL, FERTILIZER IS NOT REQUIRED. FOR SOILS WITH VERY LOW FERTILITY, 500 TO 700 POUNDS OF 10-10-10 FERTILIZER OR THE EQUIVALENT PER ACRE (12-16 LBS./1,000 SQ. FT.) SHALL BE APPLIED. FERTILIZER SHOULD BE APPLIED BEFORE LAND PREPARATION AND INCORPORATED WITH A DISK, RIPPER OR CHISEL.

SITE DEVELOPMENT PLAN  
PICKLEBALL COURTS  
LIBERTY INDEPENDENT TROOP PARK

TAX PARCEL 070A02 - CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA

SHEET NAME:  
EROSION CONTROL  
DETAILS

- REVISIONS:
- 1.
  - 2.
  - 3.
  - 4.
  - 5.
  - 6.
  - 7.
  - 8.
  - 9.
  - 10.

INITIAL DATE: 05/31/2024  
DRAWN BY: HFGD  
CHECKED BY: TRL  
PROJECT #: 2024-40

SHEET NUMBER:

C7.6

Drawing File: C:\ACTIVE PROJECTS\2024-40 H - Liberty Independent Troop Park Pickle Ball\00-DRAWINGS\DWG\2024-40.dwg  
 Plotted Date: Jul 19, 2024 - 11:40am

**CONCRETE WASHOUT AREA**  
 PURPOSE - PREVENT OR REDUCE THE DISCHARGE OF POLLUTANTS TO STORM WATER FROM CONCRETE WASTE BY CONDUCTING WASHOUT OFFSITE, OR PERFORMING ONSITE WASHOUT IN A DESIGNATED AREA TO PREVENT POLLUTANTS FROM ENTERING SURFACE WATERS OR GROUNDWATER.

CONDITIONS OF USE - CONCRETE WASHOUT AREA BEST MANAGEMENT PRACTICES ARE IMPLEMENTED ON CONSTRUCTION PROJECTS WHERE:

- CONCRETE IS USED AS A CONSTRUCTION MATERIAL.
- IT IS NOT POSSIBLE TO DISPOSE OF ALL CONCRETE WASTEWATER AND WASHOUT OFFSITE (READY MIX PLANT, ETC.).
- CONCRETE TRUCKS, PUMPER, OR OTHER CONCRETE COATED EQUIPMENT ARE WASHED ONSITE.

**DESIGN AND INSTALLATION SPECIFICATIONS**

IMPLEMENTATION - THE FOLLOWING STEPS WILL HELP REDUCE STORMWATER POLLUTION FROM CONCRETE WASTES:

- PERFORM WASHOUT OF CONCRETE TRUCKS OFFSITE OR IN DESIGNATED CONCRETE WASHOUT AREAS ONLY.
- DO NOT WASH OUT CONCRETE TRUCKS ONTO THE GROUND, OR INTO STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS.
- DO NOT ALLOW EXCESS CONCRETE TO BE DUMPED ONSITE, EXCEPT IN DESIGNATED CONCRETE WASHOUT AREAS.
- CONCRETE WASHOUT AREAS MAY BE PREFABRICATED CONCRETE WASHOUT CONTAINERS, OR SELF-INSTALLED STRUCTURES (ABOVE-GRADE OR BELOW-GRADE).
- PREFABRICATED CONTAINERS ARE MOST RESISTANT TO DAMAGE AND PROTECT AGAINST SPILLS AND LEAKS. COMPANIES MAY OFFER DELIVERY SERVICE AND PROVIDE REGULAR MAINTENANCE AND DISPOSAL OF SOLID AND LIQUID WASTE.
- IF SELF-INSTALLED CONCRETE WASHOUT AREAS ARE USED, BELOW-GRADE STRUCTURES ARE PREFERRED OVER ABOVE-GRADE STRUCTURES BECAUSE THEY ARE LESS PRONE TO SPILLS AND LEAKS.
- SELF-INSTALLED ABOVE-GRADE STRUCTURES SHOULD ONLY BE USED IF EXCAVATION IS NOT PRACTICAL.

EDUCATION - THE FOLLOWING EDUCATION PROCEDURES ARE RECOMMENDED:

- DISCUSS THE CONCRETE MANAGEMENT TECHNIQUES DESCRIBED IN THIS BEST MANAGEMENT PRACTICE WITH THE READY-MIX CONCRETE SUPPLIER BEFORE ANY DELIVERIES ARE MADE.
- EDUCATE EMPLOYEES AND SUBCONTRACTORS ON THE CONCRETE WASTE MANAGEMENT TECHNIQUES DESCRIBED IN THIS SECTION.
- ARRANGE FOR CONTRACTOR'S SUPERINTENDENT OR LEVEL 1A CERTIFIED PERSONNEL TO OVERSEE AND ENFORCE CONCRETE WASTE MANAGEMENT PROCEDURES.
- A SIGN SHOULD BE INSTALLED ADJACENT TO EACH TEMPORARY CONCRETE WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES.

CONTRACTS - INCORPORATE REQUIREMENTS FOR CONCRETE WASTE MANAGEMENT INTO CONCRETE SUPPLIER AND SUBCONTRACTOR AGREEMENTS.

LOCATION AND PLACEMENT - THE FOLLOWING GUIDELINES SHALL BE USED WHEN LOCATING AND PLACING THE CONCRETE WASH-OUT AREA:

- LOCATE WASHOUT AREA AT LEAST 50 FEET FROM SENSITIVE AREAS SUCH AS STORM DRAINS, OPEN DITCHES, OR WATER BODIES, INCLUDING WETLANDS.
- ALLOW CONVENIENT ACCESS FOR CONCRETE TRUCKS, PREFERABLY NEAR THE AREA WHERE THE CONCRETE IS BEING POURED.
- IF TRUCKS NEED TO LEAVE A PAVED AREA TO ACCESS WASHOUT, PREVENT TRACK-OUT WITH A CONSTRUCTION EXIT.
- THE NUMBER OF FACILITIES YOU INSTALL SHOULD DEPEND ON THE EXPECTED DEMAND FOR STORAGE CAPACITY.
- ON LARGE SITES WITH EXTENSIVE CONCRETE WORK, WASHOUTS SHOULD BE PLACED IN MULTIPLE LOCATIONS FOR EASE OF USE BY CONCRETE TRUCK DRIVERS.

ONSITE TEMPORARY CONCRETE WASHOUT FACILITY, TRANSIT TRUCK WASHOUT PROCEDURES:

- TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE LOCATED A MINIMUM OF 50 FT. FROM SENSITIVE AREAS INCLUDING STORM DRAIN INLETS, OPEN DRAINAGE FACILITIES, AND WATERCOURSES.
- CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
- APPROXIMATELY 7 GALLONS OF WASH WATER ARE USED TO WASH ONE TRUCK CHUTE.
- APPROXIMATELY 50 GALLONS ARE USED TO WASH OUT THE HOPPER OF A CONCRETE PUMP TRUCK.
- WASHOUT OF CONCRETE TRUCKS SHALL BE PERFORMED IN DESIGNATED AREAS ONLY.
- CONCRETE WASHOUT FROM CONCRETE PUMPER BINS CAN BE WASHED INTO CONCRETE PUMPER TRUCKS AND DISCHARGED INTO DESIGNATED WASHOUT AREA OR PROPERLY DISPOSED OF OFFSITE.
- ONCE CONCRETE WASTES ARE WASHED INTO THE DESIGNATED AREA AND ALLOWED TO HARDEN, THE CONCRETE SHOULD BE BROKEN UP, REMOVED, AND DISPOSED OF PER APPLICABLE SOLID WASTE REGULATIONS. DISPOSE OF HARDENED CONCRETE ON A REGULAR BASIS.

TEMPORARY ABOVE-GRADE CONCRETE WASHOUT FACILITY

- TEMPORARY CONCRETE WASHOUT FACILITY (TYPE ABOVE GRADE) SHOULD BE CONSTRUCTED AS SHOWN ON THE DETAILS WITH A RECOMMENDED MINIMUM LENGTH AND MINIMUM WIDTH OF 10 FT., BUT WITH SUFFICIENT QUANTITY AND VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
- PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.

TEMPORARY BELOW-GRADE CONCRETE WASHOUT FACILITY

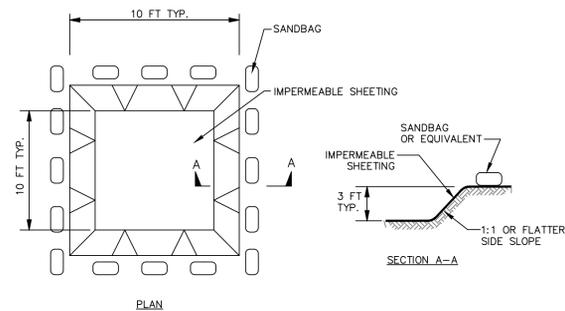
- TEMPORARY CONCRETE WASHOUT FACILITIES (TYPE BELOW GRADE) SHOULD BE CONSTRUCTED WITH A RECOMMENDED MINIMUM LENGTH AND MINIMUM WIDTH OF 10 FT. THE QUANTITY AND VOLUME SHOULD BE SUFFICIENT TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
- PLASTIC LINING MATERIAL SHALL BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.
- LINER SEAMS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
- SOIL BASE SHALL BE PREPARED FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE PLASTIC LINING MATERIAL.

INSPECTION AND MAINTENANCE

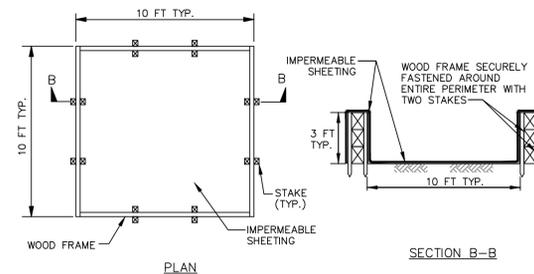
- INSPECT AND VERIFY THAT CONCRETE WASHOUT BMPs ARE IN PLACE PRIOR TO THE COMMENCEMENT OF CONCRETE WORK.
- DURING PERIODS OF CONCRETE WORK, INSPECT DAILY TO VERIFY CONTINUED PERFORMANCE.
- CHECK OVERALL CONDITION AND PERFORMANCE.
- CHECK REMAINING CAPACITY (% FULL).
- IF USING SELF-INSTALLED WASHOUT FACILITIES, VERIFY PLASTIC LINERS ARE INTACT AND SIDEWALLS ARE NOT DAMAGED.
- IF USING PREFABRICATED CONTAINERS, CHECK FOR LEAKS.
- WASHOUT FACILITIES SHALL BE MAINTAINED TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM FREEBOARD OF 12 INCHES.
- WASHOUT FACILITIES MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL.
- IF THE WASHOUT IS NEARING CAPACITY, VACUUM AND DISPOSE OF THE WASTE MATERIAL IN AN APPROVED MANNER.
- DO NOT DISCHARGE LIQUID OR SLURRY TO WATERWAYS, STORM DRAINS OR DIRECTLY ONTO GROUND.
- DO NOT USE SANITARY SEWER WITHOUT LOCAL APPROVAL.
- PLACE A SECURE, NON-COLLAPSING, NON-WATER COLLECTING COVER OVER THE CONCRETE WASHOUT FACILITY PRIOR TO PREDICTED WET WEATHER TO PREVENT ACCUMULATION AND OVERFLOW OF PRECIPITATION.
- REMOVE AND DISPOSE OF HARDENED CONCRETE AND RETURN THE STRUCTURE TO A FUNCTIONAL CONDITION. CONCRETE MAY BE REUSED ONSITE OR HAULED AWAY FOR DISPOSAL OR RECYCLING.
- WHEN YOU REMOVE MATERIALS FROM THE SELF-INSTALLED CONCRETE WASHOUT, BUILD A NEW STRUCTURE; OR, IF THE PREVIOUS STRUCTURE IS STILL INTACT, INSPECT FOR SIGNS OF WEAKENING OR DAMAGE, AND MAKE ANY NECESSARY REPAIRS. RE-LINE THE STRUCTURE WITH NEW PLASTIC AFTER EACH CLEANING.

REMOVAL OF TEMPORARY CONCRETE WASHOUT FACILITIES

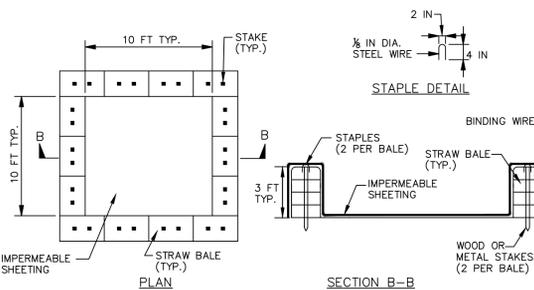
- WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR THE WORK, THE HARDENED CONCRETE, SLURRIES AND LIQUIDS SHALL BE REMOVED AND PROPERLY DISPOSED OF.
- MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF OR RECYCLED.
- HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED, REPAIRED, AND STABILIZED TO PREVENT EROSION.



EXCAVATED WASHOUT STRUCTURE



WASHOUT STRUCTURE WITH WOOD PLANKS



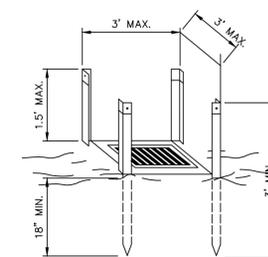
WASHOUT STRUCTURE WITH STRAW BALES

**CONSTRUCTION SPECIFICATIONS**

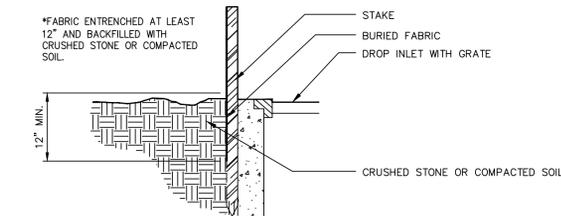
1. LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC.
2. SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS AND MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
3. PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
4. PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.
5. KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGED (E.G., RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL, AND DISPOSE OF ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER. WET-VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER. PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.

NOTE: WASHOUT OF THE CONCRETE TRUCK DRUM AT THE CONSTRUCTION SITE IS PROHIBITED.

CONCRETE WASHDOWN AREA DETAIL (CSW) NOT TO SCALE



- NOTES :
1. DESIGN IS FOR SLOPES NO GREATER THAN 5% (NOT DESIGNED FOR CONCENTRATED FLOWS).
  2. THE STEEL POSTS SUPPORTING THE SILT FENCE MATERIAL SHOULD BE SPACED EVENLY AROUND THE PERIMETER OF THE INLET (MAXIMUM OF 3' APART).
  3. THE STEEL POSTS SHOULD BE SECURELY DRIVEN AT LEAST 18" DEEP.
  4. THE FABRIC SHOULD BE ENTRENCHED AT LEAST 12" AND THEN BACKFILLED WITH CRUSHED STONE OR COMPACTED SOIL.



FABRIC AND SUPPORTING FRAME FOR INLET PROTECTION (Sd2-F) NOT TO SCALE



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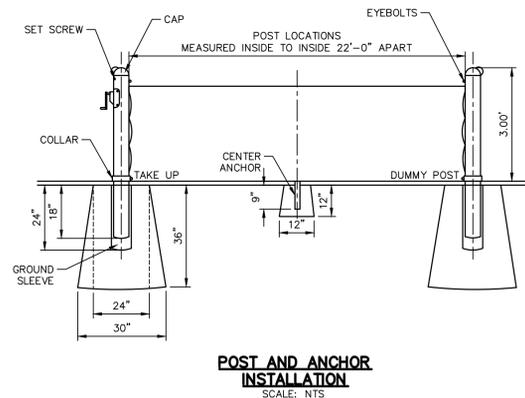
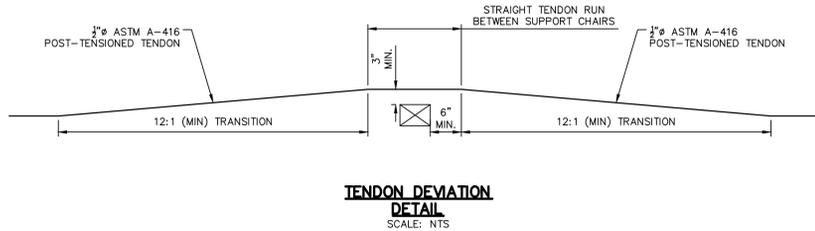
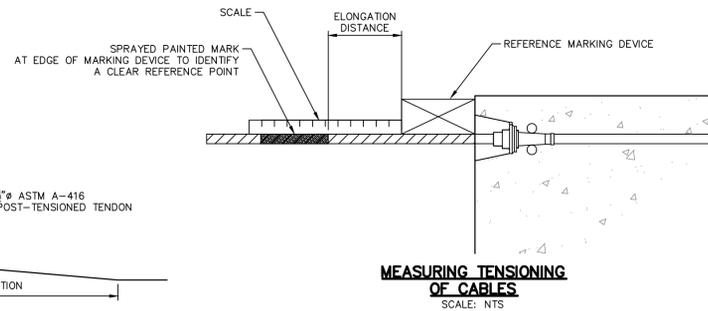
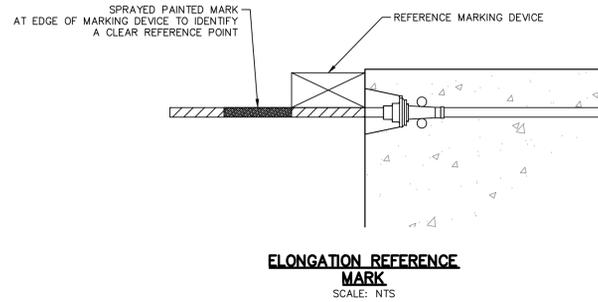
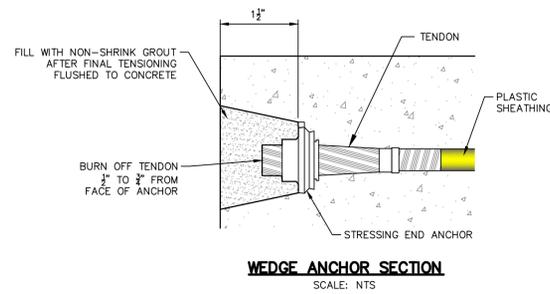
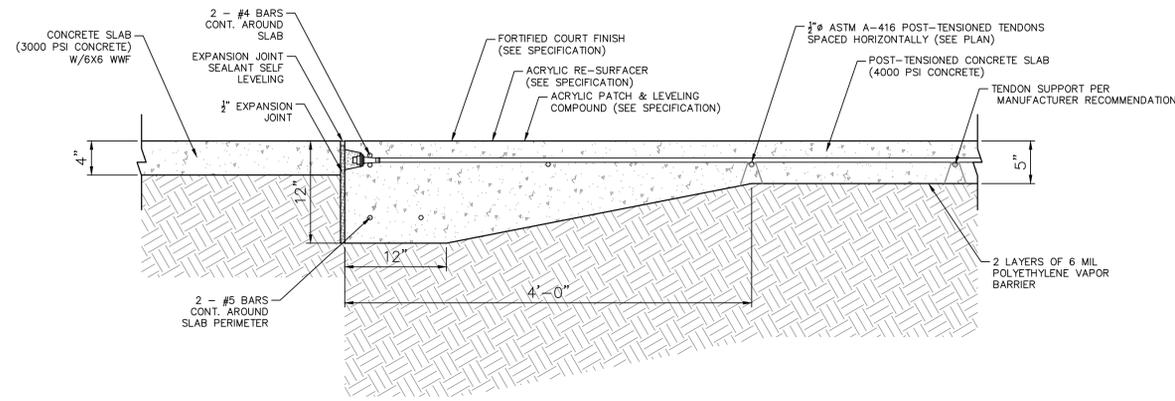
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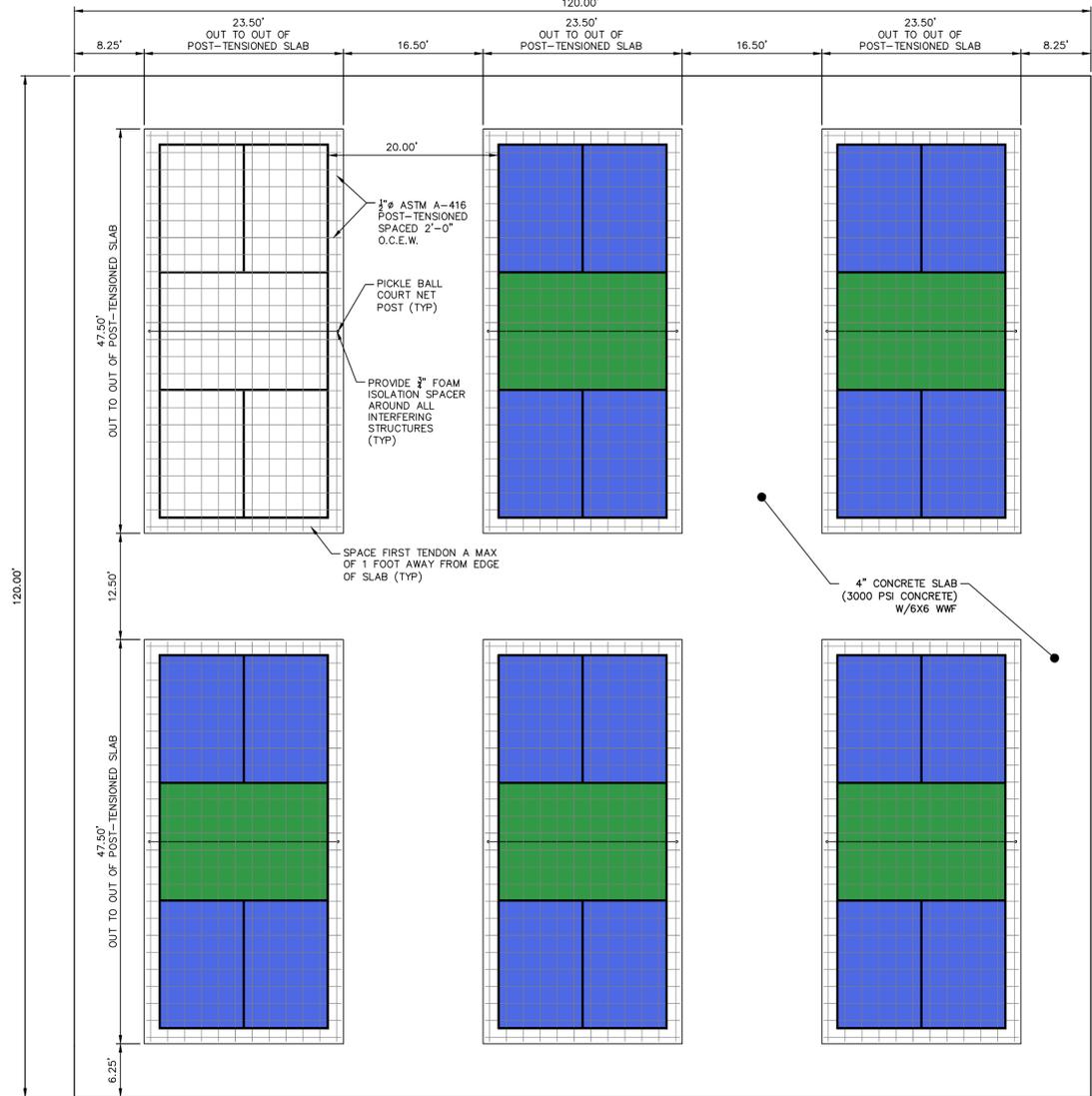
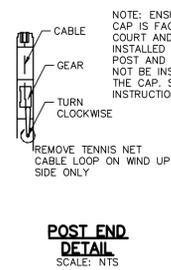
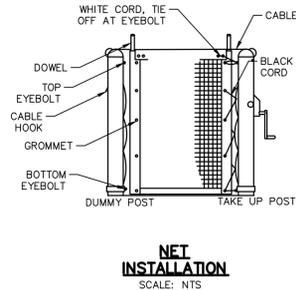


SITE DEVELOPMENT PLAN  
 PICKLEBALL COURTS  
 LIBERTY INDEPENDENT TROOP PARK

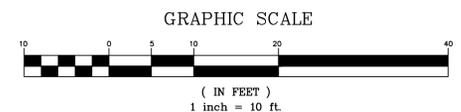
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SHEET NUMBER: <b>C7.7</b>	



- PICKLE BALL COURT APPURTENANCES NOTES:**
- CONTRACTOR SHALL CONSULT MANUFACTURER FOR RECOMMENDED INSTALLATION OF NEW POSTS AND SHALL CONSULT WITH ENGINEER ON VARIATIONS FROM DETAIL.
  - VERTICAL AND HORIZONTAL LOCATIONS OF NET POSTS ON COURT SURFACES SHALL BE IN ACCORDANCE WITH THE INTERNATIONAL FEDERATION OF PICKLE BALL (IFP) OFFICIAL TOURNAMENT RULE BOOK.
  - NET BODY SHALL BE COMPOSED OF BRAIDED, SOLID-CORE BLACK POLYETHYLENE WITH UV RESISTANT TREATMENT AND HEAT-SET KNOTS.
  - NET HEADBAND SHALL BE POLYESTER CANVAS LOCK STITCHED WITH WHITE POLYESTER THREAD.



- POST-TENSIONED PLAN NOTES:**
- STRUCTURAL FILL SHALL BE COMPACTED TO 98% MAXIMUM STANDARD PROCTOR DENSITY.
  - POST-TENSIONING TENDONS SHALL BE 3/8" GRADE 270 KSI SINGLE-STRANDED UN-BONDED TENDONS WITH WEDGE TYPE ANCHORING SYSTEMS.
  - POST-TENSIONING TENDONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-416 AND FINAL TENDON ASSEMBLY SHALL CONFORM TO THE POST-TENSIONING INSTITUTE'S (PTI) SPECIFICATION FOR UN-BONDED SINGLE STRAND TENDONS.
  - TENDONS SHALL BE STRAIGHT, UNIFORMLY SPACED, AND INSTALLED PER MANUFACTURER RECOMMENDATIONS.
  - TENDONS SHALL BE PROPERLY SUPPORTED OR CHAIRED IN THE MIDDLE OF THE SLAB AND SHOULD BE SECURED TO MAINTAIN THEIR HORIZONTAL AND VERTICAL POSITIONS DURING THE PLACEMENT OF THE CONCRETE.
  - SLAB CONCRETE SHALL BE TYPE 1 WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI. THE CONTRACTOR SHALL SUBMIT A CONCRETE MIX DESIGN, INCLUDING PROJECTED CURE RATE FROM 0 TO 28 DAYS, TO THE ENGINEER A LEAST ONE WEEK PRIOR TO PLACING THE SLAB.
  - THE CONCRETE MIX DESIGN SHALL BE SELECTED TO MINIMIZE EARLY CURING AND SHRINKAGE CRACKING THAT MAY FORM PRIOR TO TENDON STRESSING.
  - THE CONTRACTOR SHALL PROVIDE THE MEANS TO PREVENT CONCRETE FROM SPLATTERING ON THE POST.
  - POST-TENSIONED SLAB SHALL BE PLACED IN INDIVIDUAL, CONTINUOUS POURS (NO CONSTRUCTION JOINTS SHALL BE ALLOWED IN THE FIELD).
  - SLAB STRESSING SHALL OCCUR AT A CONCRETE STRENGTH OF 1,700 PSI OR GREATER. CONTRACTOR MAY CONSIDER TENSIONING UP TO 50% OF THE MAXIMUM ULTIMATE TENSILE STRENGTH 24 HOURS AFTER PLACEMENT OF CONCRETE.
  - TENDONS SHALL BE TEMPORARILY STRESSED TO 80% OF THEIR MINIMUM ULTIMATE TENSILE STRENGTH TO OVERCOME FRICTION AND TO ENABLE WEDGE SEATING. FINAL TENDON ELONGATION SHALL BE SHOWN IN THE DRAWINGS.
  - CLOSURE STRIPS AND MOM STRIPS SHALL NOT BE PLACED UNTIL SHORTENING IN THE POST-TENSIONED SLAB HAS OCCURRED.
  - ALL CONSTRUCTION-PHASE HARDWARE WHICH MAY CAUSE RESTRAINT TO SHORTENING IN THE SLAB, INCLUDING PINS HOLDING SCREED CUPS, SHALL BE REMOVED FROM THE SLAB BEFORE SET OCCURS.
  - CONTRACTOR SHALL PLACE ASTM C171 POLYETHYLENE SHEETING OVER SLAB FOR MOISTURE LOSS AND REFLECTIVE CONTROL DURING SLAB CURE.



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**SITE DEVELOPMENT PLAN**  
**PICKLEBALL COURTS**  
**LIBERTY INDEPENDENT TROOP PARK**

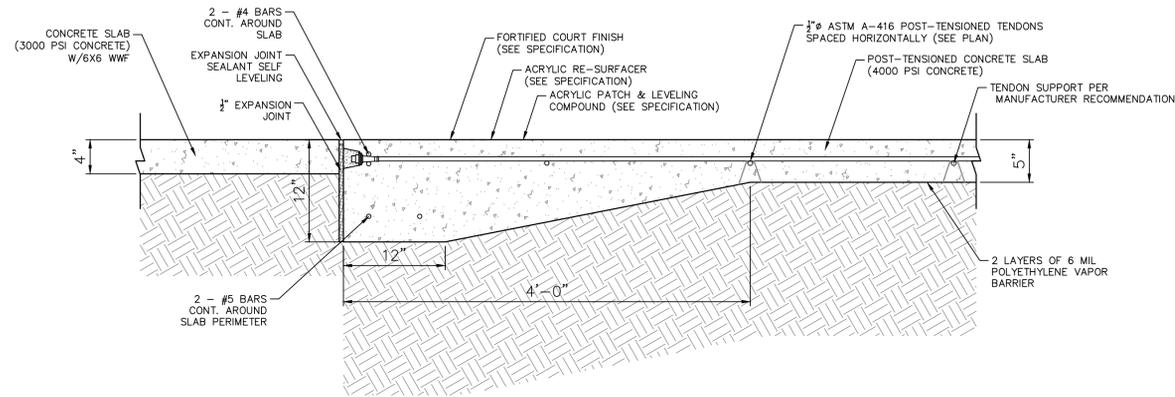
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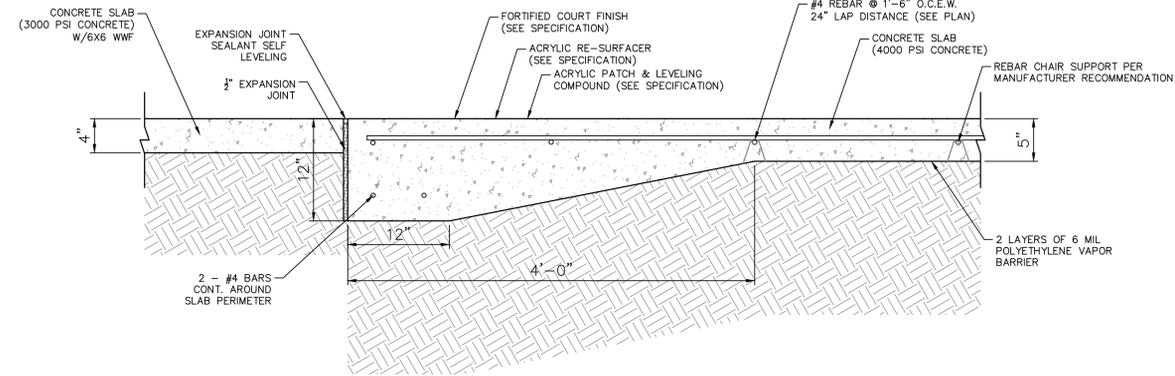
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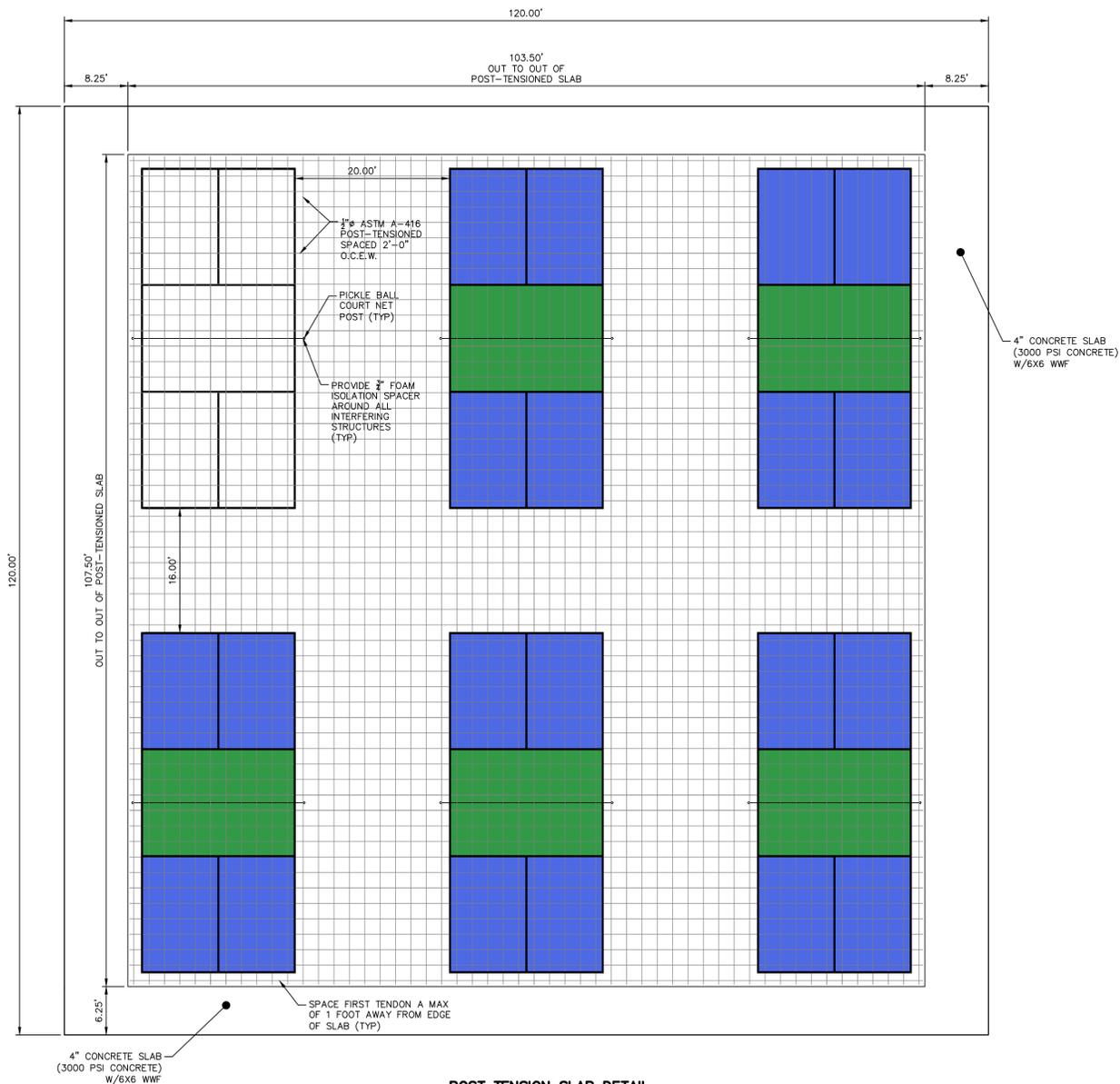
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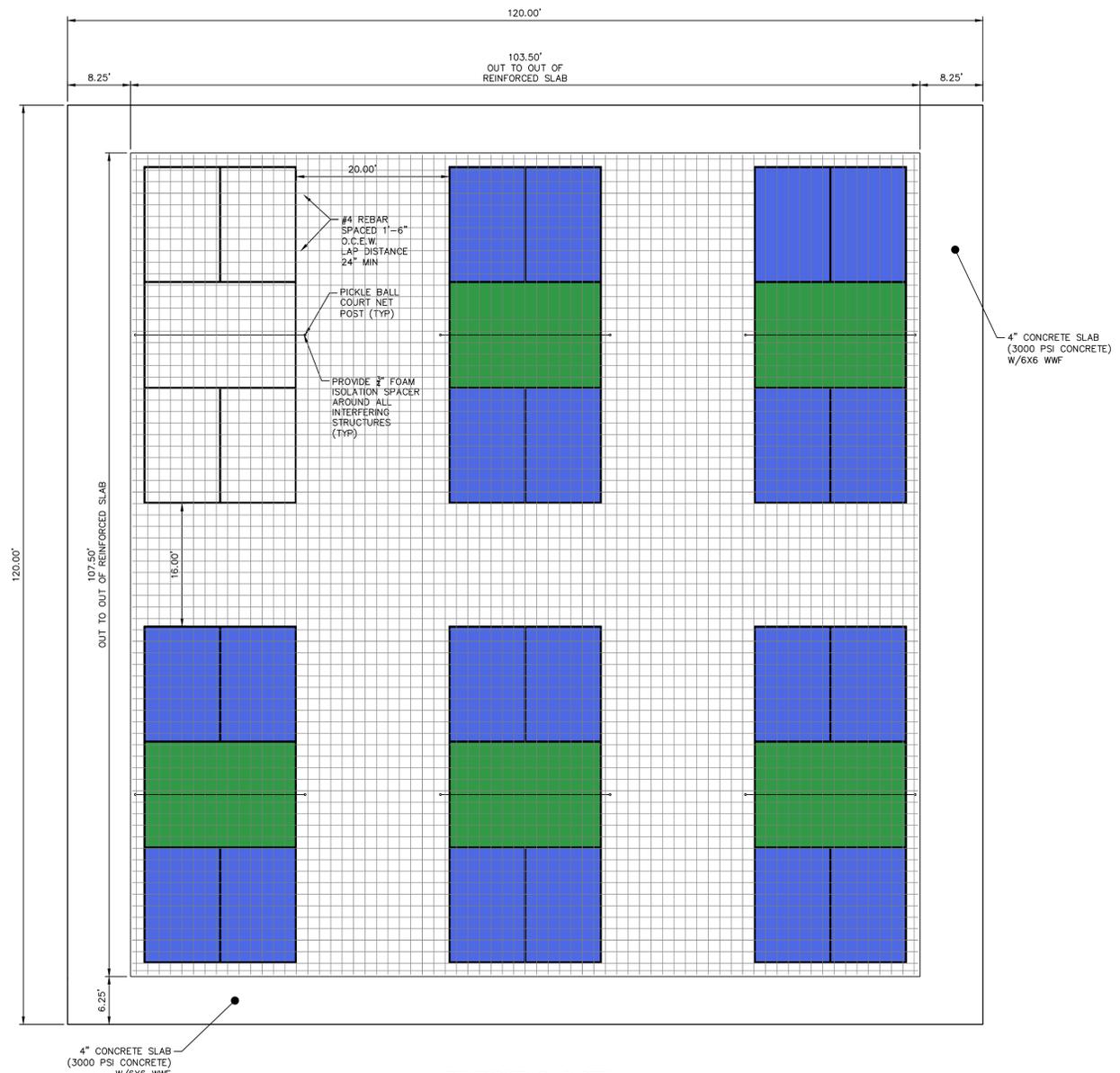
**POST TENSION SLAB DETAIL**  
SCALE: NTS



**REINFORCED SLAB DETAIL**  
SCALE: NTS



**POST TENSION SLAB DETAIL**  
**OPTION B**  
SCALE: NTS



**REINFORCED SLAB DETAIL**  
**OPTION C**  
SCALE: NTS



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**SITE DEVELOPMENT PLAN**  
**PICKLEBALL COURTS**  
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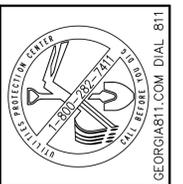
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PROJECT #: 2024-40

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Drawing File: C:\ACTIVE PROJECTS\2024-40 H - Liberty Independent Troop Park Pickle Ball\000-DRAWINGS\DWG\2024-40.dwg  
Plotted Date: Jul 19, 2024 - 11:40am



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SITE DEVELOPMENT PLAN  
PICKLEBALL COURTS  
LIBERTY INDEPENDENT TROOP PARK

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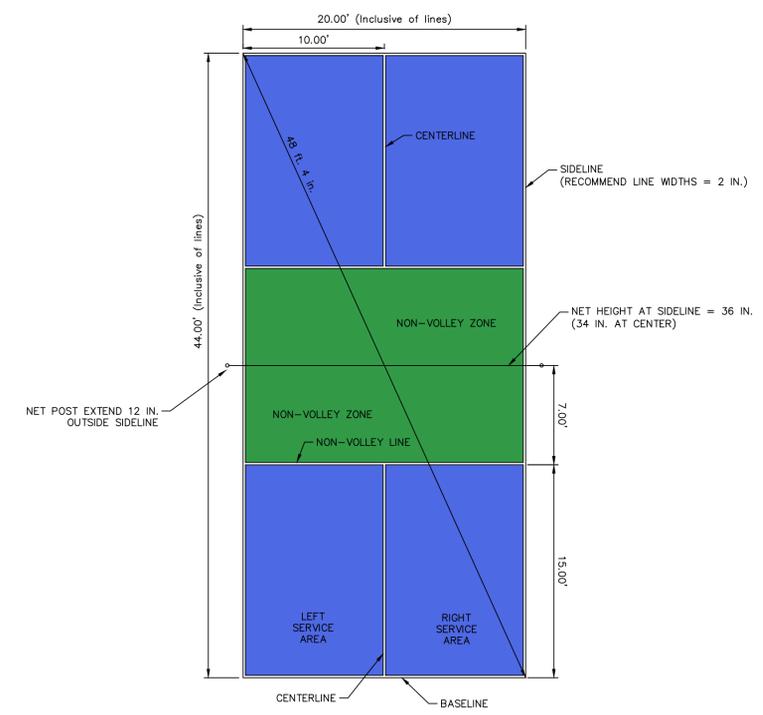
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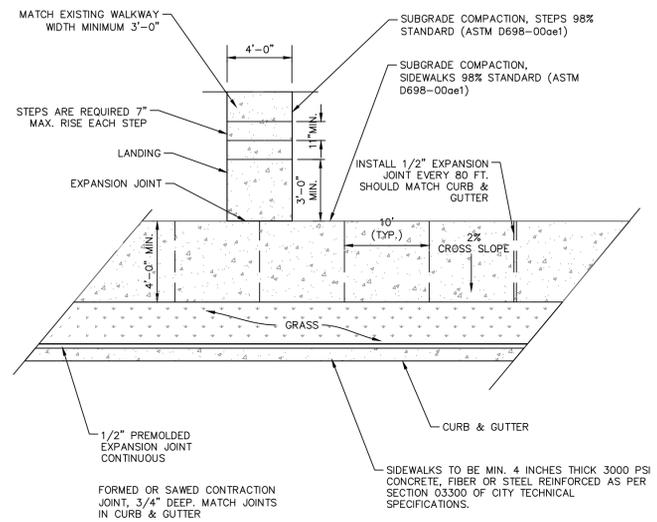
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PROJECT #: 2024-40

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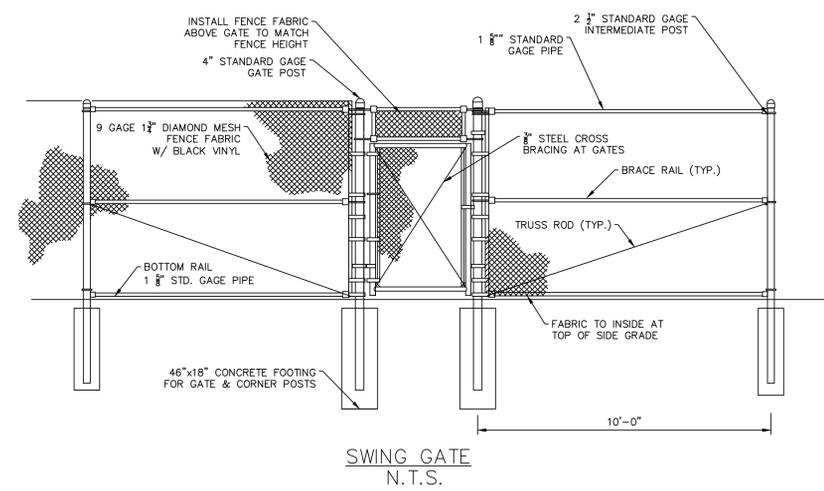
- LINE TOLERANCES:
- NET LINE TO OUTSIDE OF NVZ LINE: 7' +/- 1/8"
  - NET LINE TO OUTSIDE OF BASELINE: 22' +/- 1/4"
  - OUTSIDE SIDELINE TO OUTSIDE SIDELINE: 20' +/- 1/4"
  - OUTSIDE SIDELINE TO CENTERLINE: 10' +/- 1/8"
  - DIAGONAL DIMENSION TO OUTSIDE OF LINES: 48' 4" +/- 3/4"

PICKLEBALL COURT DIMENSIONS  
N.T.S.

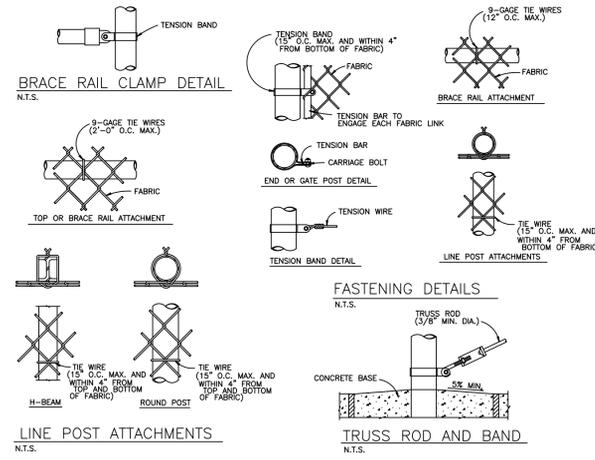


- NOTES:
- ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF HINESVILLE STANDARD SPECIFICATIONS.
  - CONTRACTION JOINTS SHOULD BE FORMED OR SAWED COINCIDENT WITH THE 10' JOINTS IN THE CURB.
  - ADA COMPLIANT WHEELCHAIR RAMPS SHALL BE INSTALLED AT EACH INTERSECTION OR DESIGNATED CROSSWALK LOCATION AND MUST MEET THE MOST CURRENT ADA STANDARDS AT THE TIME OF CONSTRUCTION.

SIDEWALK AND WALKWAY DETAILS  
N.T.S.



SWING GATE  
N.T.S.



FASTENING DETAILS  
N.T.S.

LINE POST ATTACHMENTS  
N.T.S.

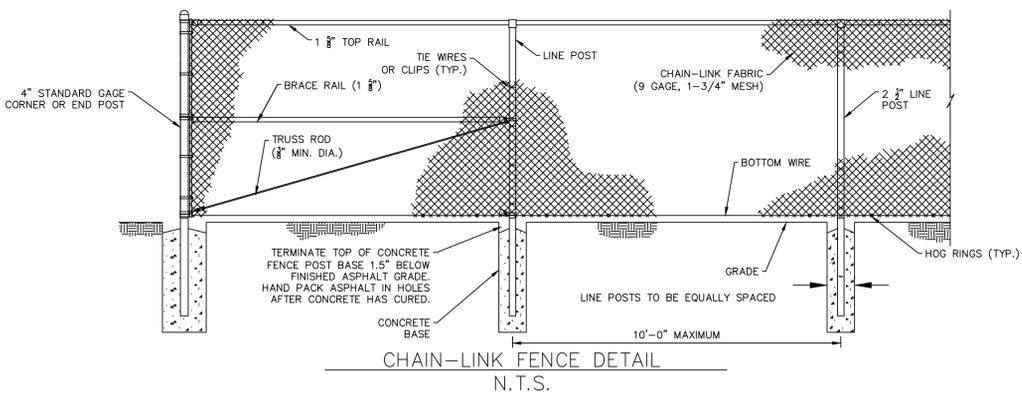
10' CENTER OF POST TO CENTER OF POST (MAX)

GATE POST		7"	8"	10"
GATE LEAF WIDTH	GATE POST HEIGHT	FABRIC DIA.	POST DIA.	POST EMBEDMENT
3' TO 6'	2.785	8" TO 9"	1 1/2"	38"
7' TO 12'	4.000	8" TO 9"	1 1/2"	42"
13'	6.625	8" TO 9"	1 1/2"	42"

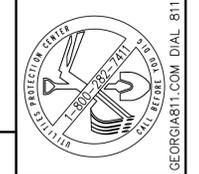
LINE AND TERMINAL POSTS		7"	8"	10"
FABRIC HEIGHT	TYPE	FABRIC DIA.	POST DIA.	POST EMBEDMENT
3'-0" TO 4'-0"	LINE	8"	1 1/2"	38"
5'-0"	LINE	8"	1 1/2"	42"
6'-0" TO 9'-0"	LINE	8"	1 1/2"	42"
10'-0" TO 12'-0"	LINE	8"	1 1/2"	42"
13'-0" TO 18'-0"	LINE	8"	1 1/2"	42"

NOTE: TERMINAL POSTS INCLUDE END, CORNER, AND PULL POSTS  
CHAIN LINK FENCE FOUNDATION  
N.T.S.

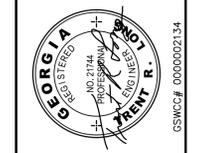


CHAIN-LINK FENCE DETAIL  
N.T.S.

Drawing File: C:\ACTIVE PROJECTS\2024-40 H - Liberty Independent Troop Park Pickle Ball\00-DRAWINGS\DWG\2024-40.dwg  
Plotted Date: Jul 19, 2024 - 11:40am



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(912) 335-1046



LIBERTY COUNTY, GEORGIA  
100 Main Street, Suite 1320  
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(912) 876-2164  
www.libertycountyga.com

STANDARD CONSTRUCTION DETAILS  
ADA HANDICAP PARKING SPACE STRIPING DETAIL

APPROVED: COUNTY ENGINEER  
DATE: OCTOBER 2019 SCALE: N.T.S.

DETAIL NUMBER  
P15

SITE DEVELOPMENT PLAN  
PICKLEBALL COURTS  
LIBERTY INDEPENDENT TROOP PARK

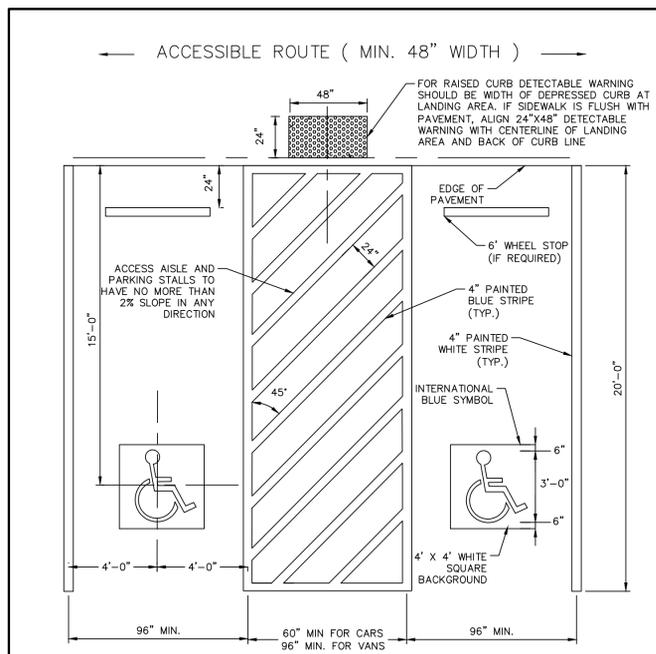
SHEET NAME:  
SITE DETAILS

REVISIONS:

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

INITIAL DATE: 05/31/2024  
DRAWN BY: FPGD  
CHECKED BY: TRL  
PROJECT #: 2024-40

SHEET NUMBER:  
**C8.4**



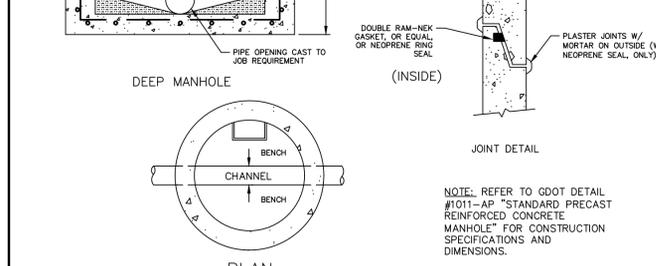
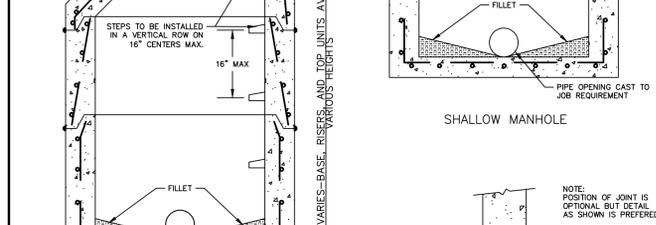
- NOTE:
1. STRIPING AND CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE FEDERAL AND STATE REGULATIONS.
  2. ALL PAVEMENT MARKINGS AND STRIPING IN THE RIGHT-OF-WAY SHALL BE THERMOPLASTIC.

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STANDARD CONSTRUCTION DETAILS  
MANHOLE COVER & FRAME DETAIL

APPROVED: COUNTY ENGINEER  
DATE: OCTOBER 2019 SCALE: N.T.S.

DETAIL NUMBER  
D16



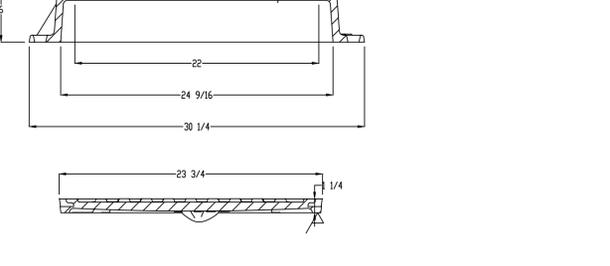
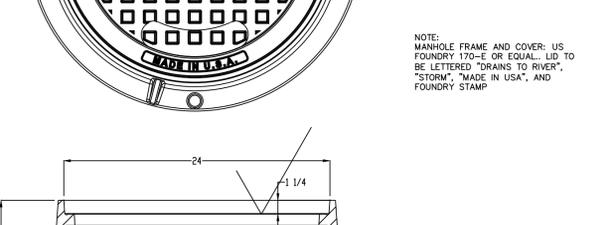
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STANDARD CONSTRUCTION DETAILS  
STANDARD PRECAST DOGHOUSE MANHOLE

APPROVED: COUNTY ENGINEER  
DATE: OCTOBER 2019 SCALE: N.T.S.

DETAIL NUMBER  
D13D



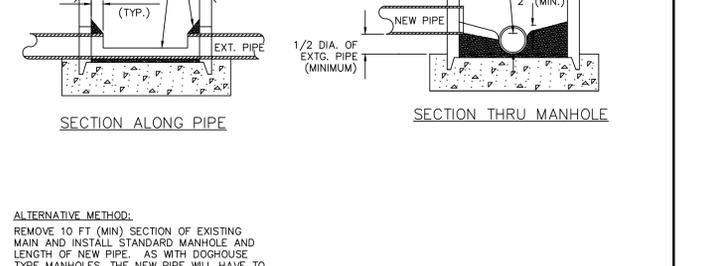
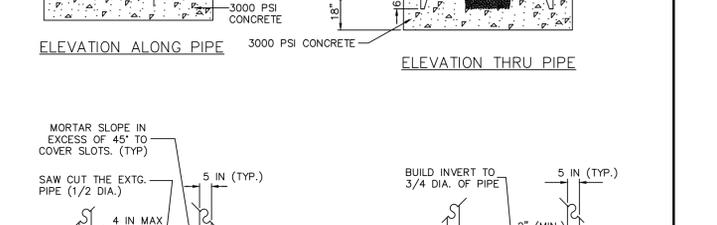
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STANDARD CONSTRUCTION DETAILS  
HANDICAP PARKING SIGN DETAIL

APPROVED: COUNTY ENGINEER  
DATE: OCTOBER 2019 SCALE: N.T.S.

DETAIL NUMBER  
P14



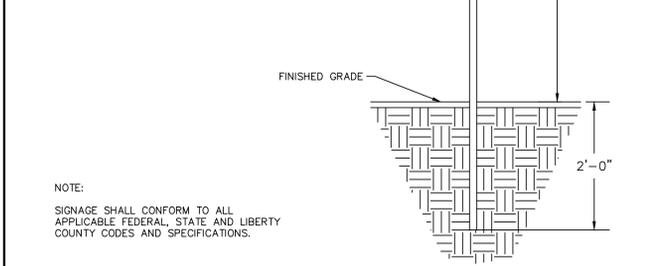
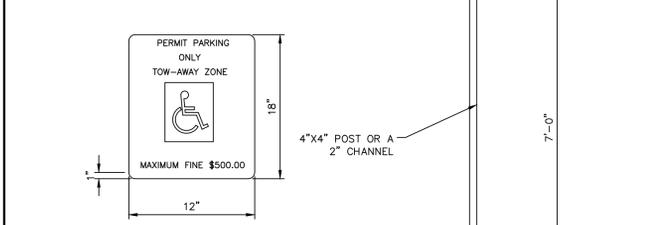
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STANDARD CONSTRUCTION DETAILS  
STANDARD PRECAST DOGHOUSE MANHOLE

APPROVED: COUNTY ENGINEER  
DATE: OCTOBER 2019 SCALE: N.T.S.

DETAIL NUMBER  
D13D



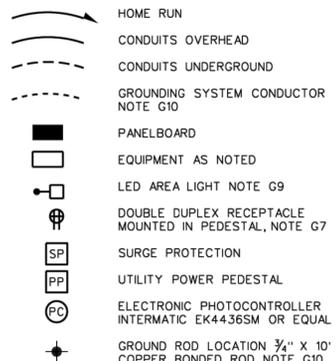
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Drawing File: C:\ACTIVE PROJECTS\2024-40 H - Liberty Independent Troop Park Pickle Ball\00-DRAWINGS\DWG\2024-40.dwg  
Plotted Date: Jul 19, 2024 - 11:41am

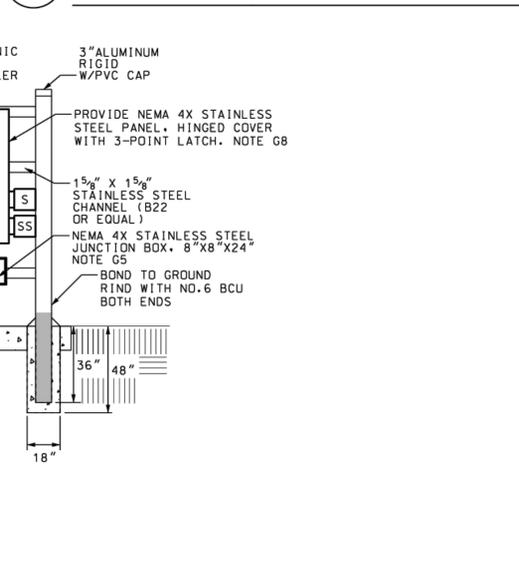
**GENERAL NOTES:** (APPLICABLE TO ALL DRAWINGS)

- G1. ALL WORK SHALL COMPLY WITH 2020 NEC, GEORGIA 2021 AMENDMENTS, AND ALL STATE AND LOCAL ORDINANCES.
- G2. WHEN CONDUCTOR SIZE IS INDICATED FOR BRANCH CIRCUIT HOME RUN, THE CONDUCTOR SIZE INDICATED SHALL BE USED FOR THE COMPLETE CIRCUIT.
- G3. EQUIPMENT GROUNDING CONDUCTORS SHALL BE PROVIDED FOR ALL BRANCH AND FEEDER CIRCUITS.
- G4. THE LOCATION AND MOUNTING HEIGHTS OF DEVICES AND OUTLETS INDICATED ON THE ELECTRICAL PLANS ARE SCHEMATIC, INTENDED ONLY TO CONVEY THE APPROXIMATE LOCATION. THE ACTUAL LOCATION AND MOUNTING HEIGHTS SHALL BE COORDINATED IN FIELD.
- G5. PROVIDE ELECTRONIC ASTRONOMIC TIME SWITCHES, 6 ZONES, INTERMATIC ET912B15CR OR APPROVED EQUAL TO CONTROL CIRCUITS LPB-2, 4, 6, 8, 10, 12 PLUS 6 SPARE ZONES. PROGRAM AS DIRECTED BY OWNER. PROVIDE BOX ADJACENT TO TIME SWITCH WITH IDENTIFIED TERMINAL STRIP TO TRANSITION FIELD WIRING TO NO.10 TO CONNECT SWITCH.
- G6. PROVIDE ELECTRONIC PHOTOCONTROL (INTERMATIC EK4236S OR EQUAL) LOCATION ON FRAME. VERIFY EXACT LOCATION AND CONNECTIONS IN FIELD.
- G7. RECEPTACLE PEDESTALS SHALL BE PEDCO POWER SOLUTIONS 5"x5"x18" 304 PAINTED STAINLESS STEEL, 14 GA BODY, 7 GA BASE PLATE, DUAL GFCI PLATE WITH BLACK POWDER COAT FINISH. PART: SP-18-C-HT-BK-140. FINISH WITH TWO WEATHER AND TAMPER RESISTANT RECEPTACLES. SEE SPECIFICATIONS; ONE GFCI AND ONE USB
- G8. PROVIDE 304SS NEMA 4X WHITE POWDER ENCLOSURE WITH 3-POINT LATCH, MATCH KEY TO PANELBOARD.
- G9. THE BASIS OF DESIGN IS NLS LIGHTING ARE-2 FIXTURES, TENNIS OPTICS 5000K COLOR TEMP, 6" DIRECT POLE ARM, ROUND POLE ADAPTOR, BLACK TEXTURED FINISH, CAT. NO. VUE-2/TT/80L/1/50K7/UNV/DPS6/BLK/RP/AS(TB0). THE FIXTURE(S) SHALL BE MOUNTED 20' ABOVE GRADE TO DIRECT BURY FIBERGLASS POLE; THE BASIS OF DESIGN IS A WHATLEY COMPOSITE POLE, TR45; ROUND, TAPERED, BLACK, TEXTURED, TOP POLE CAP WITH FACTORY DRILLED FOR SIDE MOUNT ARMS, TOTAL SHAFT LENGTH - 24', 4" BURIAL DEPTH, WIND LOADING - 5.6 @ 120MPH, CAT. NO. TR45-20-DE-BLK-TXT-DTC.
- G10. PROVIDE GROUNDING SYSTEM FOR COURT FACILITY.
  - A. PROVIDE NO.4/0 BARE COPPER AT 30" BELOW GRADE AS SHOWN.
  - B. PROVIDE NO.6 BCU JUMPER FROM GROUND RING TO EACH CORNER POST, EACH GATE POST (BOTH SIDES), EACH END OF THE EQUIPMENT FRAME, EACH RECEPTACLE PEDESTAL, AND EACH LIGHT POLE.
  - C. BOND SERVICE TO GROUNDING SYSTEM.
  - D. ALL CONNECTIONS TO 4/0 BCU SHALL BE EXOTHERMIC. CONNECTIONS TO POSTS, FRAME, AND PEDESTAL SHALL BE BY MECHANICAL LUG. CONNECT TO CIRCUIT EQUIPMENT GROUNDING CONDUCTOR AT LIGHT POLE AND RECEPTACLE PEDESTAL.
- G11. PROVIDE THREE DPST TOGGLE SWITCHES (HUBBELL HBL1202) IN WEATHERPROOF TYPE OUTLET BOXES (CAT. NO. 2-GANG: BELL 5343-0, 1-GANG: BELL 5330-0) AND WEATHERPROOF SWITCH PLATE (2-GANG: BELL 5124-5, 1-GANG: BELL 5121-5). THE SWITCHES SHALL BE MOUNTED ADJACENT TO THE LIGHTING RELAY PANEL. ROUTE THE CIRCUITS THROUGH THE SWITCHES AFTER THE RELAY PANEL. PROVIDE MANUAL ON/OFF WHILE STILL CONTROLLED BY THE TIME CLOCK FOR USEABLE HOURS.

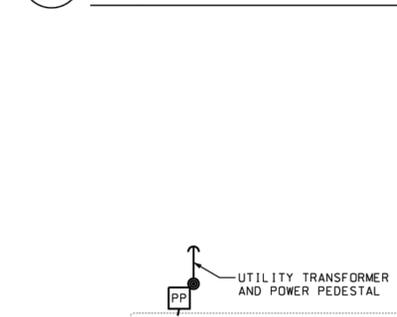
**ELECTRICAL LEGEND**



**1 SECONDARY ELECTRICAL GROUNDING**  
E.1.1 NOT TO SCALE



**2 CONTROL RISER DIAGRAM**  
E.1.1 NOT TO SCALE



**CONTROL INSTRUCTIONS**

PROGRAM ASTRONOMIC TIME CLOCK WITH THE FOLLOWING CONTROL SEQUENCE:

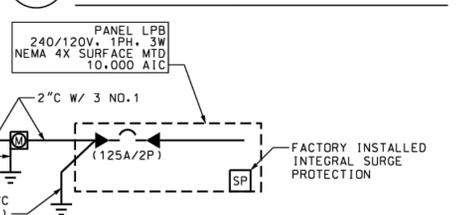
ON	OFF
DUSK TO 23:00	
06:00 TO DAWN	

INCLUDE ICE CUBE RELAY TO ALLOW ELECTRONIC PHOTOCONTROLLER TO TURN LIGHTS ON WHEN DARK.

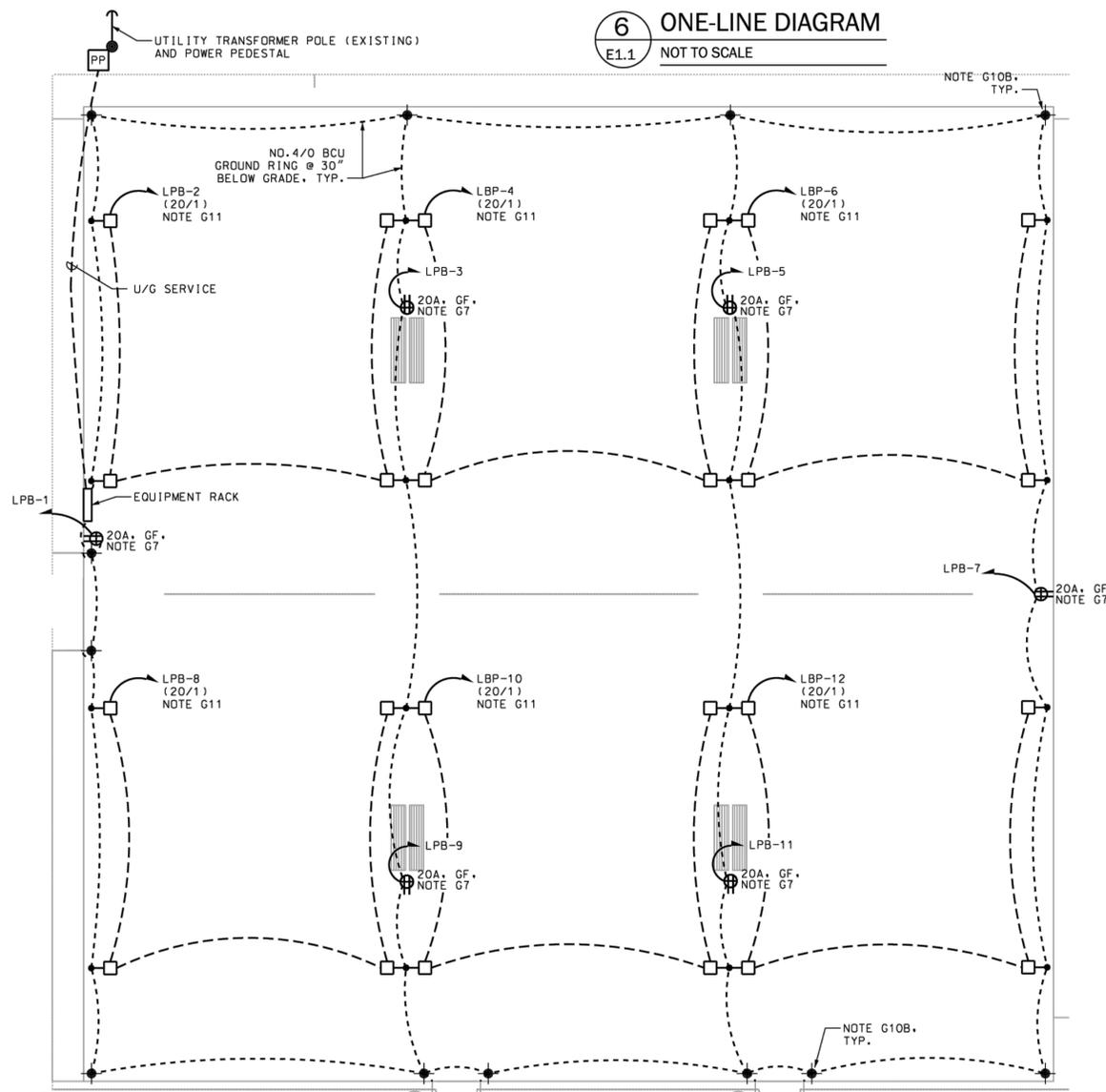
**CONTROL DETAIL LEGEND**

Lighting Contactor Each with HOA Switch in Cover. Provide Number of Poles Shown. Mount in Surface Box with Lockable Cover. Label All Circuits. All Field Wiring to be Landed on Identified Terminal Strip. Control Contactors from Time Clock.

**3 RECEPTACLE PEDESTAL DETAIL**  
E.1.1 NOT TO SCALE



**6 ONE-LINE DIAGRAM**  
E.1.1 NOT TO SCALE



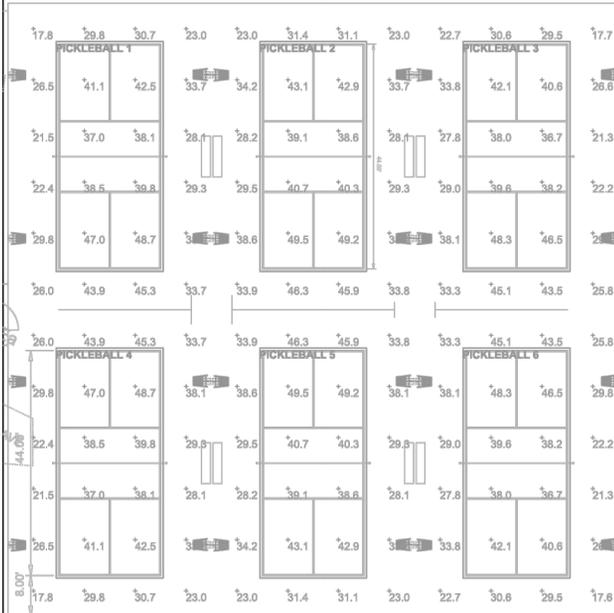
Luminaire Schedule

Symbol	Qty	Label	LFP	Arrangement	Description	Lum Watts	MTG HT
[Symbol]	8	N1	0.940	Single	VUE-2/TT/80L-1-80K-SINGLE	263	20
[Symbol]	8	N2	0.940	Back-Back	VUE-2/TT/80L-1-80K-TWIN	263	20

Calculation Summary

Label	Calc/Type	Units	Avg	Max	Min	Avg/Min	Max/Min
SITE CLACS	Illuminance	Fc	34.69	49.5	17.6	1.97	2.81
PICKLEBALL 1	Illuminance	Fc	41.59	48.7	37.0	1.12	1.32
PICKLEBALL 2	Illuminance	Fc	42.93	49.5	38.6	1.11	1.28
PICKLEBALL 3	Illuminance	Fc	41.25	48.3	36.7	1.12	1.32
PICKLEBALL 4	Illuminance	Fc	41.59	48.7	37.0	1.12	1.32
PICKLEBALL 5	Illuminance	Fc	42.93	49.5	38.6	1.11	1.28
PICKLEBALL 6	Illuminance	Fc	41.25	48.3	36.7	1.12	1.32

**4 EQUIPMENT RACK**  
E.1.1 NOT TO SCALE



**5 PHOTOMETRY PLAN**  
E.1.1 NOT TO SCALE

**SCHEDULE OF PANEL 'LPB'**

VOLTAGE: 240 / 120  
BUS AMPS: 125 A  
A.I.C RATING: 10,000 A

PHASE: 1  
DEVICE AMPS: 125 A  
MOUNTING SURFACE

WIRE: 3  
NEMA: 4X

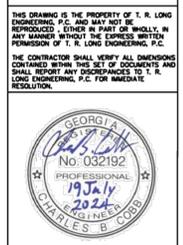
LOCATION DESCRIPTION	LOAD (KVA)	LOAD TYPE	TRIP POLE	#	PH	#	TRIP POLE	LOAD TYPE	LOAD (KVA)	LOCATION DESCRIPTION
RECEPT A	0.4	B	20A/1P	1	A	2	20A/1P	A	1.1	COURT-1
RECEPT B	0.4	B	20A/1P	3	B	4	20A/1P	A	1.1	COURT-2
RECEPT C	0.4	B	20A/1P	5	A	6	20A/1P	A	1.1	COURT-3
RECEPT D	0.4	B	20A/1P	7	B	8	20A/1P	A	1.1	COURT-4
RECEPT E	0.4	B	20A/1P	9	A	10	20A/1P	A	1.1	COURT-5
RECEPT F	0.4	B	20A/1P	11	B	12	20A/1P	A	1.1	COURT-6
SPARE			20A/1P	13	A	14	20A/1P	H	0.1	TIME CLOCK
SPARE			20A/1P	15	B	16	20A/1P			SPARE
SPARE			20A/1P	17	A	18	20A/1P			SPARE
SPARE			20A/1P	19	B	20	20A/1P			SPARE
SPARE			20A/1P	21	A	22	20A/1P			SPARE
SPARE			20A/1P	23	B	24	20A/1P			SPARE
SPARE			20A/1P	25	A	26	20A/1P			SPARE
SPARE			20A/1P	27	B	28	20A/1P			SPARE
SPARE			20A/1P	29	A	30	20A/1P			SPARE

**PANEL LOAD ANALYSIS**

Load Type	DESCRIPTION	Conn. kVA	Demand kVA	2017 NEC Reference	Load Type	DESCRIPTION	Conn. kVA	Demand kVA	2017 NEC Reference
A	Lighting	6.6	8.3	NEC Article 215.3	E	Heating	0.0	0.0	NEC Article 220.60
B	Receptacles	2.4	2.4	NEC Table 220.44	F	Largest Motor	0.0	0.0	NEC Article 440.7
C	Kitchen Equipment	0.0	0.0	NEC Table 220.56	G	Other Motors	0.0	0.0	NEC Article 440.7
D	Air-Conditioning	0.0	0.0	NEC Article 220.60	H	Other Loads	0.1	0.1	
Phase A Connected Load		4.6	4.6		TOTAL CONNECTED LOAD		9.1	9.1	
Phase B Connected Load		4.5	4.5		TOTAL DEMAND LOAD		10.8	10.8	
					MINIMUM SIZING AMPS		16.8	16.8	

Notes: Provide With 4XSS Enclosure  
Furnish Panel with Integral Surge Protection: 120kA

**7 SITE LIGHTING PLAN**  
E.1.1 SCALE: 1" = 10' - 0"



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 POOLER: 1000 Towne Center Blvd, Suite 304, Pooler, Georgia 31322 (912) 335-1046



SITE DEVELOPMENT PLAN  
 PICKLEBALL COURTS  
 LIBERTY INDEPENDENT TROOP PARK

SHEET NAME:  
 SITE LIGHTING PLAN

REVISIONS:  
 1. 7/22/2024  
 2.  
 3.  
 4.  
 5.  
 6.  
 7.  
 8.  
 9.  
 10

INITIAL DATE: 07/19/2024  
 DRAWN BY: JV  
 CHECKED BY: CC  
 PROJECT #: 2024-40

SHEET NUMBER:  
 E.1.1