ENVIRONMENTAL COMPLIANCE & SAFETY, INC.

Corporate Office:
P.O. Box 356 (282 Third Ave)
Sherman, MS 38869
Office: (662) 840-5945
Fax: (662) 840-5965

Jackson Area Office:
109 Millcreek Corners, Suite A
Brandon, MS 39047
www.envirocomp.net
Established in 2002

October 7, 2020

Ms. Florance Bass, P.E., BCEE
401/Storm Water Branch Manager
Environmental Permits Division
Mississippi Department of Environmental Quality
P.O. Box 2261
Jackson, MS 39225-2261

Re: ***Large Construction Major Modification Form and Revised Storm Water Pollution Prevention Plan (SWPPP)***
Kimberly-Clark Corporation, Corinth Mill
Corinth, Mississippi (Alcorn County)
Agency Interest ID No. 254

Dear Ms. Bass:

Kimberly-Clark Corporation, Corinth Mill (K-C) retained the services of Environmental Compliance & Safety, Inc. (ECS) to prepare a Major Modification Form for Large Construction General Permit and a revised Storm Water Pollution Prevention Plan (SWPPP) to incorporate a new construction project and access road planned at the existing K-C facility located in Corinth, Mississippi. On February 24, 2020, K-C received storm water coverage, MSR108132, for activities associated with the construction of the SABBEL project on approximately six (6) acres adjacent to the existing K-C facility. On September 22, 2020, a major modification package was submitted to your office which incorporated construction activities for an additional project known as Saturn Corinth 7 Expansion (Saturn) to be constructed primarily to the east of the SABBEL project on an additional ten (10) acres. Since that time, additional plans have been developed to incorporate the construction of a new access road to be located on approximately four (4) acres. A revised Major Modification Form for Large Construction General Permit, enclosed as Attachment I, and a revised SWPPP, enclosed as Attachment II, address construction storm water management for both the SABBEL and Saturn projects and the access road on a combined twenty (20) acres. Construction of the Saturn project and the access road will begin upon receipt of approval from the Mississippi Department of Environmental Quality.

K-C acknowledges that other necessary environmental permits will be required for operation of the Saturn project. Specifically, a minor modification application for K-C's existing Title V Operating Permit will be submitted. Operations for the Saturn project are scheduled to begin in February 2022, and all necessary NPDES wastewater permit applications will be submitted in the near future. Further, K-C understands that updates to the SWPPP associated with the Baseline Storm Water Coverage will be required.

K-C appreciates your expedited review of this information and timely processing of this modification request of the storm water coverage. Please do not hesitate to contact us if we can answer any questions or concerns. You may contact me at (662) 840-5945 or Tim Young of K-C at (662) 284-3578.

Sincerely,

Jody Lindsey
Senior Project Manager

Attachments: Attachment I: Major Modification Form for Large Construction General Permit
Attachment II: Revised Storm Water Pollution Prevention Plan

ATTACHMENT I

MAJOR MODIFICATION FORM FOR LARGE CONSTRUCTION GENERAL PERMIT

MAJOR MODIFICATION FORM
FOR LARGE CONSTRUCTION GENERAL PERMIT
Coverage No. MSR10 8 1 3 2 County Alcorn

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

INSTRUCTIONS

Coverage recipients shall notify the Mississippi Department of Environmental Quality at least 30 days in advance of the following activities (check all that apply). This form should be submitted with a modified Storm Water Pollution Prevention Plan (SWPPP), updated USGS topographic map, Corps of Engineers Section 404 documentation and wastewater collection and treatment information, as appropriate.

☑ **SWPPP details have been developed and are ready for MDEQ review for subsequent phases of an existing, covered project.**

☑ **"Footprint" identified in the original LCNOI is proposed to be enlarged.**

This form must be signed by the current coverage recipient under Mississippi's Large Construction General Permit. A different developer of new phases of existing subdivisions must apply for separate permit coverage through the submittal of a new complete LCNOI package. Coverage recipients are authorized to discharge storm water associated with proposed expansions of existing subdivisions or subsequent phases, under the conditions of the General Permit, only upon receipt of written notification of approval by MDEQ. All other modifications, such as changes of erosion and sediment controls used, must be in accordance with ACT6, S-1 (6) and S-2 (7) of the General Permit.

ALL INFORMATION MUST BE COMPLETED (indicate "N/A" where not applicable)

COVERAGE RECIPIENT INFORMATION

COVERAGE RECIPIENT CONTACT NAME: Vince Overholt TEL # (662) 284-3578

COMPANY NAME: Kimberly Clark Corporation, Corinth Mill

STREET OR P.O. BOX: 3461 County Road 100

CITY: Corinth STATE: MS ZIP: 38834 E-MAIL: voverhol@kcc.com

PROJECT INFORMATION

PROJECT NAME: SABBEL/Saturn Expansion and access road

CITY: Corinth

ADDITIONAL ACREAGE TO BE DISTURBED: 4 TOTAL PROJECT ACREAGE: 20

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Vince Overholt
Signature (must be signed by coverage recipient)

10/7/2020
Date

Vince Overholt
Printed Name

Mill Manager
Title

Please submit this form to:

Chief, Environmental Permits Division
MS Department of Environmental Quality, Office of Pollution Control
P.O. Box 2261
Jackson, Mississippi 39225

Revised: 12/12/16

ATTACHMENT II

REVISED STORM WATER POLLUTION PREVENTION PLAN

CONSTRUCTION STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

KIMBERLY-CLARK CORPORATION – CORINTH MILL
NONWOVEN AND PROFESSIONAL PRODUCTS
3461 COUNTY ROAD 100
CORINTH, MS 38834

ECS
ENVIRONMENTAL COMPLIANCE & SAFETY, INC.

Post Office Box 356
Sherman, Mississippi 38869
Office: (662) 840-5945
Fax: (662) 840-5965
www.envirocomp.net

"FOR ALL YOUR ENVIRONMENTAL AND SAFETY CONSULTING NEEDS."

Record of Revisions

Construction Storm Water Pollution Prevention Plan (SWPPP)

Revision Date	Reason for Revision	Revised Pages, Tables, Figures, or Appendices	Revision Certification Signature
1/8/2020	Development of SWPPP to address construction activities for new Kimberly-Clark Corporation - Corinth Mill facility.	Entire Document	Jody Lindsey (ECS) Brian Ketchum, PE (ECS)
1/29/2020	Response to MDEQ Comments	Entire Document	Jody Lindsey (ECS) Brian Ketchum, PE (ECS)
9/22/2020	Revised to include Saturn project and additional 10 acres of construction activities.	Entire Document	Jody Lindsey (ECS) Brian Ketchum, PE (ECS)
10/7/2020	Revised to include Saturn project and additional 14 acres of construction activities.	Entire Document	Jody Lindsey (ECS) Brian Ketchum, PE (ECS)

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Figure 1: Site Location Map

Figure 2: Aerial Map

Figure 3: Site Development Map

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APPENDICES:

Appendix A: Implementation Guidelines for Storm Water and Erosion Controls

Appendix B: Storm Water and Erosion Controls Change Form

Appendix C: Site Inspection and Certification Form

Appendix D: Large Construction Storm Water General Permit

1.0 STORM WATER POLLUTION PREVENTION PLAN CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature

10/7/2020
Date

Vince Overholt
Name Printed

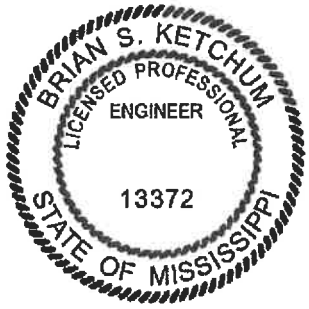
Mill Manager
Title

Kimberly-Clark Corporation
Company

The Storm Water Pollution Prevention Plan (SWPPP) was prepared in accordance with the Mississippi Department of Environmental Quality (MDEQ) Storm Water Pollution Prevention Plan (SWPPP) Guidance Manual for Construction Activities and other generally approved SWPPP format and guidance documents The information presented herein constitutes a true and accurate representation of the information, findings, and observations made during the site investigation and preparation of the plan.

10/7/2020
Date

Brian S. Ketchum, P E.
Principal, Senior Engineer
Environmental Compliance & Safety, Inc.



2.0 STORM WATER POLLUTION PREVENTION PLAN OVERVIEW

2.1 Introduction

The Large Construction General Permit requires that construction activities disturbing more than five (5) acres develop a Large Construction Storm Water Pollution Prevention Plan (SWPPP). The Construction SWPPP is used to identify practices and controls that will be utilized to prevent erosion of disturbed soils and to manage potentially contaminated storm water runoff from the construction site.

Kimberly-Clark Corporation – Corinth Mill (K-C) plans development of twenty (20) acres located adjacent to their current location at 3461 County Road 100, Corinth, Mississippi for the construction of two projects known as SABBEL and Saturn and for the construction of an industrial access road. These new projects will expand the existing K-C facility by adding two new product lines to manufacture nonwoven components and will provide alternative road access. The extents of these projects can be found on the Site Development Map provided in Figure 3. Facility operations fall within Standard Industrial Classification (SIC) code 2297 (NAICS 31323), Nonwoven Fabrics and SIC 2679 (NAICS 322299), Converted Paper and Paperboard Products.

Any significant changes to this plan will be properly documented by a responsible corporate officer or duly authorized representative, who has responsibility for the overall project operations and environmental matters, prior to the changes being implemented. The plan will be available at all times and made available upon request to an authorized representative of the Mississippi Department of Environmental Quality (MDEQ) and the United States Environmental Protection Agency (EPA). The plan will be amended whenever there is a major change in construction practices, site operation, or maintenance activities that may affect the types of controls used or the discharge of storm water from the project site.

2.2 General Information

Site Name:	***Kimberly-Clark Corporation – Corinth Mill***			
Mailing and Physical Address:	3461 County Road 100, Corinth, Mississippi 38834			
Location (GPS): Nonwovens	**Latitude:**	N 34° 56' 59.8"	**Longitude:**	W 88° 26' 57.0"
Location (GPS): CPPM	**Latitude:**	N 34° 56' 53.6"	**Longitude:**	W 88° 27' 8.50"
Closest Water Body and Route of Entry:	Facility is located near a watershed boundary. Most of the property, including the proposed project area, drains to Sevenmile Creek to Chambers Creek to the Tennessee River. The westernmost side of the property (west side of CPPM) drains to Bridge Creek within the Upper Hatchie watershed and flows north into Tennessee.			
Site Response Contact:	Tim Young, Environmental Coordinator			
Response Contact Phone No.:	Cell: (662) 322-1209		Email: timyoung@kcc.com	

2.3 Plan Objectives

The EPA published regulations in November 1990 under the National Pollutant Discharge Elimination System (NPDES) program with the objective of controlling water pollution associated with storm water discharges. The goal of the storm water program was to improve water quality by reducing the amount of pollutants contained in storm water runoff. Construction operations subject to the requirements of a NPDES storm water discharge permit must prepare and implement a SWPPP. Construction projects disturbing more than five (5) acres of land must obtain a large construction storm water general permit. In addition, MDEQ has published a SWPPP Guidance Manual for Construction Activities that specify methods for temporarily and permanently controlling sediment erosion for construction activities. MDEQ addresses storm water management through the implementation of a site-specific SWPPP to address pollutants and sources associated with storm water runoff, and the MDEQ requires structural and nonstructural best management practices (BMPs) to manage and reduce pollutants carried in storm water. The objectives of the Construction SWPPP are as follows:

- Identify and ensure that appropriate Best Management Practices (BMPs) are in place upon commencement and ongoing phases of construction activities.
- Allow for on-site managers to make field decisions as to the viability and number of controls to be implemented.
- Establish procedures to amend the SWPPP whenever there is a change in construction, operation, or maintenance which may potentially affect the discharge of pollutants to state waters; or if the SWPPP proves to be ineffective in controlling storm water pollutants.
- Establish procedures to inspect and maintain erosion and sediment controls and other protective measures.

2.4 Plan Elements

The subsequent sections of the plan contain the following elements:

- **Section 3.0: Project Information -** Describes project, site characteristics, and soil conditions.
- **Section 4.0: Erosion and Sediment Controls -** Describes controls for construction activities as well as the procedures for implementing such controls.
- **Section 5.0: Control Implementation and Inspections -** Explains sedimentation and erosion controls during on-going construction activities and the sequence in which construction activities occur.
- **Figures:** Provides storm water control measures, BMPs, outfall locations, etc.
- **Appendices**: Provides documents and tools to assist with implementing and managing the SWPPP.

2.5 Allowable Non-Storm Water Discharges

The Mississippi Large Construction Storm Water General Permit contains provisions for allowable non-storm water discharges. Listed below are non-storm water discharges allowed by the Permit:

- Discharges from fire-fighting activities;
- Fire hydrant flushing;
- Water used to control dust;
- Potable water sources including uncontaminated water line flushing;
- Routine external building wash down that does not use detergents;
- Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used;
- Uncontaminated air conditioning or compressor condensate;
- Uncontaminated ground water or spring water;
- Foundation or footing drains where flows are not contaminated with process materials;
- Landscape irrigation; and
- Water used to wash vehicles, wheel wash water and other wash waters where detergents are not used.

2.6 Prohibited Non-Storm Water Discharges

The Mississippi Large Construction Storm Water General Permit contains provisions for prohibited non-storm water discharges. The non-storm water discharges prohibited by the Permit are listed below:

- Wastewater from washout of concrete (unless managed by an appropriate control);
- Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
- Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;
- Soaps or solvents used in vehicle and equipment washing;
- Wastewater from sanitary facilities, including portable toilets; and
- Dewatering activities, including discharges from dewatering of trenches and excavations unless managed by BMPs.

3.0 PROJECT INFORMATION

3.1 Project Description

The project scope consists of the development of approximately twenty (20) acres located at the existing K-C facility at 3461 County Road 100, Corinth, Mississippi. The expansion includes the construction of two projects, known as SABBEL and Saturn, and the construction of an access road. SABBEL and Saturn consist of buildings that will house new technology to manufacture nonwoven components. Construction of the road will provide alternate access to the facility, as the existing access road will be removed as part of the proposed project. The proposed site topography consists of a relatively flat property which lies along a watershed boundary with a gradual slope towards the southeast and northeast corners. Topographical and aerial maps of the site are provided as Figure 1 - Site Location Map and Figure 2 – Aerial Map, respectively. Figure 3 – Site Development Map shows the individual project phases, and Figure 4 – Erosion and Sediment Control Plan contains civil drawings with site specific details including expected final grade elevations, storm water flows, outfall locations, and erosion and sediment controls.

3.2 Soil Conditions

Native soils on the construction site consist of Arkabutla silt loam with 0 to 2 percent slopes, Providence silt loam with 2 to 5 percent slopes, Providence silt loam with 5 to 8 percent slopes, Paden silt loam with 2 to 5 percent slopes, Ora fine sandy loam with 5 to 12 percent slopes, Mantachie fine sandy loam with 0 to 2 percent slopes, and Ruston-Shubuta-Linker association, hilly. Soil infiltration rates are rated from well drained to somewhat poorly drained. These types of soils can produce a high amount of runoff. The erosion potential of the native soils is rated as medium to very high. This indicates that erosion is likely, and controls are required to manage potential erosion.

Soil classification information for this site was gathered using the National Resources Conservation Service (NRCS) web soil survey. Specifically, the above listed soil types were evaluated to determine the hydric soil rating, as the presence of hydric soils can be an indicator of wetland areas. Three (3) of the above listed soil types, Arkabutla silt loam, Mantachie fine sandy loam, and Ruston-Shubuta-Linker association, are indicated as being a hydric soil when found in floodplains and drainageways, respectively. Based on current site conditions and wetland delineation conducted by Headwaters, Inc. on August 24, 2020 and September 15, 2020, construction activities will not occur in jurisdictional waters of the State.

3.3 Site Drainage

Current storm water runoff on the K-C property is managed through existing coverage (MSR001284) under the Baseline Storm Water General Permit for Industrial Activities. Storm water falling on the K-C property primarily flows by way of sheet flow, drainage ditches, and underground culverts to an outfall on the north perimeter (i.e., SW004), to outfalls on the northwest (i.e., SW001, SW002, and SW003), and to an outfall on the northeast corner (i.e., SW005) of the property. The facility is located along a watershed boundary

line. Most of the property, including the proposed project area, drains into an unnamed tributary to Sevenmile Creek and then into Chambers Creek to the Tennessee River. The westernmost side of the property (west side of CPPM building) drains to Bridge Creek within the Upper Hatchie watershed before flowing north into Tennessee.

For the construction of the SABBEL and Saturn projects storm water runoff will be directed to a sediment trap located in the northeast portion of the project and two sediment basins located in the eastern portion of the project and in the south eastern corner of the project, as shown in Figure 1 – Site Location Map. Outfall 1 is located at the outlet of the northeast sediment trap and will discharge to an underground pipe to the existing outfall, SW001. Outfall 2 is located at the outlet of the easternmost sediment basin and will flow through a flared end outlet pipe to a drainage way which then flows into the adjacent road right-of-way. Outfall 3 is located at the outlet of the southeast sediment basin and will discharge through a flared end outlet pipe into the adjacent road right-of-way. For the construction of the access road, silt fences will be utilized to prevent movement of sediment offsite. Additionally, three (3) culverted road crossings will be constructed, and adequate energy dissipaters will be provided to prevent scouring at these locations.

As required in the Baseline Storm Water General Permit, K-C will notify MDEQ of the expansion and/or modification at least 30 days prior to any planned change in industrial processes that may affect storm water quality and will provide necessary updates to the Baseline Notice of Intent and/or Baseline SWPPP.

4.0 EROSION AND SEDIMENT CONTROLS

4.1 Control Methods

The Storm Water Guidance Manual for Construction Activities lists the following control procedures that must be observed at the construction site:

- Control storm water volume and velocity within the site to minimize soil erosion at outlets and to minimize downstream channel and stream bank erosion;
- Minimize the amount of soil exposed during construction activity;
- Minimize the disturbance of slopes;
- Minimize sediment discharges from the site;
- Provide and maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration;
- Minimize soil compaction and, unless infeasible, preserve topsoil;
- Transport runoff down slopes through lined channels or piping;
- Minimize the amount of cut and fill;
- Minimize off-site vehicle tracking of sediment; and
- Implement best management practices to mitigate adverse impacts from storm water runoff.

4.2 Vegetative Practices

Vegetative practices will be implemented to preserve existing vegetation, as much as feasible, and initiate vegetative stabilization measures after land disturbing activities. The use of temporary and permanent seeding, buffer zones, topsoil preservation, and appropriate use of heavy equipment are all practicable forms of such vegetative practices. Soil stabilization-vegetative stabilization measures must be initiated whenever any clearing, grading, excavating or other land disturbing activities have temporarily or permanently ceased on any portion of the site and will not resume for a period of fourteen (14) days or more. The appropriate temporary or permanent vegetative practices will be initiated immediately or no later than then next work day.

- **Temporary Seeding:** Construction activities leaving an exposed surface fourteen (14) days or more should be planted with fast growing annual grasses.
- **Permanent Seeding:** Completed areas or areas where no further construction work is expected, except where structural controls are implemented, will utilize perennial grasses to stabilize the soil. These areas should be seeded and covered with soil reinforcing mats or ditch liners, as appropriate. Decisions may be made to sod some areas where immediate permanent vegetation is needed.
- **Buffer Zones**: A maintained minimum 150-feet buffer zone is recommended between land disturbing activities and perennial water bodies. In this case, there are no perennial water bodies near the area of construction.
- **Topsoil**: A minimum depth of 2 inches of stockpiled topsoil will be distributed on 3:1 slopes and 4 inches on flatter slopes. The use of original topsoil will aide in re-vegetation of the disturbed area.

- **Heavy Equipment**: The areas to be re-vegetated will be avoided by heavy equipment. If compaction cannot be avoided, the top 4 inches of the soil bed will be tilled and fertilized, if necessary, prior to re-vegetation.

Vegetative practices that will be utilized for this project include the temporary and permanent seeding of exposed areas as required. Buffer zones will be used around storm water drainages and ditches and along the property boundaries where possible. Topsoil removed from the site will be stockpiled on the site for use in post closure activities. To reduce compaction in the area of construction, heavy equipment will make every effort to avoid the areas to be revegetated.

4.3 Structural Practices

Structural practices will be used to divert flows from exposed soils, store flows or otherwise limit runoff from exposed areas. Such practices can include, but are not limited to, the use of silt fences, straw bales, rip rap outlet controls, gravel, sediment and retention basins, sediment traps, construction entrance/exit, storm drain inlets, perimeter controls, and project phasing.

- ***Silt Fences and Straw Bales*** may be utilized to capture sediment down gradient from construction or disturbed areas created by sheet flow. For sites with relatively gentle slopes, these types of controls will constitute most of the erosion controls utilized. Frequent monitoring of controls must be performed. Sediment behind must be removed when the accumulation is more than one half the height of the control height. These barriers may be utilized in drainage ways with low flow volume, and the barriers must be inspected after each rain event and repairs made as appropriate. These types of control are not intended for steep slopes.

- ***Riprap Outlet Controls*** consist of rock placed in drainage ditches or along swales and may be used to slow the velocity of storm water runoff and keep erosion to a minimum. While not intended as a primary silt collection control, any silt accumulated must be removed when it reaches one half the height of the lowest point on the control. These controls will be inspected after each significant rain event and repairs made as appropriate.

- ***Gravel*** may be used to reduce erosion at entrances, exits, or over larger surfaces.

- ***Sediment or Retention Basins*** may be designed to allow storm water run-off to pool and to drop out suspended sediment. They are used, when necessary, in conjunction with temporary seeding, diversion dikes, or other controls to reduce the quantity of sediment entering the basin. Silt accumulated in basins will be removed when the storage capacity of the basin has been reduced by 50%. For drainage locations that serve an area with ten (10) or more disturbed acres at one time, a temporary (or permanent) sediment basin providing at least 3600 cubic feet (133 cubic yards) of storage per acre drained should be provided until final stabilization of the site. Sediment basins are installed before major site grading and are designed for a minimum 2-year, 24-hour storm event.

- ***Sediment Traps*** are temporary sediment control devices formed by excavation and/or an embankment with an outlet used to intercept sediment laden runoff and to retain the sediment in order to protect drainage ways, properties, and rights-of-way downstream.

- ***Rock Check Dams*** are small, temporary dams constructed across a swale or drainage ditch and are used to slow the velocity of water thus reducing erosion of the drainage way.

- ***Construction Entrances/Exits***: Wherever traffic will be leaving a construction site and moving directly onto a paved public road, graveled construction entrances and/or exits will be used.

- ***Storm Drain Inlets***: Inlets that could receive storm water from construction activities should be protected by surrounding or covering with a filter material until final stabilization has been achieved. Sediment tubes may be utilized in lieu of silt fence as inlet protection.

- ***Perimeter Controls***: Natural areas will be maintained and supplemented with silt fence or straw bales around the project perimeter. If not feasible to maintain natural areas, such controls are considered sufficient.

- ***Project Phasing***: Schedule or sequence construction activities so as to concentrate work in certain areas so as to minimize the amount of soil that is exposed at one time.

- ***Concrete Washout:*** Concrete washout areas are used to contain concrete and liquids when the chutes of concrete mixers and hoppers of concrete pumps are rinsed out after delivery.

Structural practices that will be utilized for this project include the construction of one sediment trap with adjacent rock check dams and silt fencing in the northeast corner of the project site. Additionally, two (2) sediment basins will be located along the eastern boundary and in the southeast corner of the project site. Silt fencing or sediment tubes may be utilized for inlet protection. Silt fencing and rock check dams will be utilized along the perimeter of the new access road construction site located along the northern and eastern portions of the property.

The existing entry road will be demolished, and a temporary asphalt access road will be constructed to the east of the existing access road. Construction traffic will enter and exit the construction site through the construction exit located at the intersection of the existing access road and the temporary access road located in the central portion of the site. This construction exit will be added to the temporary road to reduce erosion and assist with housekeeping efforts on the local/state access road. Graveled parking, trailer, and laydown areas and an asphalted temporary access road will be used to minimize erosion within the site.

Silt fencing will be utilized at the spoil disposal area to prevent the movement of sediment offsite. Site grading and minimum slope grading will produce sheet flow with minimum runoff and erosion potential. The concrete washout location will be determined in the field and will be constructed using a plastic liner. The ***Erosion and Sediment Control Plan*** in ***Figure 4*** provides locations and design details for these BMPs.

4.4 Post Construction Control Measures

Post-construction control measures will be installed to control pollutants in storm water after construction is complete. These controls could include, but are not limited to, one or more of the following: on-site retention of runoff and flow attenuation using open vegetated swales. Where needed, velocity dissipation devices may be placed at detention or retention pond outfalls and along the outfall channel to provide for a non-erosive flow. For this project, the primary means of post-construction control of storm water runoff will be

final grading, vegetation of exposed areas, and design of a site drainage system including retention basins, to ensure water velocity is reduced and routed to existing storm water drainage systems leaving the property.

4.5 Good Housekeeping

Housekeeping should be designed to keep pollutants from entering storm water. All equipment used for site activities will be routinely inspected. Waste receptacles will be provided. Portable sanitary facilities and fuel storage containers may be utilized during site activities and will be inspected. Concrete washout pits will be used when trucks are pouring concrete, as necessary, and will be cleaned out when 50% full. The contractor will remove mud/soil daily from pavement, as necessary, to minimize the tracking of mud onto paved roadways from construction areas. Equipment washing activities will occur in various locations throughout the project site, but will be limited to occur over stone, gravel, or crushed rock so as to minimize runoff and prevent erosion. Non-storm water runoff from equipment and vehicle washing will be allowed to infiltrate into the ground. Equipment washing operations will not use soaps, detergents, or solvents. Inspections of good housekeeping measures will be monitored in conjunction with the weekly inspections and corrective actions will be documented.

5.0 CONTROL IMPLEMENTATIONS AND INSPECTIONS

5.1 Implementation of Controls

Before construction activities begin, any necessary erosion, sedimentation, and storm water controls will be planned and implemented. During the construction project, the need for different or additional erosion and sedimentation controls may arise due to a failure of a control or a change in construction activities. The site operator is responsible for implementing all necessary erosion and sedimentation controls to minimize the impact on receiving waters.

Erosion and storm water controls will be implemented as needed during the course of the project. Implementation of the controls will proceed according to the ***Implementation Guidelines for Storm Water and Erosion Controls*** provided in ***Appendix A***. Prior to the commencement of construction activities, the controls will be installed following the general guidelines. The exact controls installed, and the guidelines are subject to modification during the project by the site manager. Changes to the proposed controls will be indicated on the ***Storm Water and Erosion Control Change Forms*** found in ***Appendix B***. In addition to the Change Forms, changes will be clearly marked, dated, and initialed on the Site Diagram. Minor changes will include alternate locations of controls or use of an alternate type of control that will provide equal or improved sediment control. Any major changes, such as a decision to utilize a different type of control for major portions of the project will require an amendment to this plan.

Erosion controls must be installed even if they may be located in the way of subsequent activities, such as utility installation, grading or other construction activities. Controls must be temporarily removed, if necessary, for subsequent access, and immediately replaced. Removed controls may not be left in a non-functioning state while other construction activities are completed.

Accumulated sediment in a control structure shall be removed when it reaches one-half (1/2) the height of the control and properly disposed or repositioned. Nonfunctioning controls shall be repaired, replaced or supplemented with functional controls within 24 hours of discovery or as soon as field conditions allow. Temporary controls will be removed when permanent controls have been established and are properly functioning.

5.2 Non-Numeric Limitations

Storm water discharges shall be free from:

- Debris, oil, scum, and other floating materials other than in trace amounts;
- Eroded soils and other materials that will settle to form objectionable deposits in receiving waters;
- Suspended solids, turbidity and color at levels inconsistent with the receiving waters; and

- Chemicals in concentrations that would cause violation of State Water Quality Criteria in the receiving waters.

5.3 Inspection Requirements

Inspection of the entire site including all erosion controls, outfalls/discharge points, and other plan requirements shall be performed during land disturbing activities. Inspections shall be performed:

- At least once per week for a minimum of four inspections per month;
- Immediately before anticipated storm events;
- After rain events that produce a discharge; and
- As often as is necessary to ensure that appropriate erosion and sediment controls have been properly constructed and maintained and determine if additional or alternative control measures are required. (Unauthorized changes, erosion, and control failures will be noted on the inspection sheets).

5.4 Documentation of Inspections

All inspections must be documented on the Large Construction General Permit Inspection and Certification Form located in Appendix C. Documentation of all inspections must be kept with the plan on-site. Inspections must continue until such time that planned construction activities have been completed, land disturbing activities have ceased and disturbed areas have been stabilized with no significant erosion occurring. Inspection records will be maintained for a period of at least three (3) years from the date construction was completed.

5.5 Non-Compliance Reporting

Anticipated Noncompliance: The owner or operator shall give at least ten (10) days advance notice, if possible, before any planned noncompliance with plan requirements.

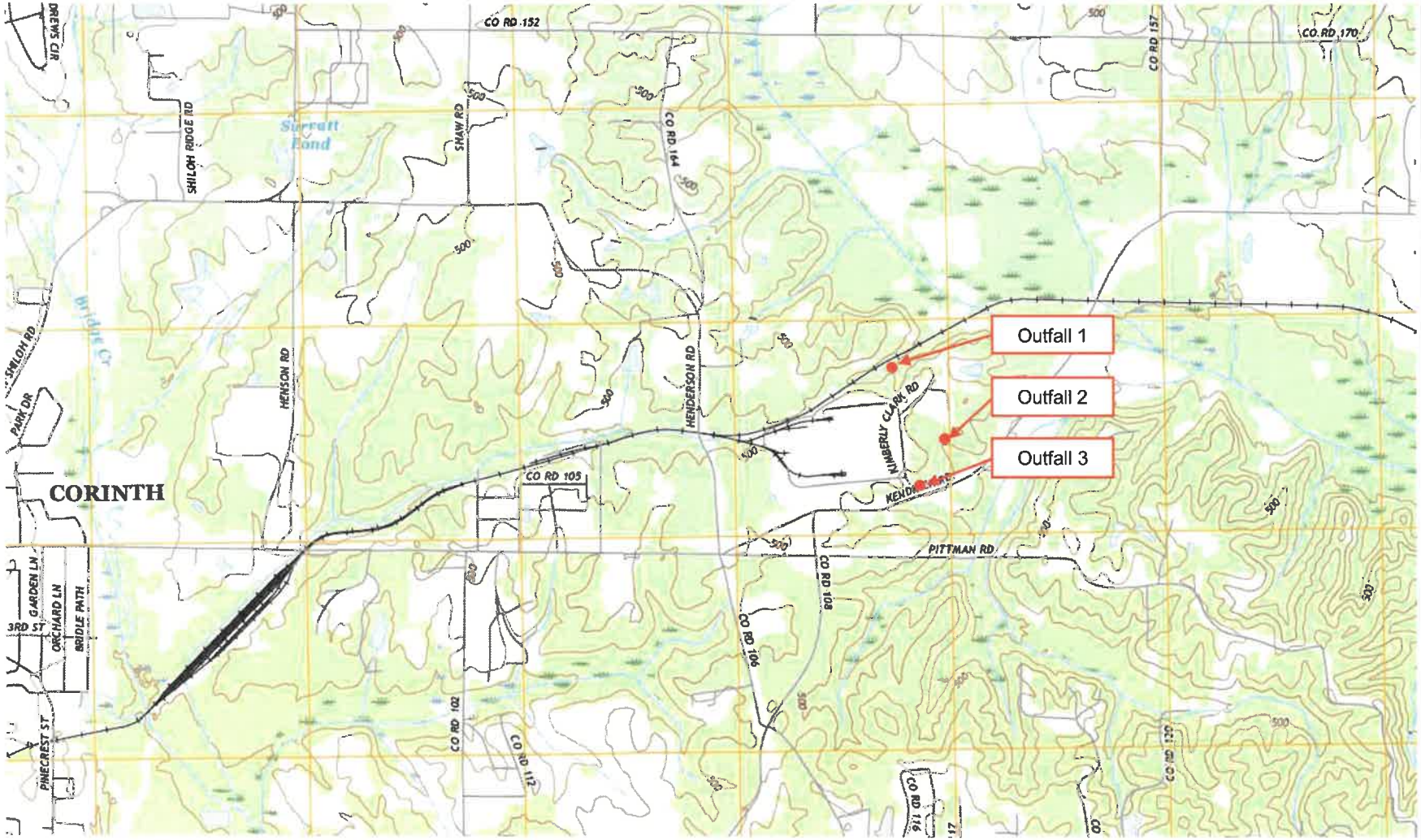
Unanticipated Noncompliance: The owner or operator shall notify MDEQ orally within 24 hours from the time they become aware of unanticipated noncompliance. A written report shall be provided to MDEQ within five (5) working days of the time they become aware of the circumstances. The report shall describe the cause, the exact dates and times, steps taken or planned to reduce, eliminate, or prevent recurrence and, if the noncompliance has not ceased, the anticipated time for correction.

Mailing Address:	Physical Address:
MDEQ Chief, Environmental Permits Division P.O. Box 2261 Jackson, MS 39225-2261	MDEQ Chief, Environmental Permits Division 515 East Amite Street Jackson, MS 39201
Phone:	(601) 961-5171

FIGURES

FIGURE 1

SITE LOCATION MAP



Legend:

N
W E
S

Source:
U.S.G.S Topo Map – Kendrick Quadrangle

Drawn By: CHB	Checked By: GJL
Date: 09/21/2020	Scale: NTS
Project No.: N/A	Drawing No.: N/A

Kimberly-Clark Corporation, Corinth Mill
3461 County Road 100
Corinth, Mississippi 38834

ECS
ENVIRONMENTAL COMPLIANCE & SAFETY, INC.
P.O. Box 356
Sherman, Mississippi 38869
(662) 840-5945

Figure 1: Site Location Map

FIGURE 2

AERIAL MAP

Legend:

N
W E
S

Source:
Google Maps (2020)

Drawn By: CHB	Checked By: GJL
Date: 10/05/2020	Scale: NTS
Project No.: N/A	Drawing No.: N/A

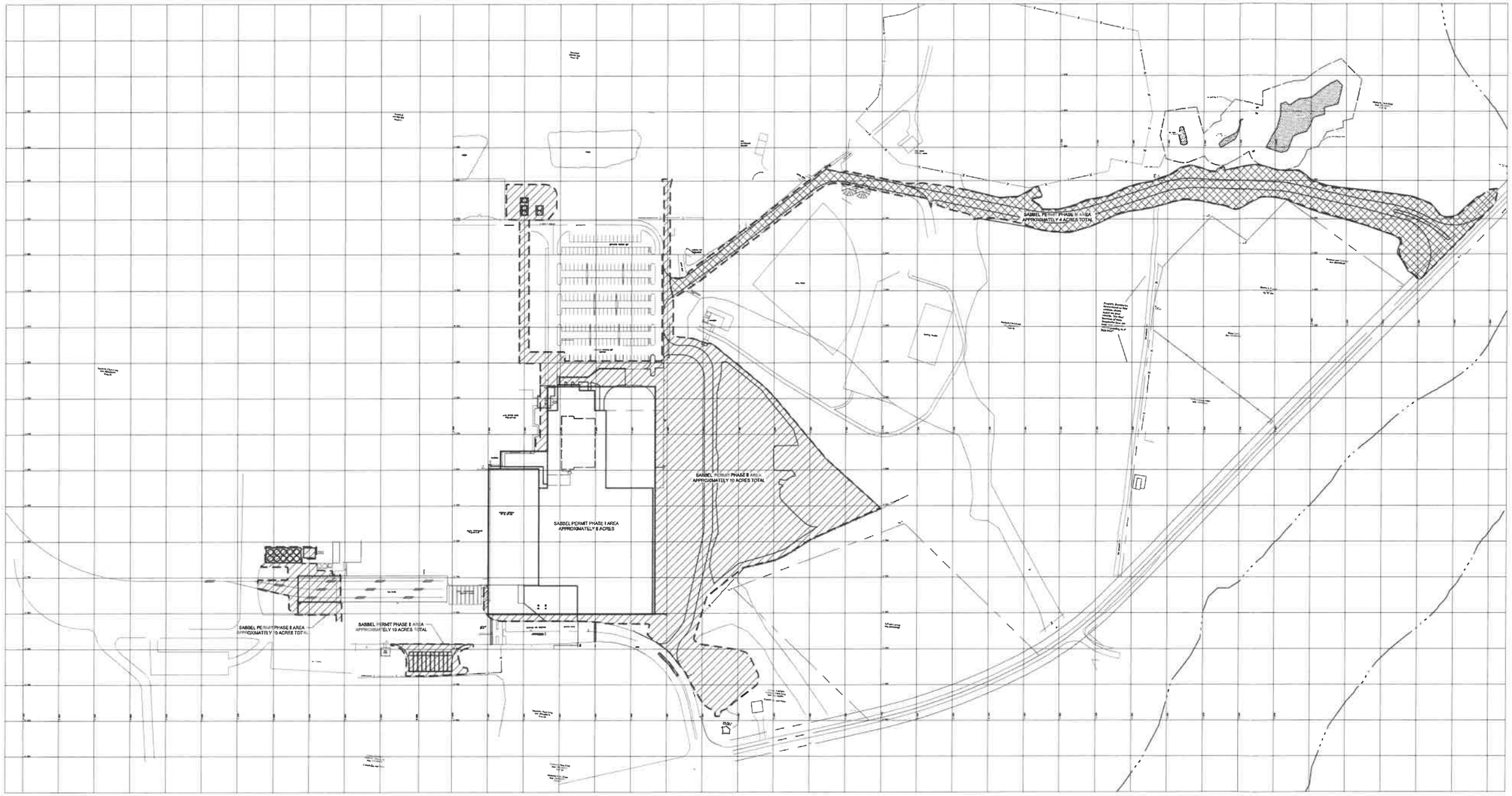
Kimberly-Clark Corporation, Corinth Mill
3461 County Road 100
Corinth, Mississippi 38834

ECS
ENVIRONMENTAL COMPLIANCE & SAFETY, INC.
P.O. Box 356
Sherman, Mississippi 38869
(662) 840-5945

Figure 2: Aerial Map

FIGURE 3

SITE DEVELOPMENT MAP



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THE BUSINESS OF PROJECT DELIVERY
10 Falcon Crest Drive, Suite 300
Greenville, SC 29607
P.O. 10288 Greenville, SC 29603
Tel: 864.298.2000 - Fax: 864.298.2200
www.cresa-sc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
Official Job Number: 232000163

Seal

THIRD ANGLE PROJECTION

DIMENSIONAL TOLERANCES (INCHES): X ± .050, .XX ± .015, .XXX ± .005
DIMENSIONAL TOLERANCES (MILLIMETERS): X. ± 1.30, X.X ± 0.40, X.XX ± 0.15
ANGULAR TOLERANCE: X.X = ± 0° 30', X.XX = ± 0° 15'
DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS

	K-C NUMBER
DRAWN FJ RAMSEUR	08 | 11 | 20
CHECK RF WILL	08 | 12 | 20
APVD BR CHANDLER	08 | 21 | 20

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR INFORMATION	FJR	6/21/20	BRC
B			REVISED FOR PERMIT	FJR	10/22/20	BRC

-INCH-

MNEMONIC: -

SHEET NO.: -

TITLE: CIVIL PERMIT AREAS

Kimberly-Clark Corporation

DWG NO.: EXHIBIT A

SIZE: E ISSUE: B

FIGURE 4

EROSION AND SEDIMENT CONTROL PLAN

KIMBERLY-CLARK CORPORATION

PROJECT SATURN

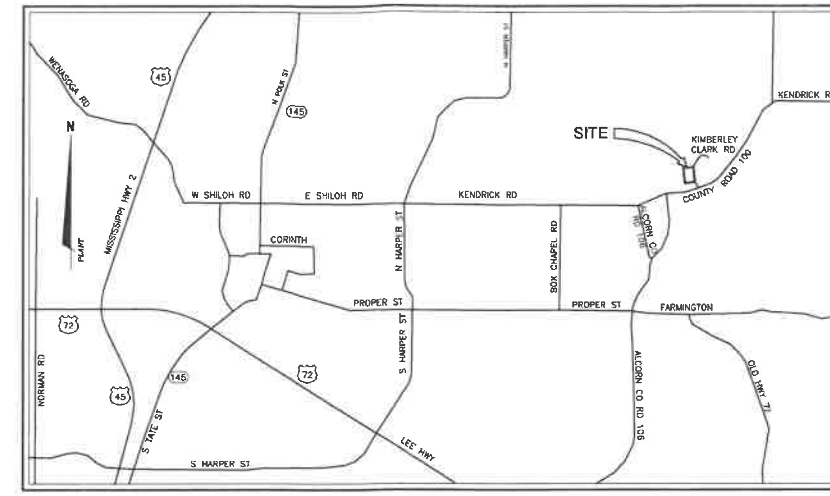
SITE DEVELOPMENT PLANS

3461 COUNTY ROAD 100

CORINTH, MISSISSIPPI 38834

LEGEND

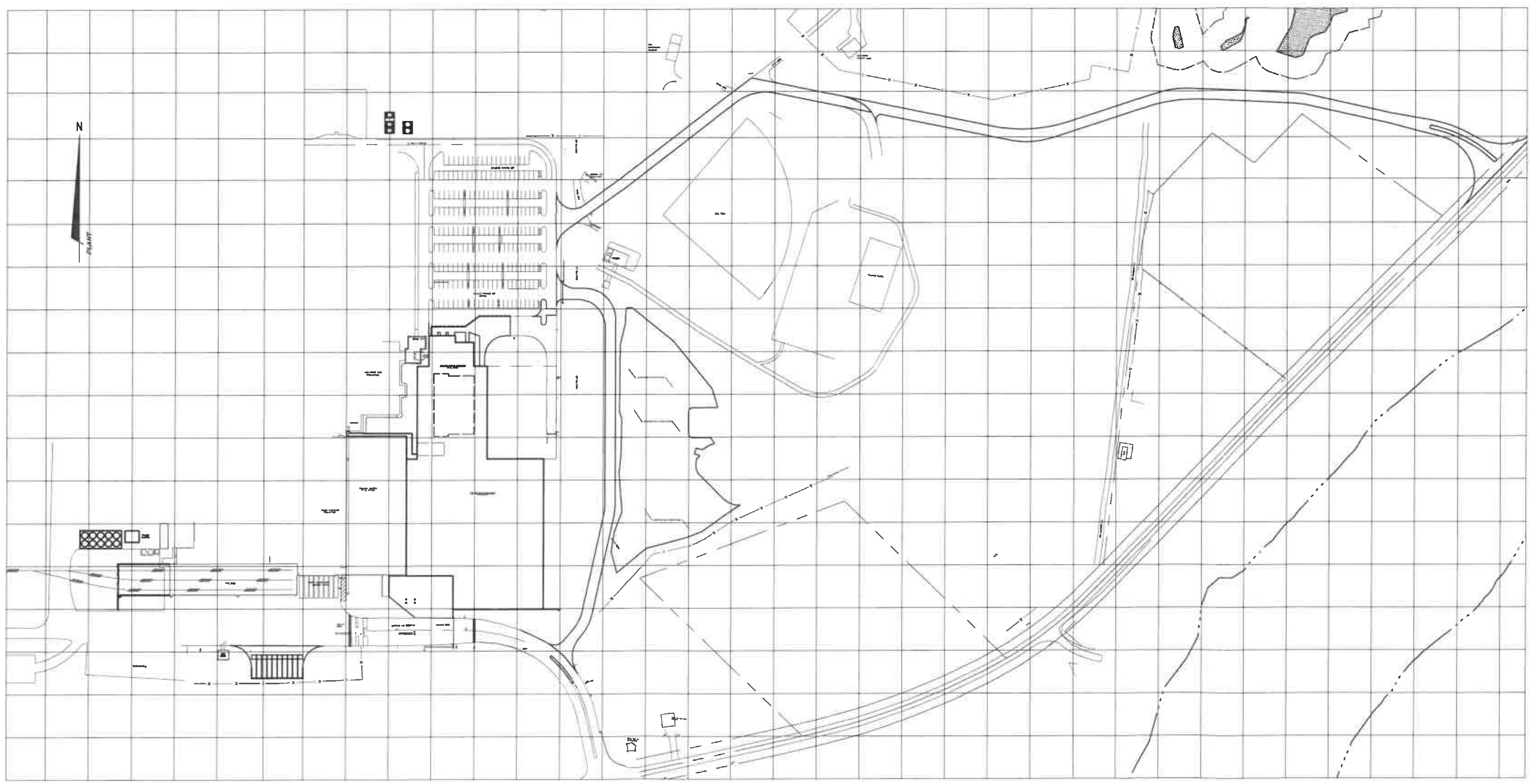
EXISTING	NEW	DESCRIPTION
		GRAVEL PAVEMENT
		ASPHALT PAVEMENT
		CONCRETE PAVEMENT
		CONCRETE SIDEWALK
		BUILDING OR STRUCTURE
x 500.0	x 500.0	RANDOM GRADE ELEVATION
	x INV. 495.0	INVERT ELEVATION
	x HP 510.0	HIGH POINT ELEVATION
	x FG 500.0	FINISH GRADE ELEVATION
	x TVP 500.0	TOP OF PAVEMENT ELEVATION
	x TVC 500.0	TOP OF CONCRETE ELEVATION
x FF 500.0	x FF 500.0	FINISHED FLOOR ELEVATION
500	500	GRADE CONTOUR
		EDGE OF TREES
		RAILROAD
		EXISTING STRUCTURE OR UTILITY TO BE REMOVED
		EXISTING STRUCTURE OR UTILITY TO BE ABANDONED
		GRATE INLET (GI)
		MANHOLE (MH)
		HYDRANT (HYD)
		POST INDICATOR VALVE (PIV)
		DITCH
		SWALE
		PROPERTY LINE
		RIGHT OF WAY LINE
		EDGE OF WATER OR C OF CREEK
		CLEAR AND GRUB LIMITS
x	xx	FENCE
SS	SS	SANITARY SEWER LINE
SD	SD	STORM DRAINAGE LINE
W	W	DOMESTIC WATER LINE
FP	FP	FIRE PROTECTION LINE
PS	PS	PROCESS SEWER LINE
FM	FM	SEWER FORCE MAIN
G	G	GAS LINE
	CWS	COOLING WATER SUPPLY
	CWR	COOLING WATER RETURN
P	P	POWER LINE - AERIAL
UP	UP	POWER LINE - UNDERGROUND
T	T	TELEPHONE LINE - AERIAL
UT	UT	TELEPHONE LINE - UNDERGROUND
	SF	SILT FENCE
		SOIL BORING
		THRUST RESTRAINT
	UNDER / OVER	PIPE CROSSING
	CO	CLEANOUT



VICINITY MAP

DRAWING LIST

DRAWING NUMBER	DRAWING TITLE
C348-CV-00001	COVER SHEET
C348-CV-00002	OVERALL EXISTING CONDITIONS AND DEMOLITION PLAN
C348-CV-00003	EXISTING CONDITIONS AND DEMOLITION PLAN 1
C348-CV-00004	EXISTING CONDITIONS AND DEMOLITION PLAN 2
C348-CV-00005	EXISTING CONDITIONS AND DEMOLITION PLAN 3
C348-CV-00006	EXISTING CONDITIONS AND DEMOLITION PLAN 4
C348-CV-00007	EXISTING CONDITIONS AND DEMOLITION PLAN 5
C348-CV-00008	OVERALL SITE DEVELOPMENT PLAN
C348-CV-00009	LAYOUT AND PAVING PLAN 1
C348-CV-00010	LAYOUT AND PAVING PLAN 2
C348-CV-00011	LAYOUT AND PAVING PLAN 3
C348-CV-00012	LAYOUT AND PAVING PLAN 4
C348-CV-00013	LAYOUT AND PAVING PLAN 5
C348-CV-00014	OVERALL GRADING AND STORM DRAINAGE PLAN
C348-CV-00015	GRADING AND STORM DRAINAGE PLAN 1
C348-CV-00016	GRADING AND STORM DRAINAGE PLAN 2
C348-CV-00017	GRADING AND STORM DRAINAGE PLAN 3
C348-CV-00018	GRADING AND STORM DRAINAGE PLAN 4
C348-CV-00019	GRADING AND STORM DRAINAGE PLAN 5
C348-CV-00020	OVERALL PHASE I EROSION AND SEDIMENT CONTROL PLAN
C348-CV-00021	PHASE I EROSION AND SEDIMENT CONTROL PLAN 1
C348-CV-00022	PHASE I EROSION AND SEDIMENT CONTROL PLAN 2
C348-CV-00023	PHASE I EROSION AND SEDIMENT CONTROL PLAN 3
C348-CV-00024	PHASE I EROSION AND SEDIMENT CONTROL PLAN 4
C348-CV-00025	PHASE I EROSION AND SEDIMENT CONTROL PLAN 5
C348-CV-00026	OVERALL PHASE II EROSION AND SEDIMENT CONTROL PLAN
C348-CV-00027	PHASE II EROSION AND SEDIMENT CONTROL PLAN 1
C348-CV-00028	PHASE II EROSION AND SEDIMENT CONTROL PLAN 2
C348-CV-00029	PHASE II EROSION AND SEDIMENT CONTROL PLAN 3
C348-CV-00030	PHASE II EROSION AND SEDIMENT CONTROL PLAN 4
C348-CV-00031	PHASE II EROSION AND SEDIMENT CONTROL PLAN 5
C348-CV-00032	OVERALL UNDERGROUND UTILITIES PLAN
C348-CV-00033	UNDERGROUND UTILITIES PLAN 1
C348-CV-00034	UNDERGROUND UTILITIES PLAN 2
C348-CV-00035	UNDERGROUND UTILITIES PLAN 3
C348-CV-00036	UNDERGROUND UTILITIES PLAN 4
C348-CV-00037	UNDERGROUND UTILITIES PLAN 5
C348-CV-00038	MISCELLANEOUS NOTES, SECTIONS AND DETAILS
C348-CV-00039	MISCELLANEOUS NOTES, SECTIONS AND DETAILS
C348-CV-00040	MISCELLANEOUS NOTES, SECTIONS AND DETAILS
C348-CV-00041	MISCELLANEOUS NOTES, SECTIONS AND DETAILS
C348-CV-00042	MISCELLANEOUS NOTES, SECTIONS AND DETAILS
C348-CV-00043	ROAD PROFILES
C348-CV-00044	ROAD PROFILES
C348-CV-00045	ROAD PROFILES



1" = 200'

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OWNER

LARRY BEARD
KIMBERLY-CLARK CORPORATION
3461 COUNTY ROAD 100
CORINTH, MISSISSIPPI 38834
PHONE: 662-264-3591
EMAIL: LBEARD@KCC.COM

ENGINEER

ROBERT F. WILL III, PE
O'NEAL, INC.
10 FALCON CREST DRIVE
GREENVILLE, SC 29607
OFFICE: 864-298-2058
FAX: 864-298-2200
EMAIL: RWILL@ONEALINC.COM

O'NEAL
THE BUSINESS OF PROJECT DELIVERY
10 Falcon Crest Drive, Suite 300
Greenville, SC 29607
P.O. 10388 Greenville, SC 29603
Tel: 864.298.2000 - Fax: 864.298.2200
www.onealinc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 202000183

Seal: ROBERT FREDERICK WILL, III — LICENSED PROFESSIONAL ENGINEER — 20489 — STATE OF MISSISSIPPI

THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES	ANGULAR TOLERANCE	DIMENSION & TOLERANCE
	INCHES: .X ± .050; .XX ± .015; .XXX ± .005 / MILLIMETERS: X. ± 1.30; X.X ± 0.40; X.XX ± 0.15	X.X = ± 0° 30'; X.XX = ± 0° 15'	PER ASME Y14.5 OR ISO STANDARDS

	NAME	K-C NUMBER		
DRAWN	FJ RAMSEUR	08	11	20
CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR ESTIMATE	FJR	8/13/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT	FJR	9/18/20	BRC
C			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

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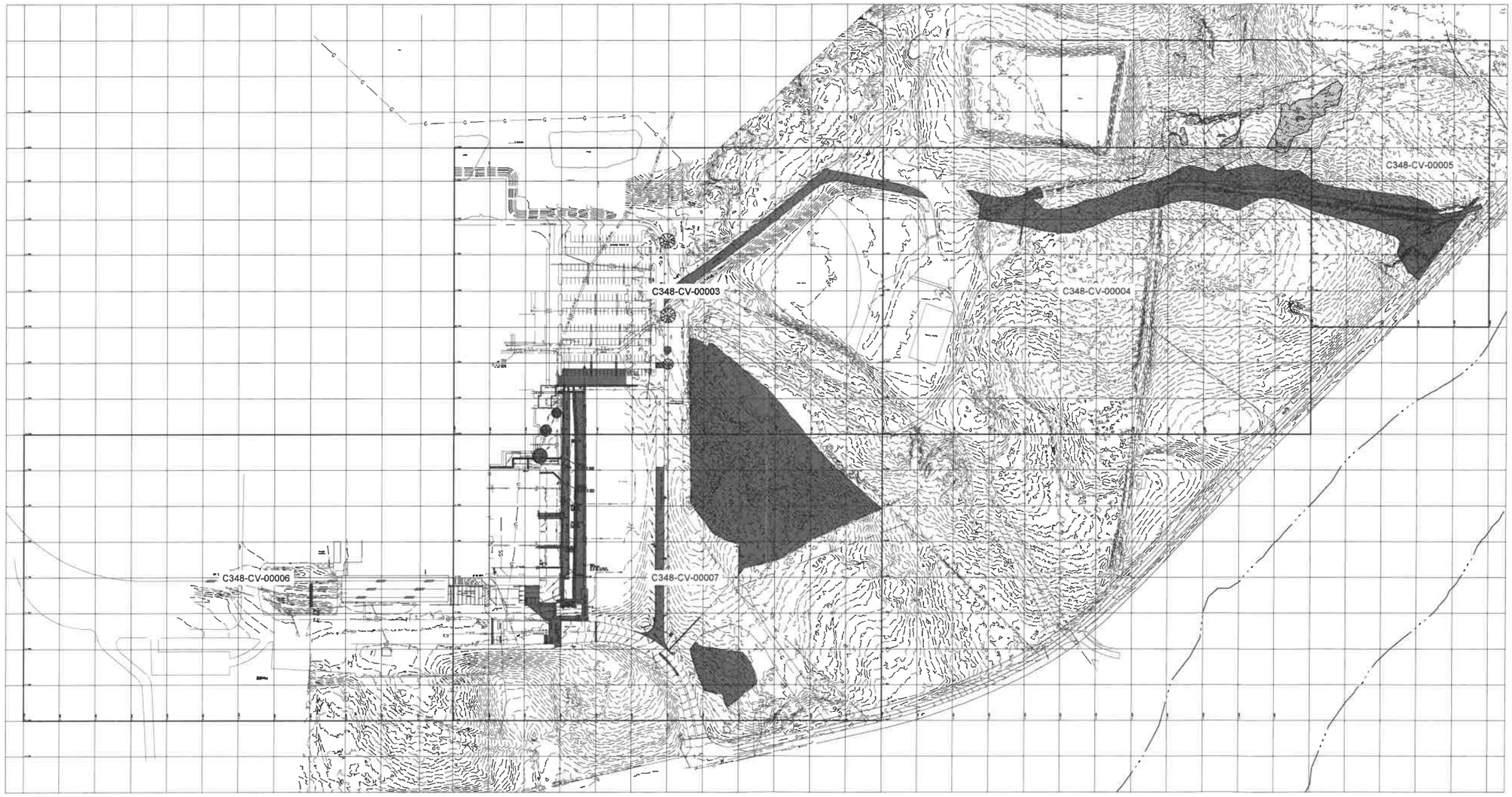
MNEMONIC: -   SHEET NO.: -

TITLE: CIVIL COVER SHEET

Kimberly-Clark Corporation

DWG. NO.: C348-CV-00001   SIZE: E   ISSUE: C

NOTES:
FOR GENERAL NOTES SEE DWG. C348-CV-00038.



PRELIMINARY - NOT FOR CONSTRUCTION

THIRD ANGLE PROJECTION

DIMENSIONAL TOLERANCES (INCHES): .X ± .050, .XX ± .015, .XXX ± .005
DIMENSIONAL TOLERANCES (MILLIMETERS): X.X ± 1.30, X.X ± 0.40, X.XX ± 0.15

ANGULAR TOLERANCE: X.X = ± 0° 30', X.XX = ± 0° 15'

DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS

	K–C NUMBER
DRAWN FJ RAMSEUR	08 | 11 | 20
CHECK RF WILL	08 | 12 | 20
APVD BR CHANDLER	08 | 12 | 20

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR ESTIMATE	FJR	6/13/20	BRC
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C			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

O'NEAL
THE BUSINESS OF PROJECT DELIVERY
10 Falcon Crest Drive, Suite 300
Greenville, SC 29607
P.O. 10289 Greenville, SC 29603
Tel: 864.288.3000 - Fax: 864.288.2300
www.oneallinc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 302000165

Seal: REGISTERED PROFESSIONAL ENGINEER — ROBERT FREDERICK WILL — 30499 — STATE OF MISSISSIPPI

N

-INCH-

MNEMONIC -

SHEET NO. -

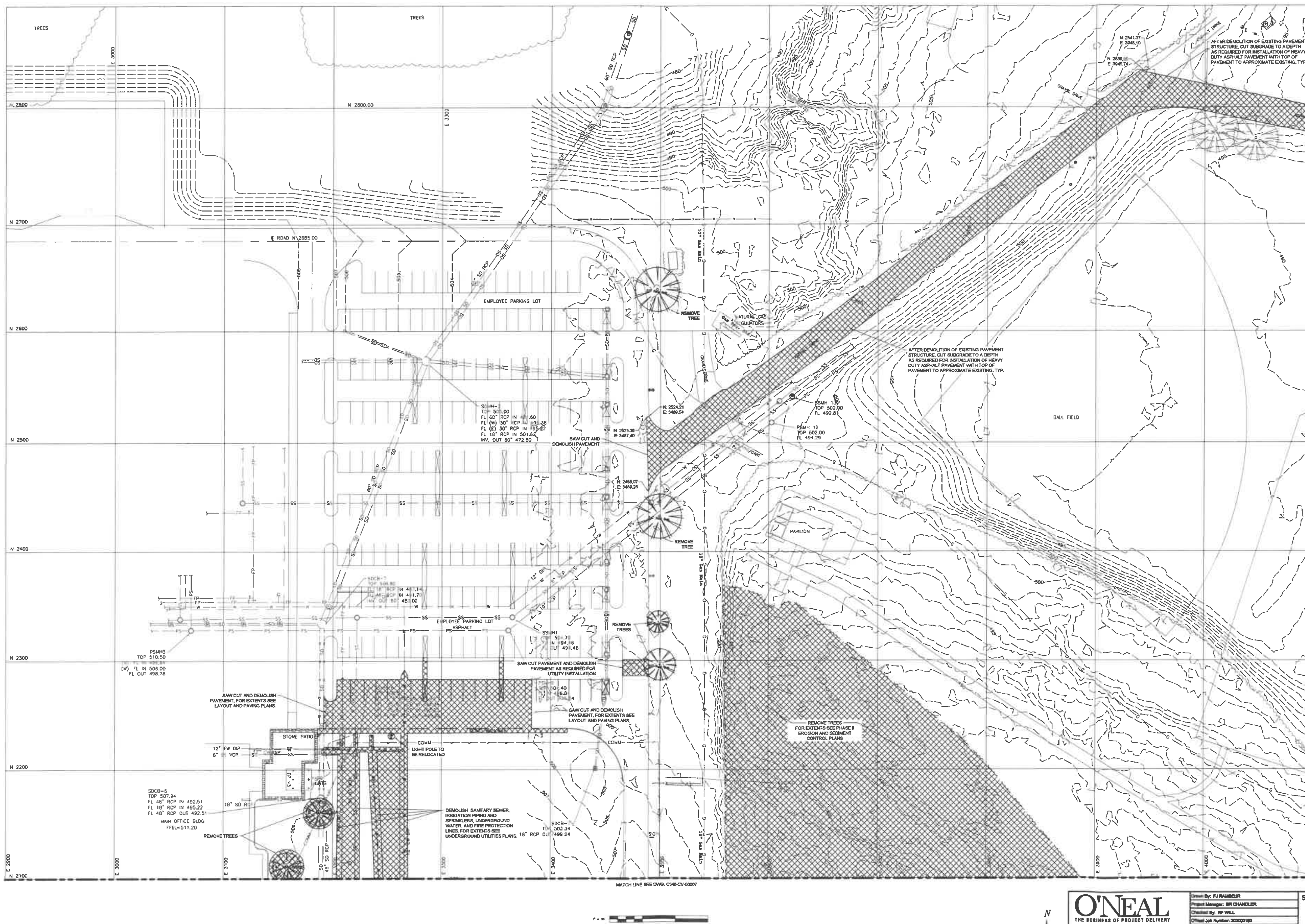
TITLE
CIVIL
OVERALL EXISTING CONDITIONS AND DEMOLITION PLAN

Kimberly-Clark Corporation

DWG NO. C348-CV-00002

SIZE E ISSUE C

NOTES
FOR GENERAL NOTES SEE DWG. C348-CV-00008.



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Tel: 864.298.2000 - Fax: 864.298.2200
www.onealinc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 202000163

Seal: ROBERT FREDERICK WILL, III — LICENSED PROFESSIONAL ENGINEER — 30499 — STATE OF MISSISSIPPI

THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES INCHES	MILLIMETERS	ANGULAR TOLERANCE	DIMENSION & TOLERANCE
	.X ± .050	X. ± 1.30	X.X = ± 0' 30'	PER ASME Y14.5 OR ISO STANDARDS
	.XX ± .015	X.X ± 0.40	X.XX = ± 0' 15'	
	.XXX ± .005	X.XX ± 0.15		

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CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR ESTIMATE	FJR	8/13/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT	FJR	9/18/20	BRC
C			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

-INCH-

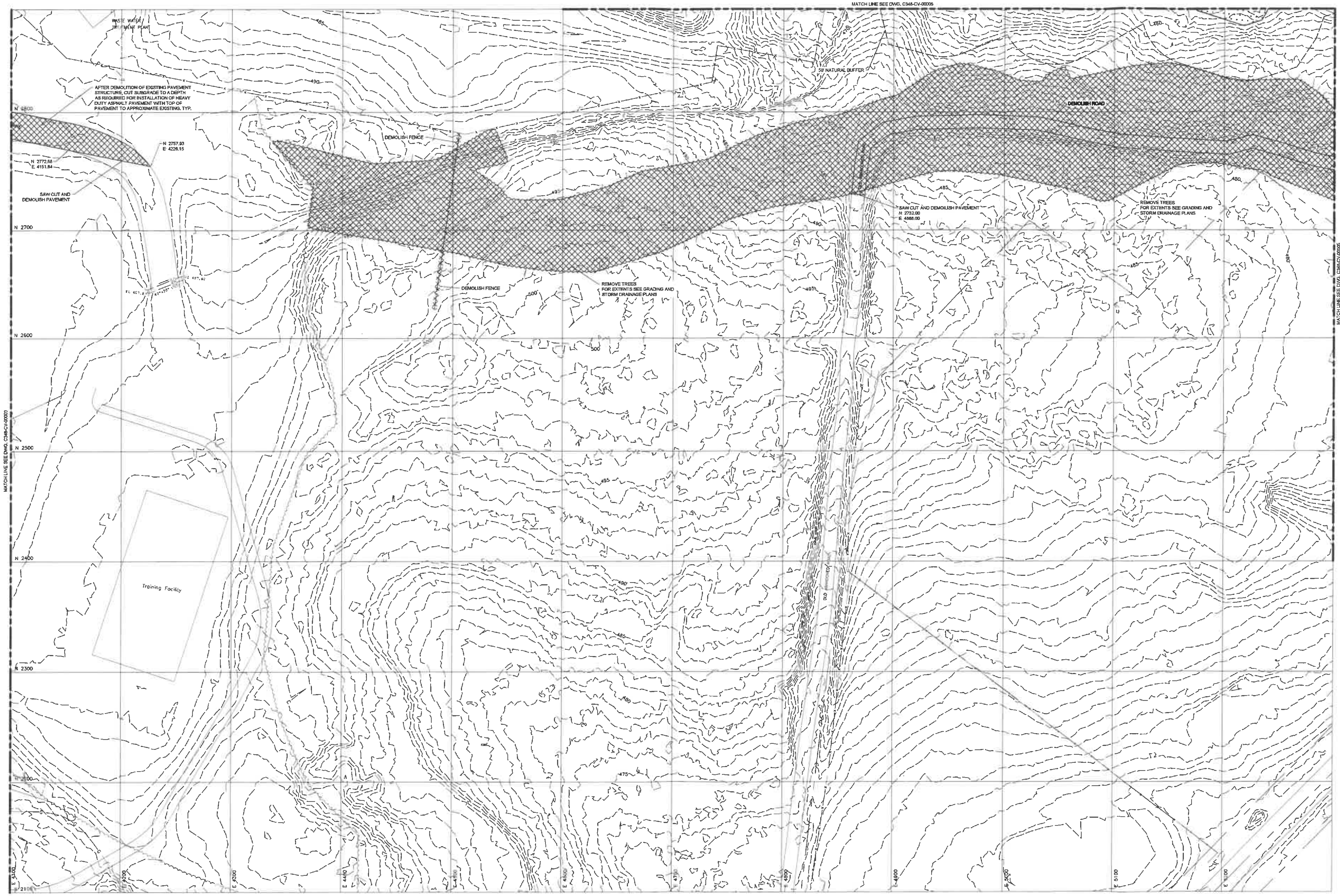
MNEMONIC -   SHEET NO. -

TITLE
CIVIL
EXISTING CONDITIONS AND DEMOLITION PLAN 1

Kimberly-Clark Corporation

DWG. NO. C348-CV-00003   SIZE E   ISSUE C

NOTES:
FOR GENERAL NOTES SEE DWG. C348-CV-00036.



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10 Falcon Crest Drive, Suite 300
Greenville, SC 29607
P.O. 10298 Greenville, SC 29603
Tel: 864.298.2000 - Fax: 864.298.2300
www.onealinc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 202000169

Seal
ROBERT FREDERICK WILL, III
LICENSED PROFESSIONAL ENGINEER
30490
STATE OF MISSISSIPPI

THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES INCHES	MILLIMETERS	ANGULAR TOLERANCE	DIMENSION & TOLERANCE
	.X ± .050 .XX ± .015 .XXX ± .005	X. ± 1.30 X.X ± 0.40 X.XX ± 0.15	X.X = ± 0' 30' X.XX = ± 0' 15'	PER ASME Y14.5 OR ISO STANDARDS

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		K-C NUMBER		
DRAWN	FJ RAMSEUR	08	11	20
CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR ESTIMATE	FJR	8/13/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

-INCH-

MNEMONIC -
SHEET NO. -

TITLE
CIVIL
EXISTING CONDITIONS AND DEMOLITION PLAN 2

Kimberly-Clark Corporation

DWG. NO. C348-CV-00004
SIZE E
ISSUE B

NOTES:
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Tel: 864.298.2000 - Fax: 864.298.2200
www.onealinc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 202000168

Seal: ROBERT FREDERICK WILL, II — LICENSED PROFESSIONAL ENGINEER — 20436 — STATE OF MISSISSIPPI

THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES INCHES	MILLIMETERS	ANGULAR TOLERANCE	DIMENSION & TOLERANCE
	.X ± .050 .XX ± .015 .XXX ± .005	X. ± 1.30 X.X ± 0.40 X.XX ± 0.15	X.X = ± 0' 30' X.XX = ± 0' 15'	PER ASME Y14.5 OR ISO STANDARDS

	Name	K-C NUMBER		
DRAWN	FJ RAMSEUR	08	11	20
CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR ESTIMATE	FJR	8/13/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

-INCH-

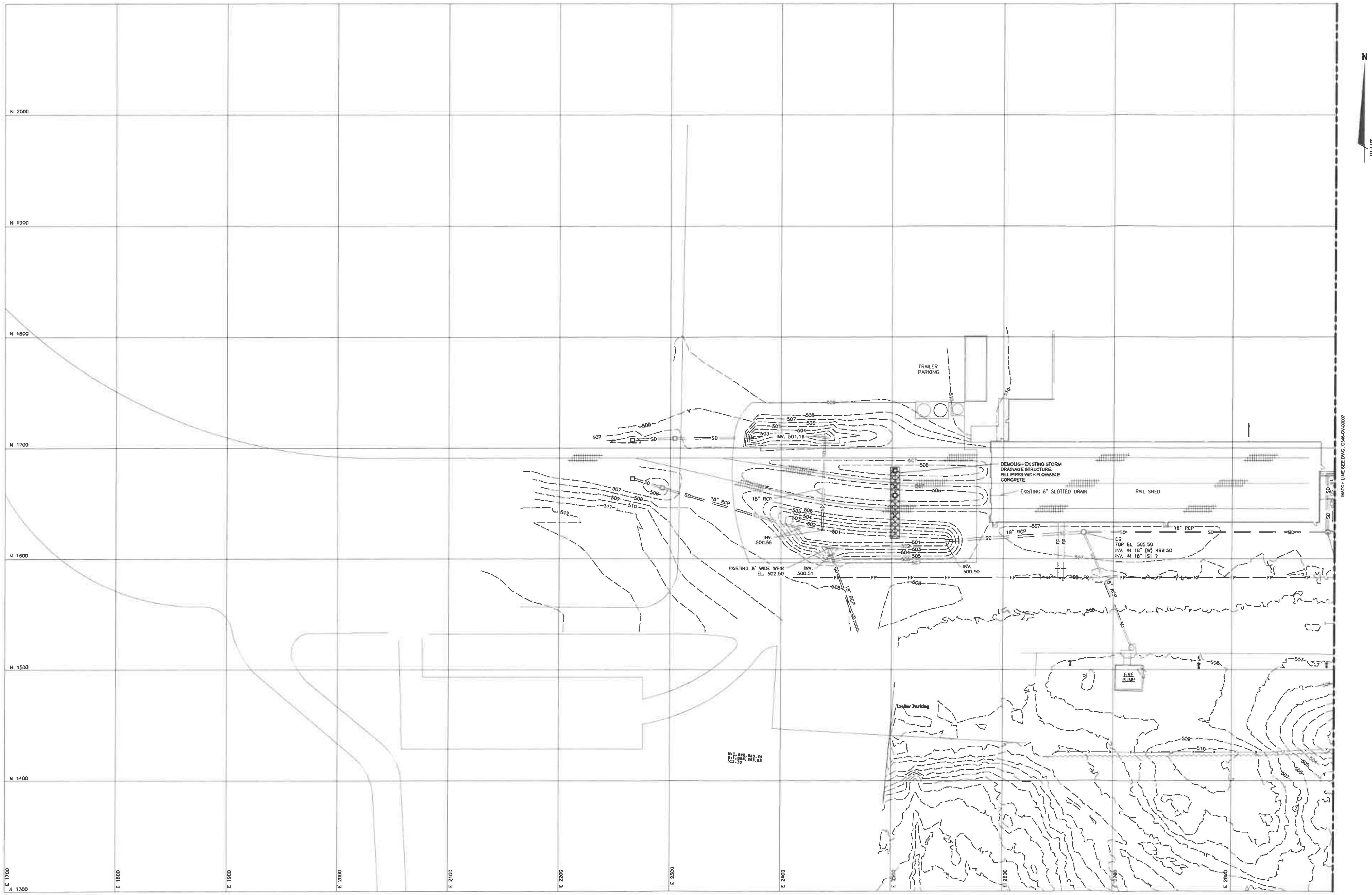
MNEMONIC: -
SHEET NO.: -

TITLE: CIVIL
EXISTING CONDITIONS AND DEMOLITION PLAN 3

Kimberly-Clark Corporation

DWG NO.: C348-CV-00005
SIZE: E ISSUE: B

NOTES
FOR GENERAL NOTES SEE DWG. C348-CV-00038.



PRELIMINARY - NOT FOR CONSTRUCTION

THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES INCHES	MILLIMETERS	ANGULAR TOLERANCE	DIMENSION & TOLERANCE
	.X ± .050 .XX ± .015 .XXX ± .005	X. ± 1.30 X.X ± 0.40 X.XX ± 0.15	X.X = ± 0' 30' X.XX = ± 0' 15'	PER ASME Y14.5 OR ISO STANDARDS

		K-C NUMBER		
DRAWN	FJ RAMSEUR	08	11	20
CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR ESTIMATE	FJR	8/13/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT	FJR	9/18/20	BRC
C			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

-INCH-

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THE BUSINESS OF PROJECT DELIVERY
10 Falcon Crest Drive, Suite 300
Greenville, SC 29607
P.O. 10369 Greenville, SC 29603
Tel: 864.298.2000 - Fax: 864.298.2200
www.onealinc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 202000183

Seal
ROBERT FREDERICK WILL, III
LICENSED PROFESSIONAL ENGINEER
20400
STATE OF MISSISSIPPI

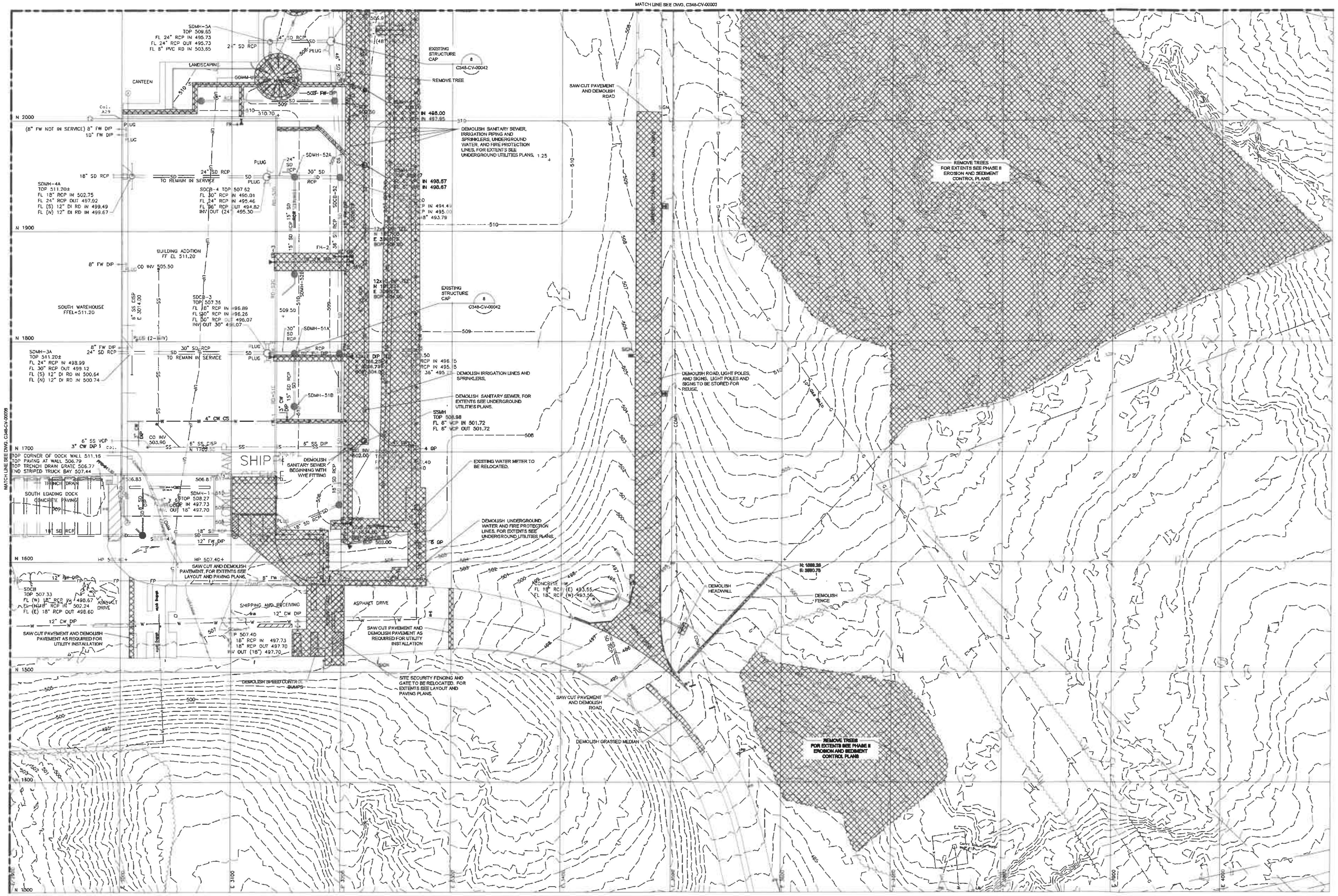
MNEMONIC -
SHEET NO. -

TITLE
CIVIL
EXISTING CONDITIONS AND DEMOLITION PLAN 4

Kimberly-Clark Corporation

DWG. NO. C348-CV-00006
SIZE E
ISSUE C

NOTES
FOR GENERAL NOTES SEE DWG. C348-CV-00038.



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THE BUSINESS OF PROJECT DELIVERY
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Greenville, SC 29607
P.O. 10289 Greenville, SC 29603
Tel: 864.298.2000 - Fax: 864.298.2300
www.onealinc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 202000163

Seal: ROBERT FREDERICK WILL, III — LICENSED PROFESSIONAL ENGINEER — 30499 — STATE OF MISSISSIPPI

THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES INCHES	MILLIMETERS	ANGULAR TOLERANCE	DIMENSION & TOLERANCE
	.X ± .050	X. ± 1.30	X.X = ± 0° 30'	PER ASME Y14.5 OR ISO STANDARDS
	.XX ± .015	X.X ± 0.40	X.XX = ± 0° 15'	
	.XXX ± .005	X.XX ± 0.15		

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		K-C NUMBER		
DRAWN	FJ RAMSEUR	08	11	20
CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR ESTIMATE	FJR	8/13/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT	FJR	9/18/20	BRC
C			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

-INCH-

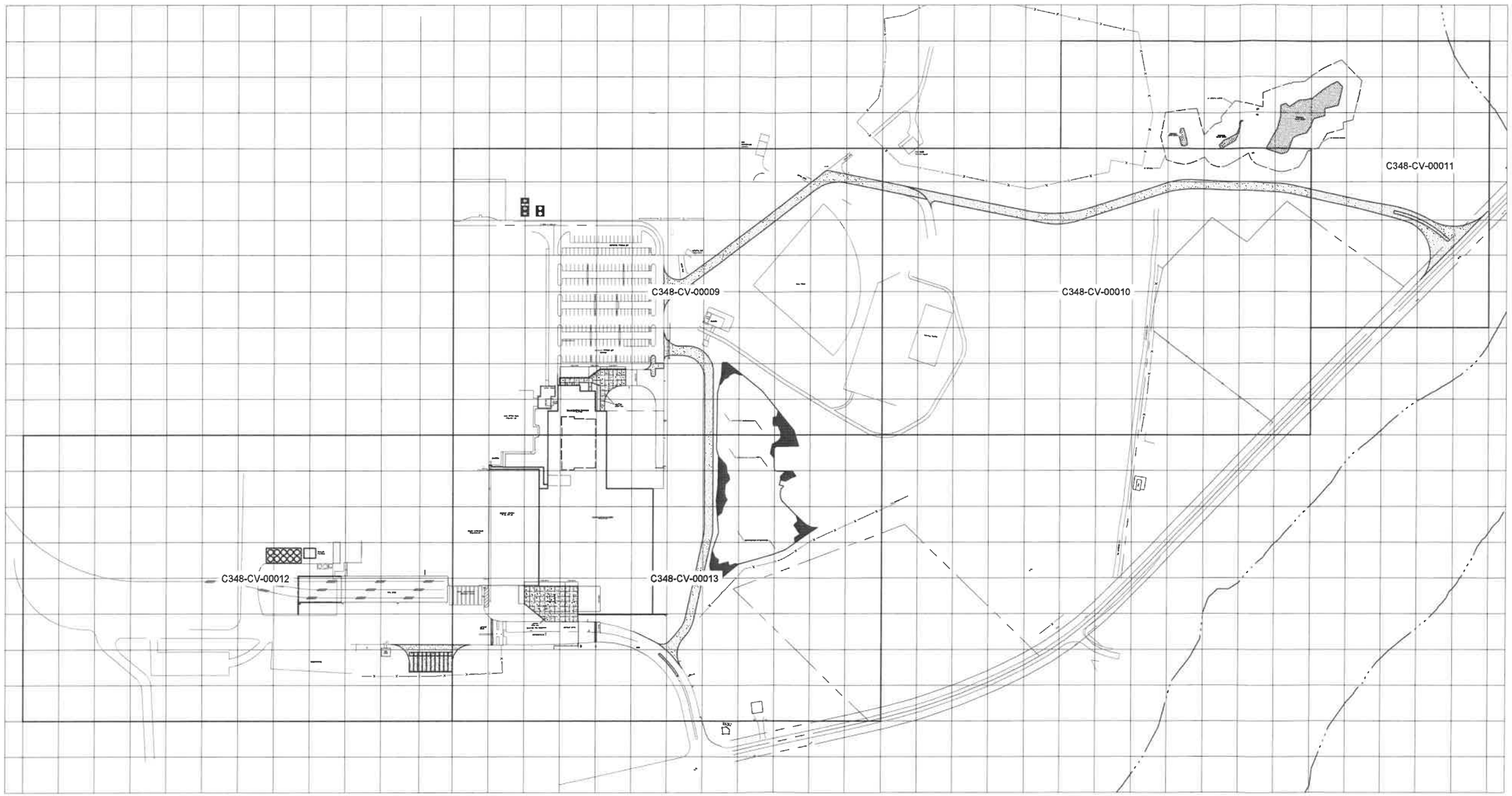
MNEMONIC: -
SHEET NO. -

TITLE: CIVIL
EXISTING CONDITIONS AND DEMOLITION PLAN 5

Kimberly-Clark Corporation

DWG. NO. C348-CV-00007
SIZE E
ISSUE C

NOTES:
FOR GENERAL NOTES SEE DWG. C348-CV-00006.



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10 Falcon Crest Drive, Suite 300
Greenville, SC 29607
P.O. 10289 Greenville, SC 29603
Tel: 864.288.3300 - Fax: 864.288.2300
www.oneal-inc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
Owner Job Number: 3280001B3

Seal

-INCH-

MNEMONIC: -
SHEET NO.: -

TITLE
CIVIL
OVERALL LAYOUT AND PAVING PLAN

Kimberly-Clark Corporation

DWG. NO. C348-CV-00008

SIZE ISSUE E C

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR ESTIMATE	FJR	8/13/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT	FJR	9/18/20	BRC
C			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

K-I-C NUMBER

DRAWN	FJ RAMSEUR	08 11 20	
CHECK	RF WILL	08 12 20	
APVD	BR CHANDLER	08 12 20	

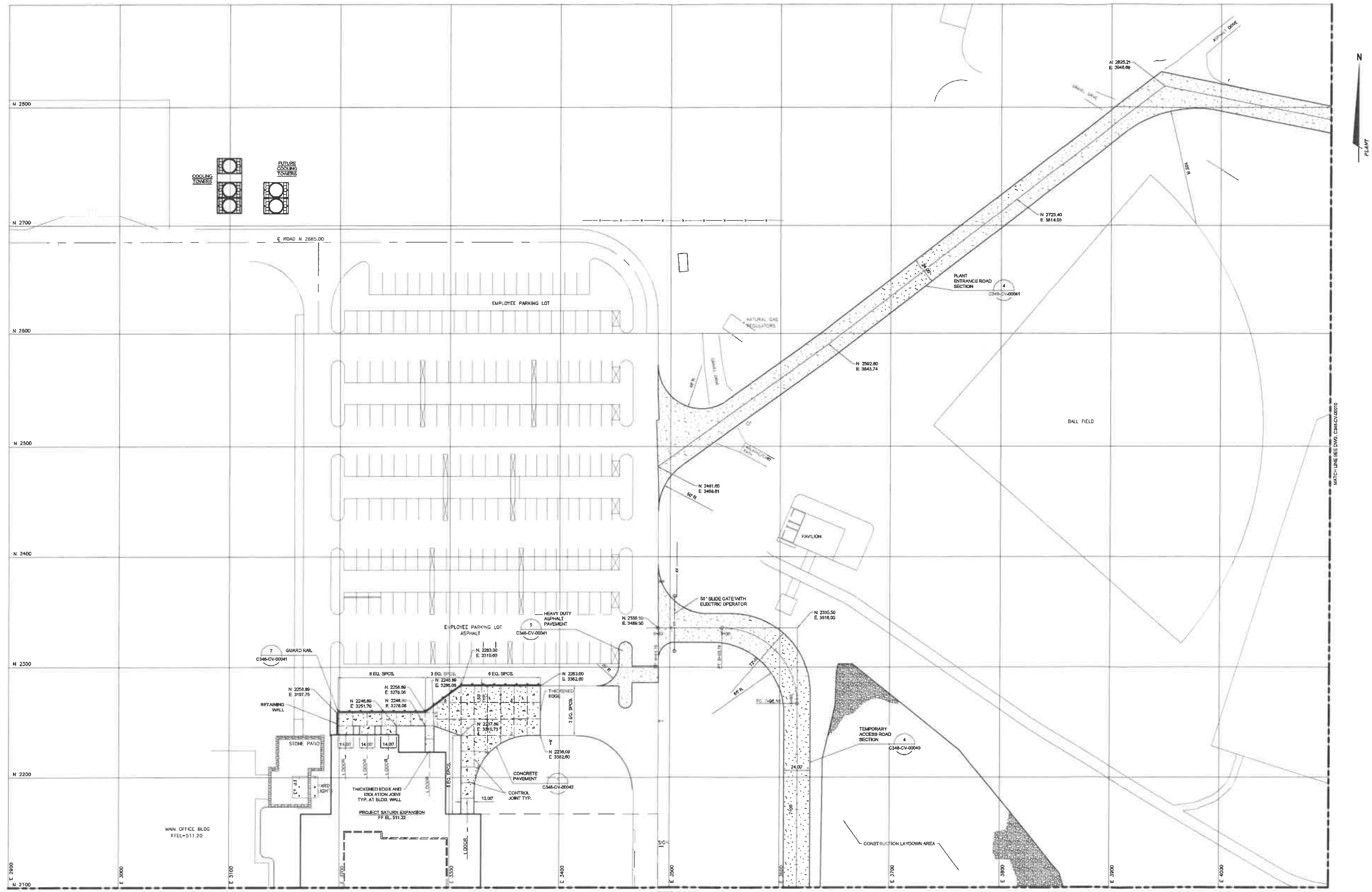
THIRD ANGLE PROJECTION

DIMENSIONAL TOLERANCES (INCHES): X ± .055; .XX ± .015; .XXX ± .005
DIMENSIONAL TOLERANCES (MILLIMETERS): X. ± 1.30; X.X ± 0.40; X.XX ± 0.15

ANGULAR TOLERANCE: X.X = ± 0° 30'; X.XX = ± 0° 15'

DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS

NOTES
FOR GENERAL NOTES SEE DWG. C348-CV-00008.



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Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 202000168

Seal

THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES INCHES	MILLIMETERS	ANGULAR TOLERANCE	DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS
	.X ± .050	X. ± 1.30	X.X = ± 0° 30'	
	.XX ± .015	X.X ± 0.40	X.XX = ± 0° 15'	
	.XXX ± .005	X.XX ± 0.15		

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	Name	K-C NUMBER		
DRAWN	FJ RAMSEUR	08	11	20
CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR ESTIMATE	FJR	8/13/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT	FJR	9/18/20	BRC
C			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

-INCH-

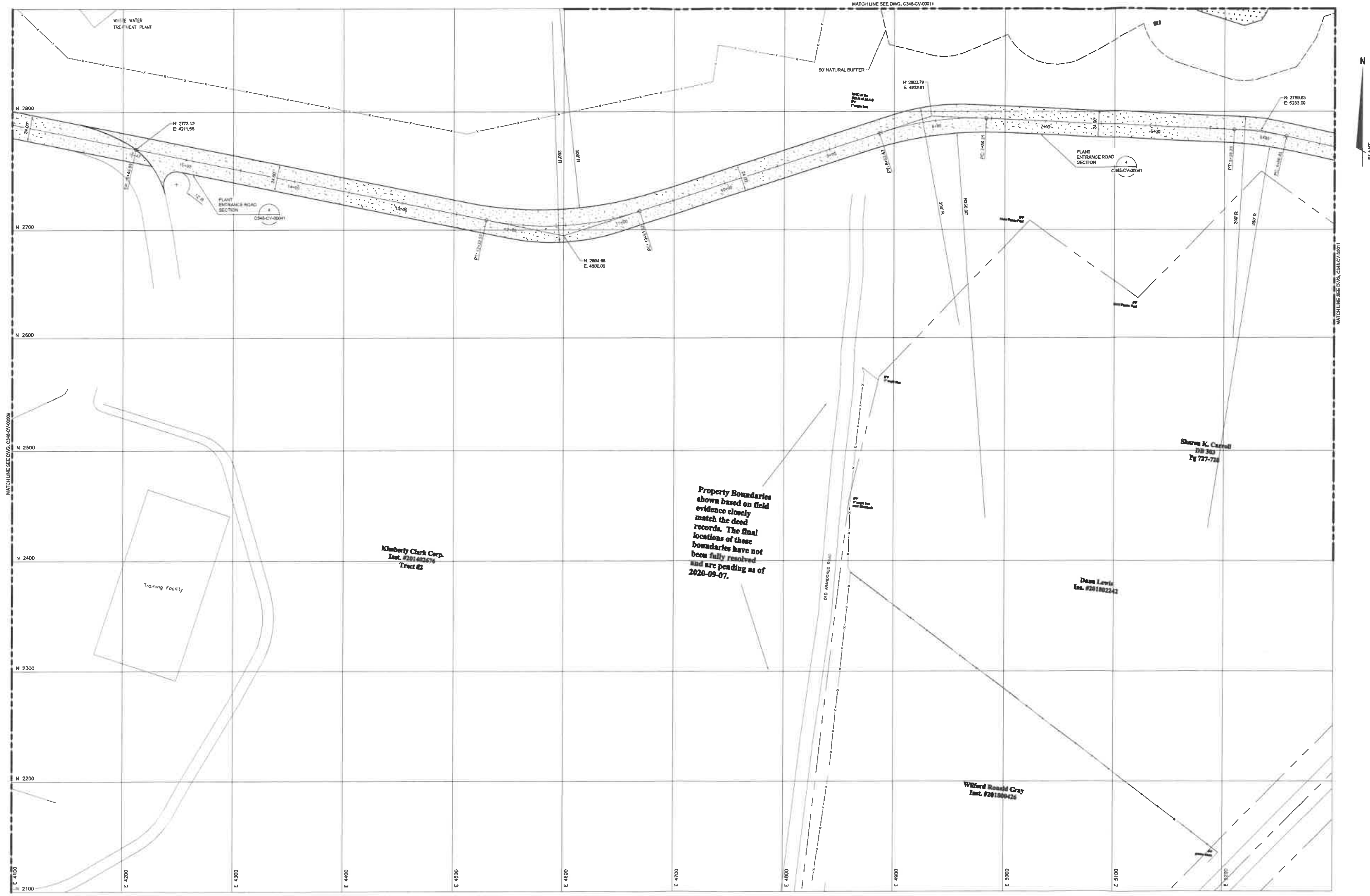
MNEMONIC -   SHEET NO. -

TITLE
CIVIL
LAYOUT AND PAVING PLAN 1

Kimberly-Clark Corporation

DWG. NO. C348-CV-00009   SIZE E   ISSUE C

NOTES
FOR GENERAL NOTES SEE DWG. C348-CV-00035.



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www.onealinc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 202000193

Seal

THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES		ANGULAR TOLERANCE	DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS
	.X ± .050 .XX ± .015 .XXX ± .005 INCHES	X. ± 1.30 X.X ± 0.40 X.XX ± 0.15 MILLIMETERS	X.X = ± 0° 30' X.XX = ± 0° 15'	

		K-C NUMBER		
DRAWN	FJ RAMSEUR	08	11	20
CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

-INCH-

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR ESTIMATE	FJR	8/13/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

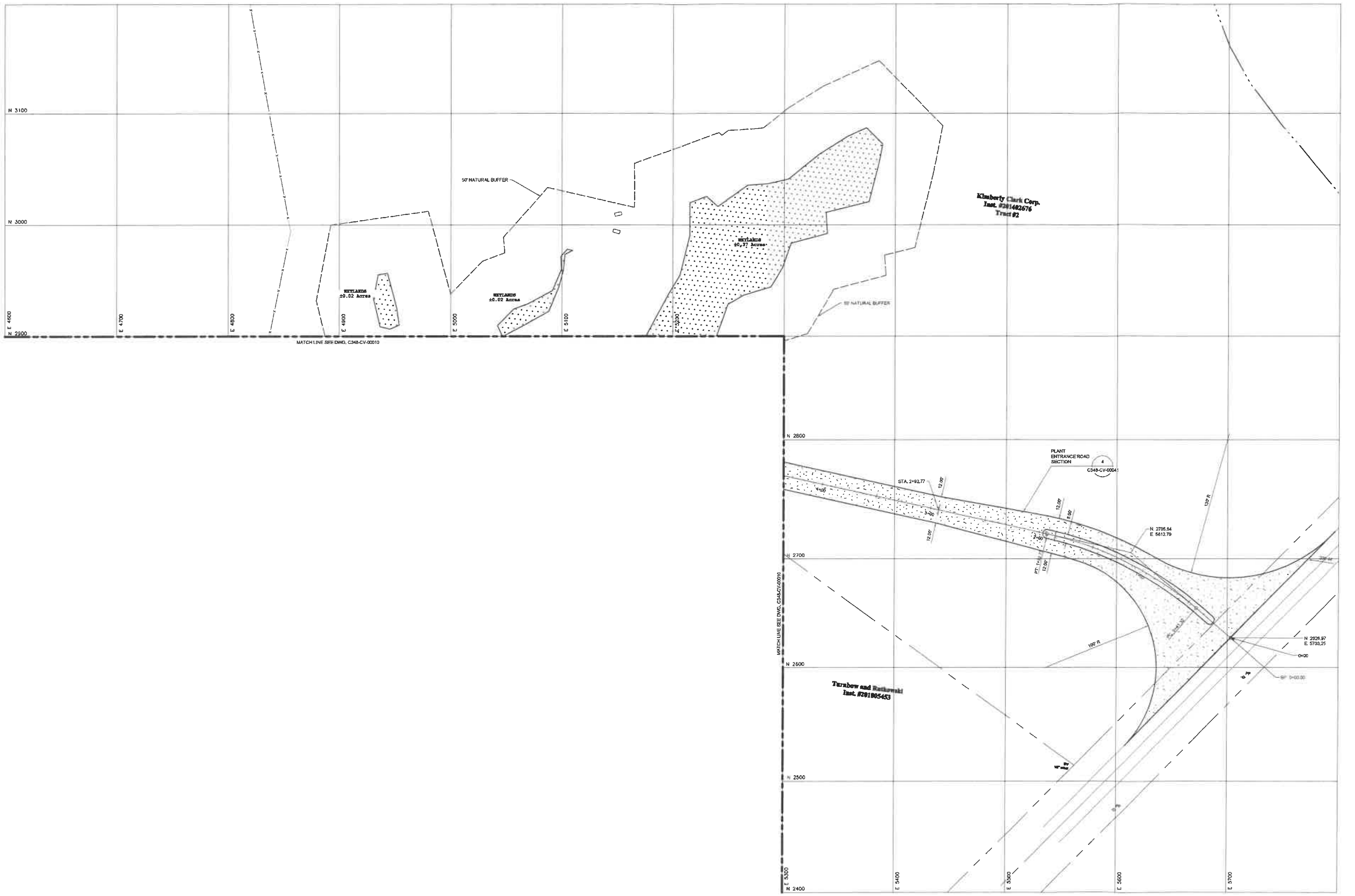
MNEMONIC -
SHEET NO. -

TITLE
CIVIL
LAYOUT AND PAVING PLAN 2

Kimberly-Clark Corporation

DWG. NO. C348-CV-00010
SIZE E
ISSUE B

NOTES:
FOR GENERAL NOTES SEE DWG. C348-CV-00001.



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Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number:

Seal

-INCH-

MNEMONIC -
SHEET NO. -

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR ESTIMATE	FJR	8/13/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

TITLE
CIVIL
LAYOUT AND PAVING PLAN 3

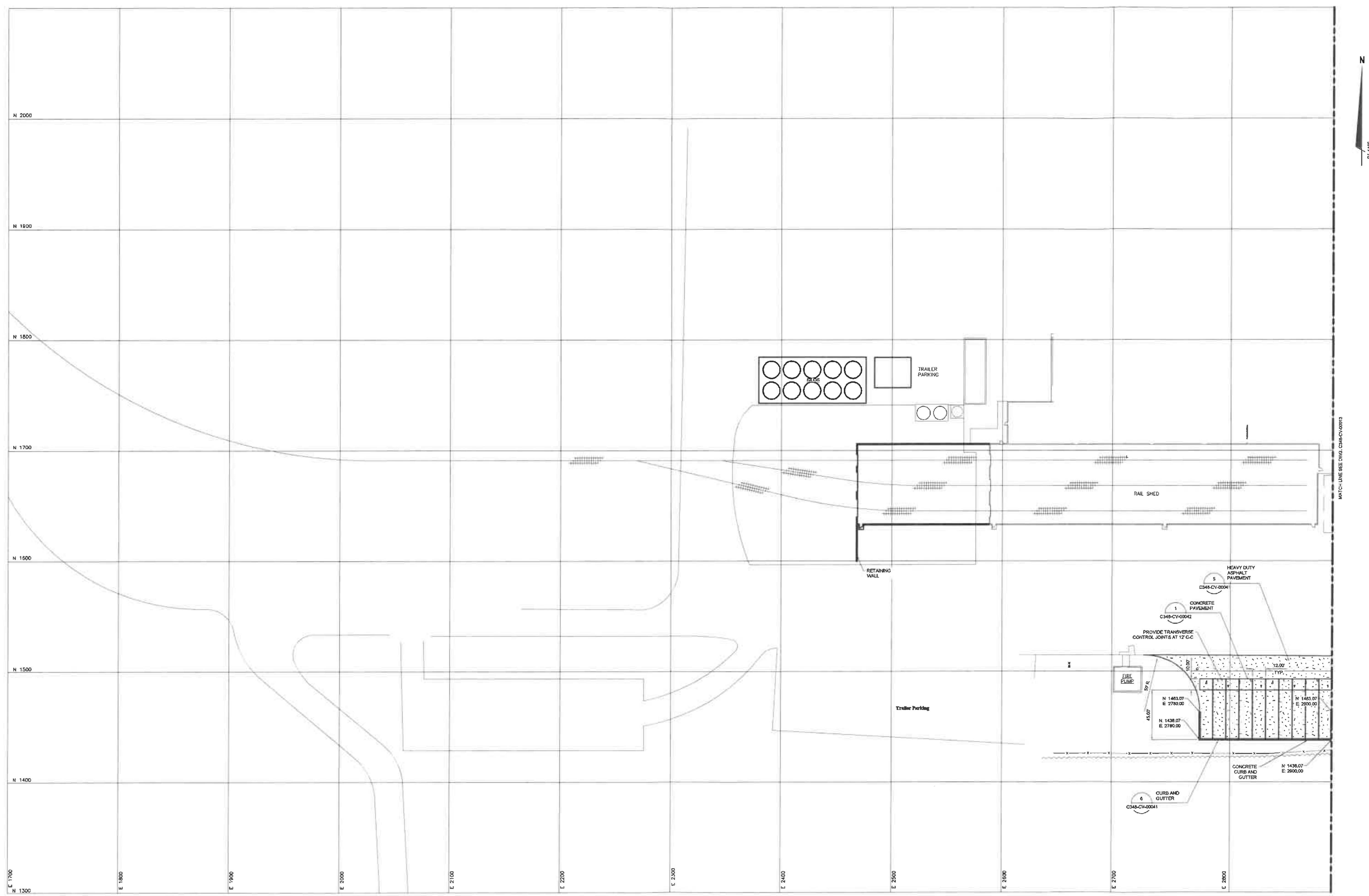
Kimberly-Clark Corporation

DWG. NO. C348-CV-00011 SIZE E ISSUE B

THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES INCHES	DIMENSIONAL TOLERANCES MILLIMETERS	ANGULAR TOLERANCE	
	.X ± .050	X. ± 1.30	X.X = ± 0° 30'	DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS
	.XX ± .015	X.X ± 0.40	X.XX = ± 0° 15'	
	.XXX ± .005	X.XX ± 0.15		

		K-C NUMBER
DRAWN	FJ RAMSEUR	08 11 20
CHECK	RF WILL	08 12 20
APVD	BR CHANDLER	08 12 20

NOTES
FOR GENERAL NOTES SEE DWG. C348-CV-00035.



PRELIMINARY - NOT FOR CONSTRUCTION

THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES INCHES	DIMENSIONAL TOLERANCES MILLIMETERS	ANGULAR TOLERANCE	DIMENSION & TOLERANCE
	.X ± .050 .XX ± .015 .XXX ± .005	X. ± 1.30 X.X ± 0.40 X.XX ± 0.15	X.X = ± 0' 30' X.XX = ± 0' 15'	PER ASME Y14.5 OR ISO STANDARDS

		K-C NUMBER		
DRAWN	FJ RAMSEUR	08	11	20
CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

-INCH-

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR PERMIT	FJR	9/18/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

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Tel: 864.298.2000 - Fax: 864.298.2300
www.onealinc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 202000163

Seal
ROBERT FREDERICK WILL, III
LICENSED PROFESSIONAL ENGINEER
20499
STATE OF MISSISSIPPI

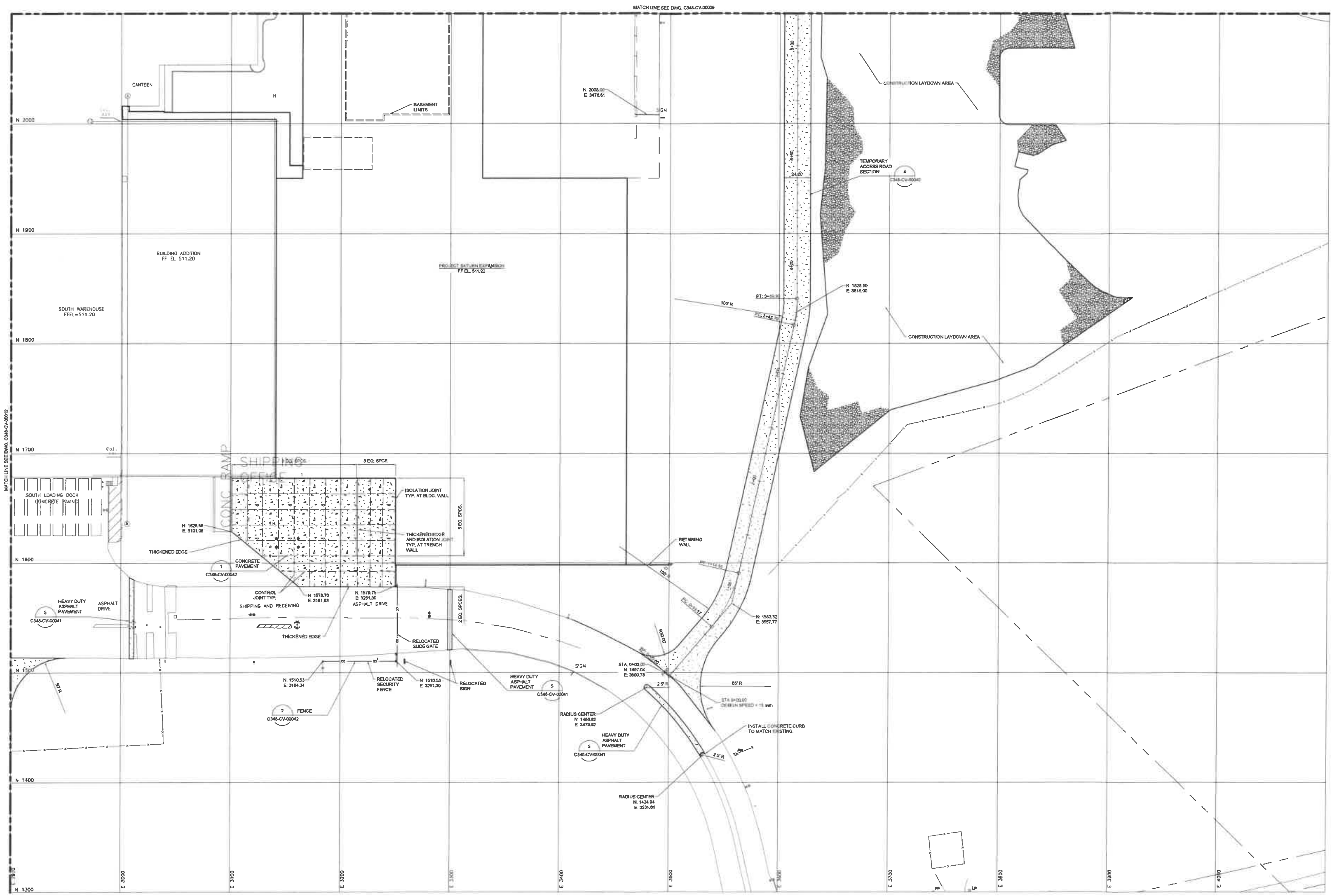
MNEMONIC -
SHEET NO. -

TITLE
CIVIL
LAYOUT AND PAVING PLAN 4

Kimberly-Clark Corporation

DWG. NO C348-CV-00012
SIZE E
ISSUE B

NOTES
FOR GENERAL NOTES SEE DWG. C348-CV-00036.



PRELIMINARY - NOT FOR CONSTRUCTION

O'NEAL THE BUSINESS OF PROJECT DELIVERY

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL

Seal: ROBERT FREDERICK WILL, III — LICENSED PROFESSIONAL ENGINEER — 20459 — STATE OF MISSISSIPPI

-INCH-

THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES INCHES	MILLIMETERS	ANGULAR TOLERANCE	DIMENSION & TOLERANCE
	.X ± .050 .XX ± .015 .XXX ± .005	X. ± 1.30 X.X ± 0.40 X.XX ± 0.15	X.X = ± 0' 30' X.XX = ± 0' 15'	PER ASME Y14.5 OR ISO STANDARDS

		K-C NUMBER		
DRAWN	FJ RAMSEUR	08	11	20
CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

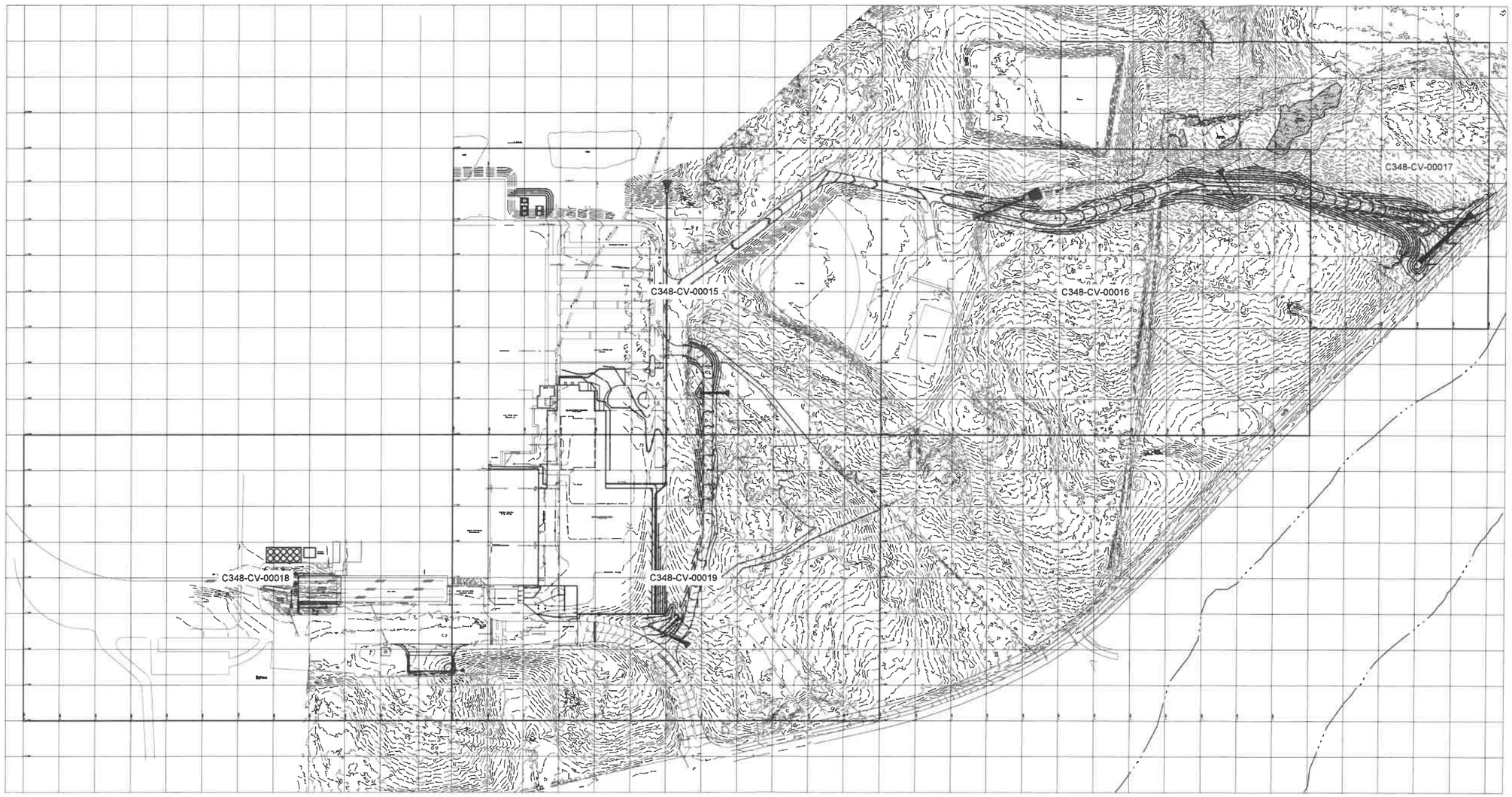
ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR PERMIT	FJR	9/18/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

TITLE
CIVIL
LAYOUT AND PAVING PLAN 5

Kimberly-Clark Corporation

DWG. NO. C348-CV-00013 SIZE E ISSUE B

NOTES
FOR GENERAL NOTES SEE DWG. C348-CV-00030.



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www.oneal.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 3030002169

Seal

THIRD ANGLE PROJECTION

DIMENSIONAL TOLERANCES (INCHES): .X ± .050, .XX ± .015, .XXX ± .005
DIMENSIONAL TOLERANCES (MILLIMETERS): X. ± 1.30, X.X ± 0.40, X.XX ± 0.15

ANGULAR TOLERANCE: X.X = ± 0° 30', X.XX = ± 0° 15'

DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS

	K–C NUMBER		
DRAWN FJ RAMSEUR	08	11	20
CHECK RF WILL	08	12	20
APVD BR CHANDLER	08	12	20

ISS	NO	LOC	REVISIONS (INDICATED BY Δ)	BY	DATE	APP
A			ISSUED FOR PERMIT	FJR	9/18/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/22/20	BRC

-INCH-

DRAWING: -
SHEET NO.: -

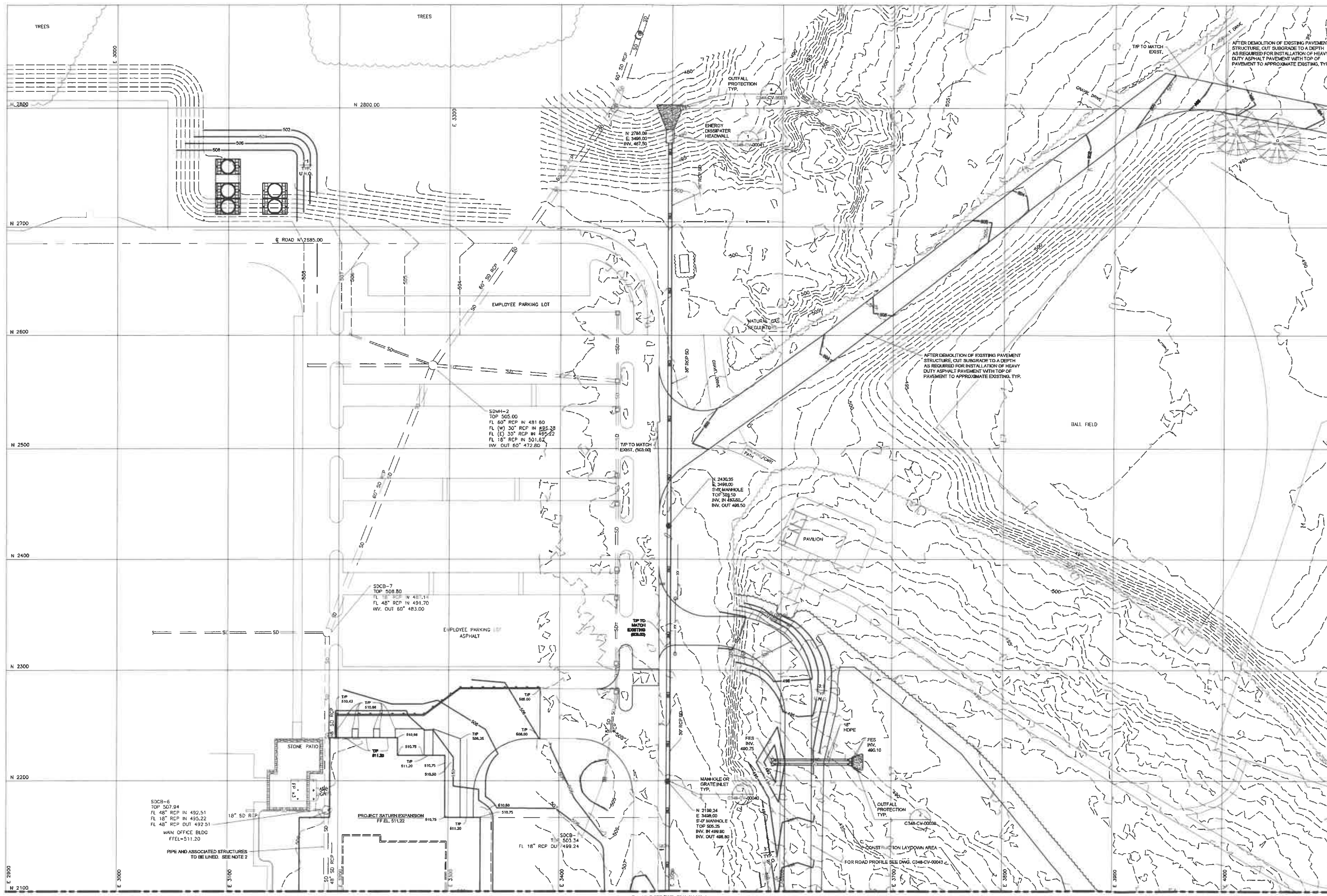
TITLE
CIVIL
OVERALL GRADING STORM DRAINAGE PLAN

Kimberly-Clark Corporation

DWG. NO. C348-CV-00014

SIZE ISSUE E B

NOTES
1. FOR GENERAL NOTES SEE DWG. C348-CV-00036.
2. STORM SEWER PIPE TO RECEIVE CURED-IN-PLACE PIPE (CIPP) LINING. ASSOCIATED INLETS AND MANHOLES TO RECEIVE A RIGID POLYETHYLENE COATING. SEE SPECIFICATIONS.



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Greenville, SC 29607
P.O. 10289 Greenville, SC 29603
Tel: 864.298.2000 - Fax: 864.298.2300
www.onealinc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 202000153

Seal: ROBERT FREDERICK WILL, III — LICENSED PROFESSIONAL ENGINEER — 30496 — STATE OF MISSISSIPPI

THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES INCHES	MILLIMETERS	ANGULAR TOLERANCE	DIMENSION & TOLERANCE
	.X ± .050 .XX ± .015 .XXX ± .005	X. ± 1.30 X.X ± 0.40 X.XX ± 0.15	X.X = ± 0' 30' X.XX = ± 0' 15'	PER ASME Y14.5 OR ISO STANDARDS

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		K-C NUMBER
DRAWN	FJ RAMSEUR	08 11 20
CHECK	RF WILL	08 12 20
APVD	BR CHANDLER	08 12 20

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR PERMIT	FJR	9/18/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

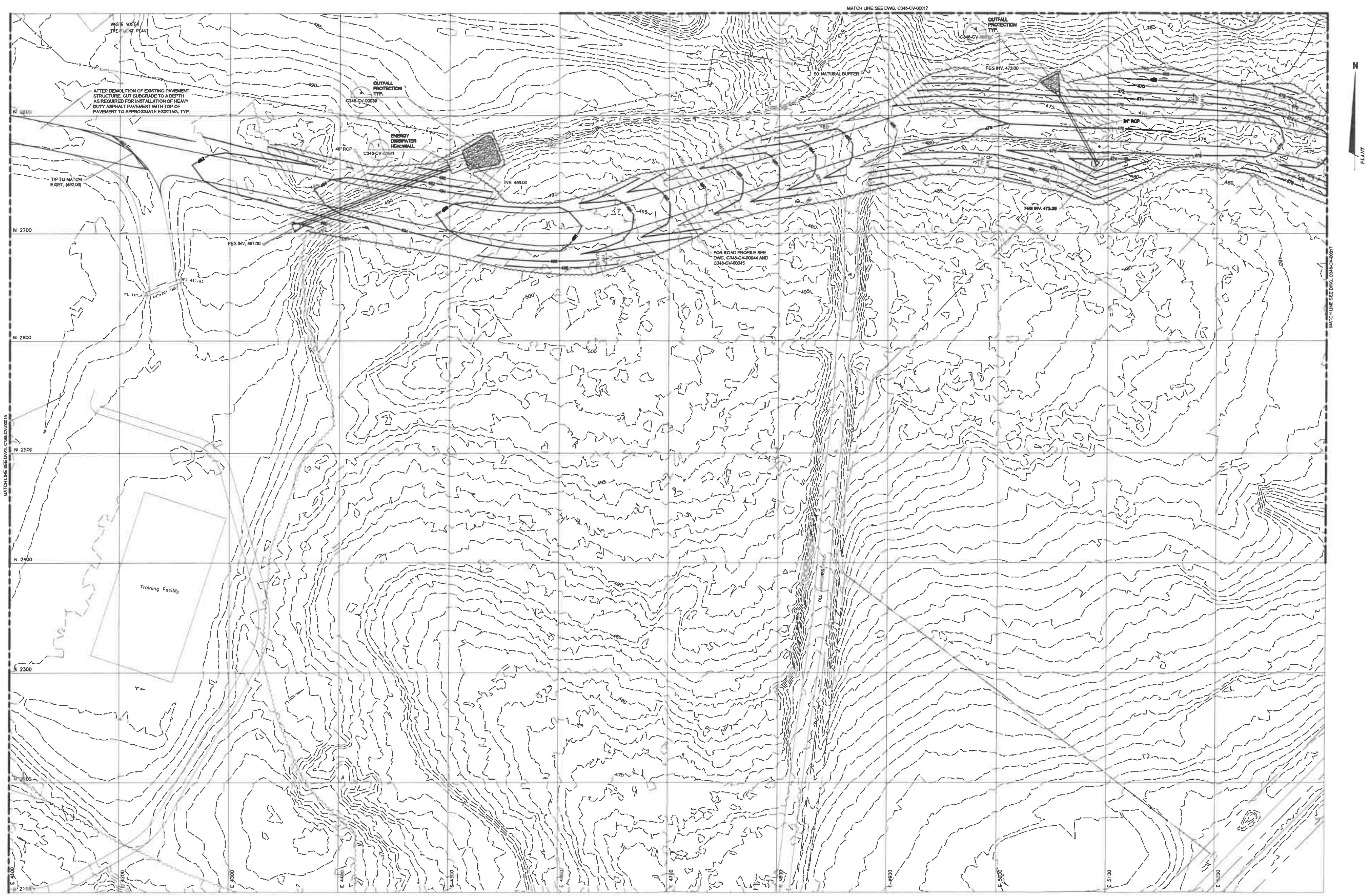
-INCH-
MNEMONIC: -
SHEET NO.: -

TITLE: CIVIL
GRADING AND STORM DRAINAGE PLAN 1

Kimberly-Clark Corporation

DWG. NO. C348-CV-00015 | SIZE E | ISSUE B

NOTES:
FOR GENERAL NOTES SEE DWG. C348-CV-00036.



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Tel: 864.298.2000 - Fax: 864.298.2300
www.onealinc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 202000168

Seal
ROBERT FREDERICK WILL III
STATE OF MISSISSIPPI

-INCH-

THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES INCHES	DIMENSIONAL TOLERANCES MILLIMETERS	ANGULAR TOLERANCE	DIMENSION & TOLERANCE
	.X ± .050	X. ± 1.30	X.X = ± 0° 30'	PER ASME Y14.5 OR ISO STANDARDS
	.XX ± .015	X.X ± 0.40	X.XX = ± 0° 15'	
	.XXX ± .005	X.XX ± 0.15		

					K-C NUMBER
DRAWN	FJ RAMSEUR	08	11	20	
CHECK	RF WILL	08	12	20	
APVD	BR CHANDLER	08	12	20	

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

MNEMONIC -
SHEET NO. -

TITLE
CIVIL
GRADING AND STORM DRAINAGE PLAN 2

Kimberly-Clark Corporation

DWG. NO.	SIZE	ISSUE
C348-CV-00016	E	A

NOTES
FOR GENERAL NOTES SEE DWG. C348-CV-00036.

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THE BUSINESS OF PROJECT DELIVERY

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL

THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES .X ± .050, .XX ± .015, .XXX ± .005 INCHES; X. ± 1.30, X.X ± 0.40, X.XX ± 0.15 MILLIMETERS	ANGULAR TOLERANCE X.X = ± 0° 30', X.XX = ± 0° 15'	DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS	THIS DOCUMENT AND THE INFORMATION CONTAINED THEREON ARE CONFIDENTIAL AND THE EXCLUSIVE PROPERTY OF KIMBERLY-CLARK CORPORATION, USE ONLY FOR THE PURPOSE FOR WHICH THE DOCUMENT WAS PROVIDED. DO NOT REDISTRIBUTE, SHARE OR TRANSMIT TO ANY OTHER PARTIES	

	Name	MM	DD	YY
DRAWN	FJ RAMSEUR	08	11	20
CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

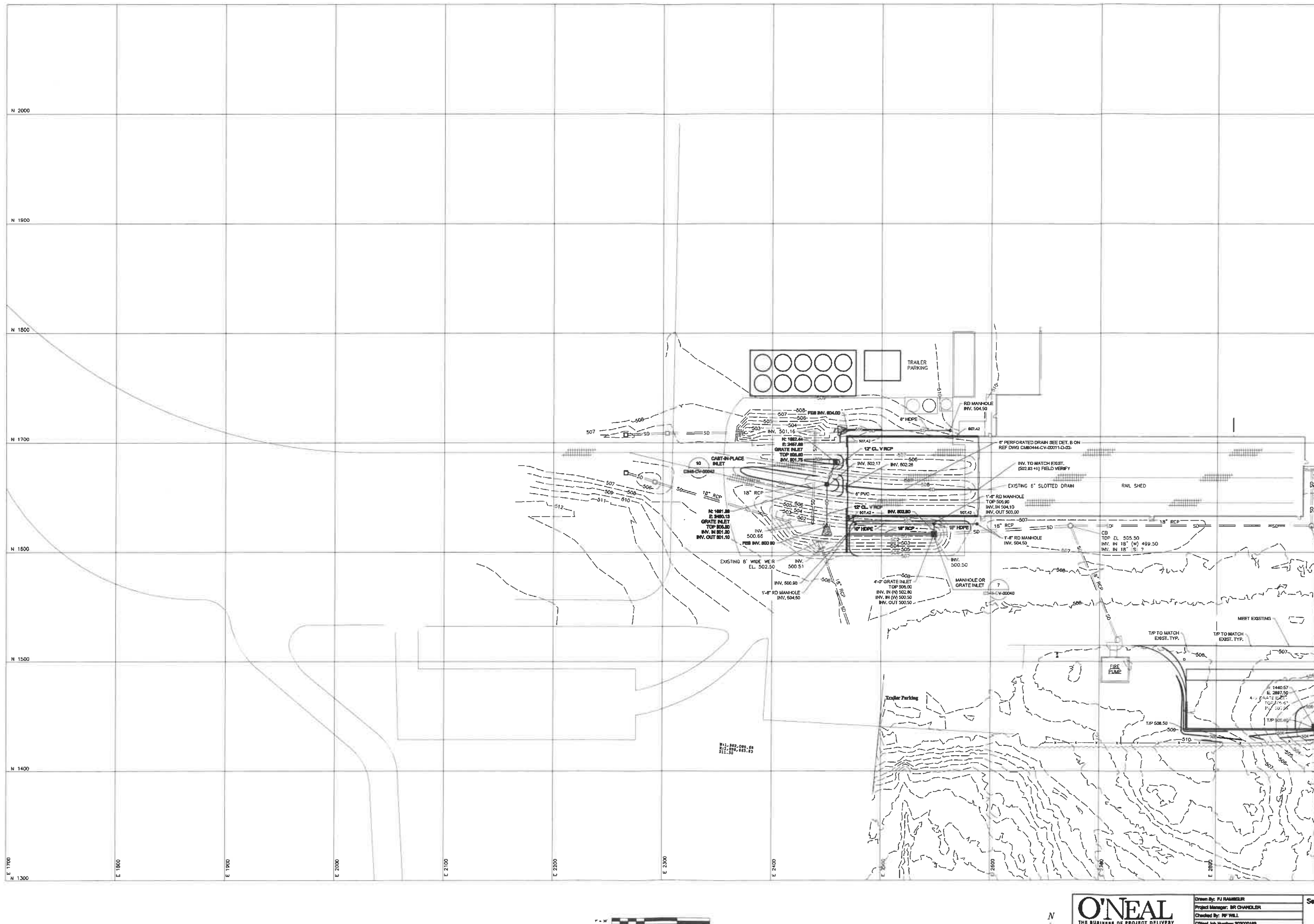
-INCH-

TITLE: CIVIL
GRADING AND STORM DRAINAGE PLAN 3

Kimberly-Clark Corporation

DWG NO. C348-CV-00017 | SIZE E | ISSUE A

NOTES
FOR GENERAL NOTES SEE DWG. C348-CV-00036.



THIRD ANGLE PROJECTION

DIMENSIONAL TOLERANCES INCHES	MILLIMETERS
.X ± .050	X. ± 1.30
.XX ± .015	X.X ± 0.40
.XXX ± .005	X.XX ± 0.15

ANGULAR TOLERANCE
X.X = ± 0° 30'
X.XX = ± 0° 15'

DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS

DRAWN	FJ RAMSEUR	08	11	20
CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

K-C NUMBER

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR PERMIT	FJR	9/18/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

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Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 302000160

Seal

-INCH-

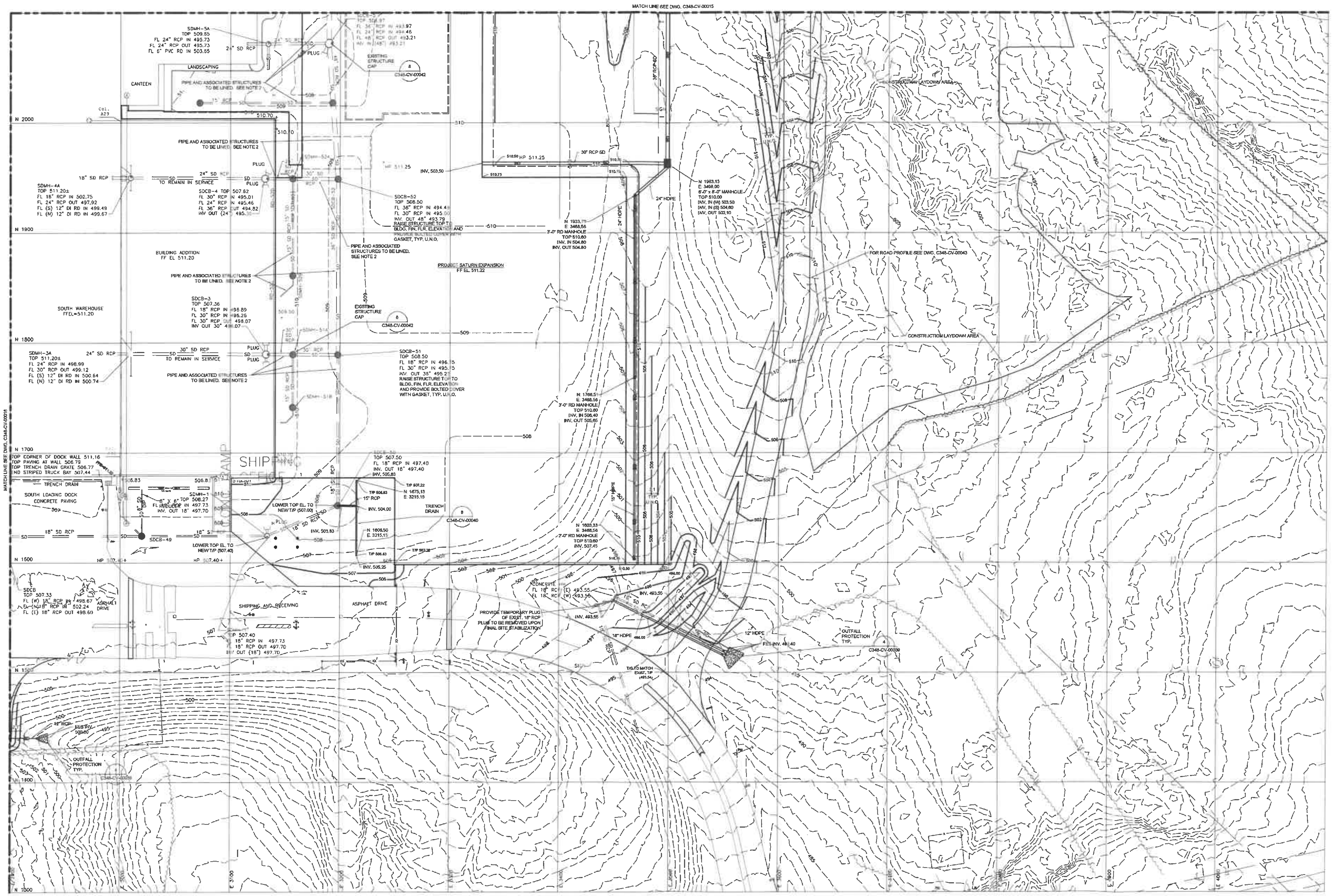
MNEMONIC -
SHEET NO. -

TITLE
CIVIL
GRADING AND STORM DRAINAGE PLAN 4

Kimberly-Clark Corporation

DWG. NO. C348-CV-00018
SIZE E
ISSUE B

NOTES
1. FOR GENERAL NOTES SEE DWG. C348-CV-00038.
2. STORM SEWER PIPE TO RECEIVE CURED-IN-PLACE PIPE (CIPP) LINING. ASSOCIATED INLETS AND MANHOLES TO RECEIVE A RIGID POLYETHYLENE COATING. SEE SPECIFICATIONS.



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Tel: 864.298.2000 - Fax: 864.298.2200
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Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 202000163

Seal: ROBERT FREDERICK WILL, III — LICENSED PROFESSIONAL ENGINEER — 20499 — STATE OF MISSISSIPPI

THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES INCHES	MILLIMETERS	ANGULAR TOLERANCE	DIMENSION & TOLERANCE
	.X ± .050 .XX ± .015 .XXX ± .005	X. ± 1.30 X.X ± 0.40 X.XX ± 0.15	X.X = ± 0° 30' X.XX = ± 0° 15'	PER ASME Y14.5 OR ISO STANDARDS

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		K-C NUMBER		
DRAWN	FJ RAMSEUR	08	11	20
CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR PERMIT	FJR	9/18/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

-INCH-
MNEMONIC -
SHEET NO. -

TITLE
CIVIL
GRADING AND STORM DRAINAGE PLAN 5

Kimberly-Clark Corporation

DWG. NO. C348-CV-00019 SIZE E ISSUE B

NOTES
FOR GENERAL NOTES SEE DWG. C348-CV-00008.

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Greenville, SC 29607
P.O. 10299 Greenville, SC 29603
Tel: 864.288.2000 - Fax: 864.288.2300
www.oneal-inc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 3C8000165

Seal

-INCH-

MNEMONIC -

SHEET NO. -

THIRD ANGLE PROJECTION

DIMENSIONAL TOLERANCES (INCHES): .X ± .050, .XX ± .015, .XXX ± .005
DIMENSIONAL TOLERANCES (MILLIMETERS): X ± 1.30, X.X ± 0.40, X.XX ± 0.15
ANGULAR TOLERANCE: X.X = ± 0° 30', X.XX = ± 0° 15'
DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS

	K-C NUMBER
DRAWN FJ RAMSEUR	08 11 20
CHECK RF WILL	08 12 20
APVD BR CHANDLER	08 12 20

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR PERMIT	FJR	9/18/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

TITLE
CIVIL
OVERALL PHASE I EROSION AND SEDIMENT CONTROL PLAN

Kimberly-Clark Corporation

DWG NO C348-CV-00020

SIZE E ISSUE B

NOTES
FOR GENERAL NOTES SEE DWG. C348-CV-00036.

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P.O. 10388 Greenville, SC 29603
Tel: 864.298.2000 - Fax: 864.298.2300
www.onealinc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 202000183

Seal: ROBERT FREDERICK WILL III, LICENSED PROFESSIONAL ENGINEER, 26499, STATE OF MISSISSIPPI

-INCH-

MNEMONIC | SHEET NO. -

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR PERMIT	FJR	9/18/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

TITLE
CIVIL
PHASE I EROSION AND SEDIMENT CONTROL PLAN 1

Kimberly-Clark Corporation

DWG. NO. C348-CV-00021 SIZE E ISSUE B

THIRD ANGLE PROJECTION

DIMENSIONAL TOLERANCES

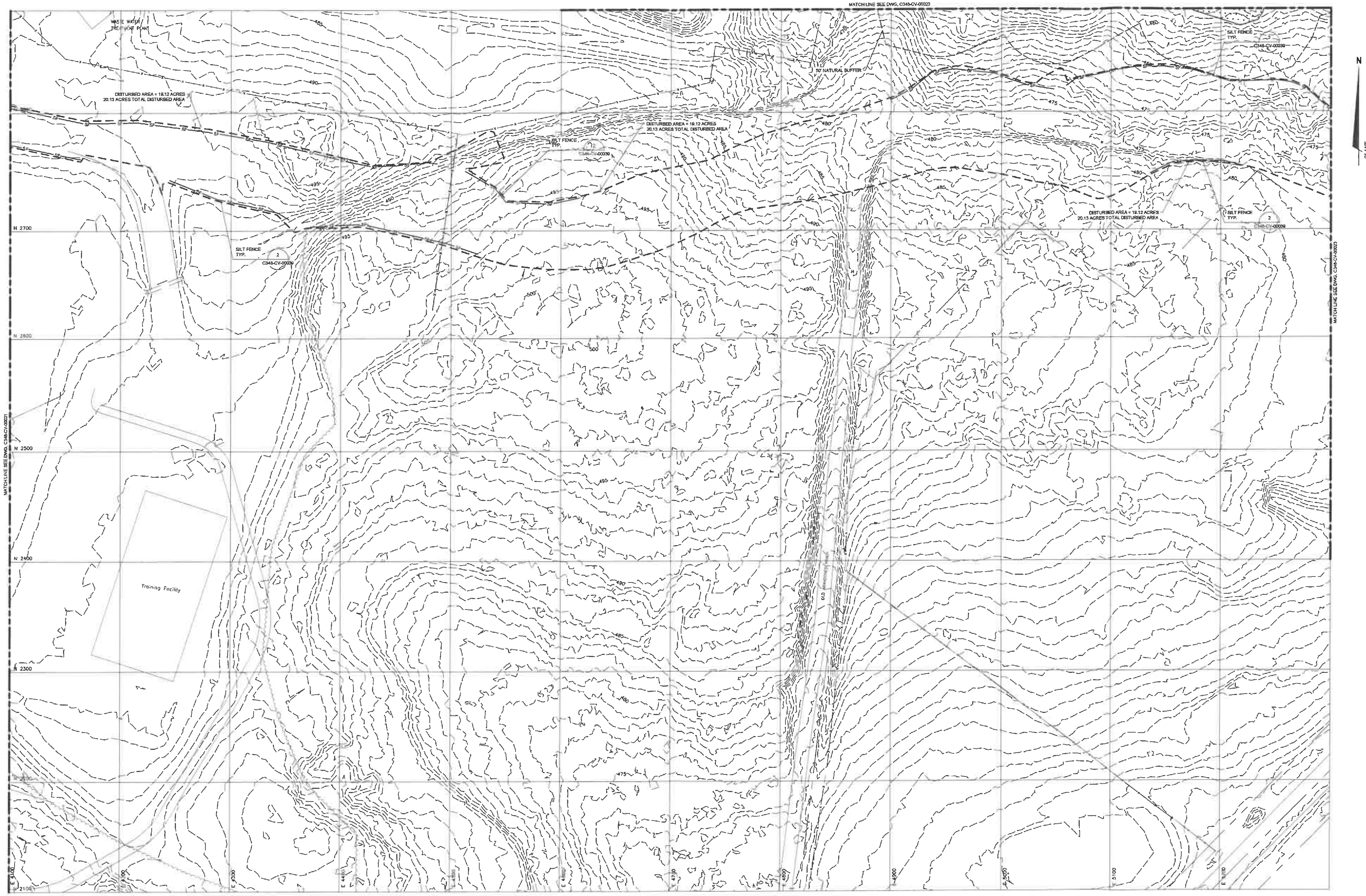
INCHES		MILLIMETERS	
.X	± .050	X.	± 1.30
.XX	± .015	X.X	± 0.40
.XXX	± .005	X.XX	± 0.15

ANGULAR TOLERANCE
X.X = ± 0° 30'
X.XX = ± 0° 15'

DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS

		K-C NUMBER		
DRAWN	FJ RAMSEUR	08	11	20
CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

NOTES:
FOR GENERAL NOTES SEE DWG. C348-CV-00030.



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O'NEAL
THE BUSINESS OF PROJECT DELIVERY
10 Falcon Crest Drive, Suite 300
Greenville, SC 29607
P.O. 10389 Greenville, SC 29603
Tel: 864.298.2000 - Fax: 864.298.2300
www.onealinc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 202000163

Seal
ROBERT FREDERICK WILL, III
LICENSED PROFESSIONAL ENGINEER
20499
STATE OF MISSISSIPPI

-INCH-

K-C NUMBER			ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
			A			ISSUED FOR ESTIMATE	FJR	8/13/20	BRC
08	11	20	B			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC
08	12	20							
08	12	20							

MNEMONIC -
SHEET NO. -

TITLE
CIVIL
PHASE I EROSION AND SEDIMENT CONTROL PLAN 2

Kimberly-Clark Corporation

DWG. NO. C348-CV-00022 | SIZE E | ISSUE B

THIRD ANGLE PROJECTION

DIMENSIONAL TOLERANCES

INCHES		MILLIMETERS	
.X	± .050	X.	± 1.30
.XX	± .015	X.X	± 0.40
.XXX	± .005	X.XX	± 0.15

ANGULAR TOLERANCE
X.X = ± 0° 30'
X.XX = ± 0° 15'

DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS

DRAWN FJ RAMSEUR
CHECK RF WILL
APVD BR CHANDLER

NOTES
FOR GENERAL NOTES SEE DWG. C348-CV-00036.

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THE BUSINESS OF PROJECT DELIVERY
10 Falcon Crest Drive, Suite 300
Greenville, SC 29607
P.O. 10288 Greenville, SC 29603

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL

Seal

-INCH-

MNEMONIC -
SHEET NO. -

K-C NUMBER	ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
	A			ISSUED FOR ESTIMATE	FJR	8/13/20	BRC
	B			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

DRAWN	FJ RAMSEUR	08 11 20
CHECK	RF WILL	08 12 20
APVD	BR CHANDLER	08 12 20

TITLE
CIVIL
PHASE I EROSION AND SEDIMENT CONTROL PLAN 3

Kimberly-Clark Corporation

DWG. NO. C348-CV-00023 SIZE E ISSUE B

THIRD ANGLE PROJECTION

DIMENSIONAL TOLERANCES
INCHES: .X ± .050; .XX ± .015; .XXX ± .005
MILLIMETERS: X. ± 1.30; X.X ± 0.40; X.XX ± 0.15

ANGULAR TOLERANCE
X.X = ± 0° 30'
X.XX = ± 0° 15'

DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS

NOTES
FOR GENERAL NOTES SEE DWG. C348-CV-00030.

N

PLANT

N 2000
N 1900
N 1800
N 1700
N 1600
N 1500
N 1400
N 1300
E 1700
E 1800
E 1900
E 2000
E 2100
E 2200
E 2300
E 2400
E 2500
E 2600
E 2700
E 2800
E 2900

DISTURBED AREA = 0.88 ACRES
20.13 ACRES TOTAL DISTURBED AREA

TRAILER PARKING

SILT FENCE TYP.
3 C348-CV-00039

ROCK CHECK DAM TOP EL. 506.00
3 C348-CV-00039

ROCK CHECK DAM TOP EL. 503.00
3 C348-CV-00039

SEDIMENT TUBE TYP.
5 C348-CV-00040

RAIL SHED

DISTURBED AREA = 0.33 ACRES
20.13 ACRES TOTAL DISTURBED AREA

FIRE PUMP

Scatter Parking

SILT FENCE TYP.
2 C348-CV-00039

MATCH LINE SEE DWG. C348-CV-00025

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N

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10 Falcon Crest Drive, Suite 300
Greenville, SC 29607
P.O. 10268 Greenville, SC 29603
Tel: 864.288.3000 - Fax: 864.288.3300
www.oneal-inc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 2020001169

Seal
ROBERT FREDERICK WILL
REGISTERED
20149
PROFESSIONAL ENGINEER
STATE OF MISSISSIPPI

MNEMONIC: -
SHEET NO.: -

THIRD ANGLE PROJECTION

DIMENSIONAL TOLERANCES (INCHES): .X ± .050, .XX ± .015, .XXX ± .005
DIMENSIONAL TOLERANCES (MILLIMETERS): X. ± 1.30, X.X ± 0.40, X.XX ± 0.15
ANGULAR TOLERANCE: X.X = ± 0° 30', X.XX = ± 0° 15'
DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS

	K–C NUMBER		
DRAWN FJ RAMSEUR	08	11	20
CHECK RF WILL	08	12	20
APVD BR CHANDLER	08	12	20

ISS	NO	LOC	REVISIONS (INDICATED BY Δ)	BY	DATE	APP
A			ISSUED FOR ESTIMATE	FJR	8/13/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT	FJR	8/18/20	BRC
C			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/20/20	BRC

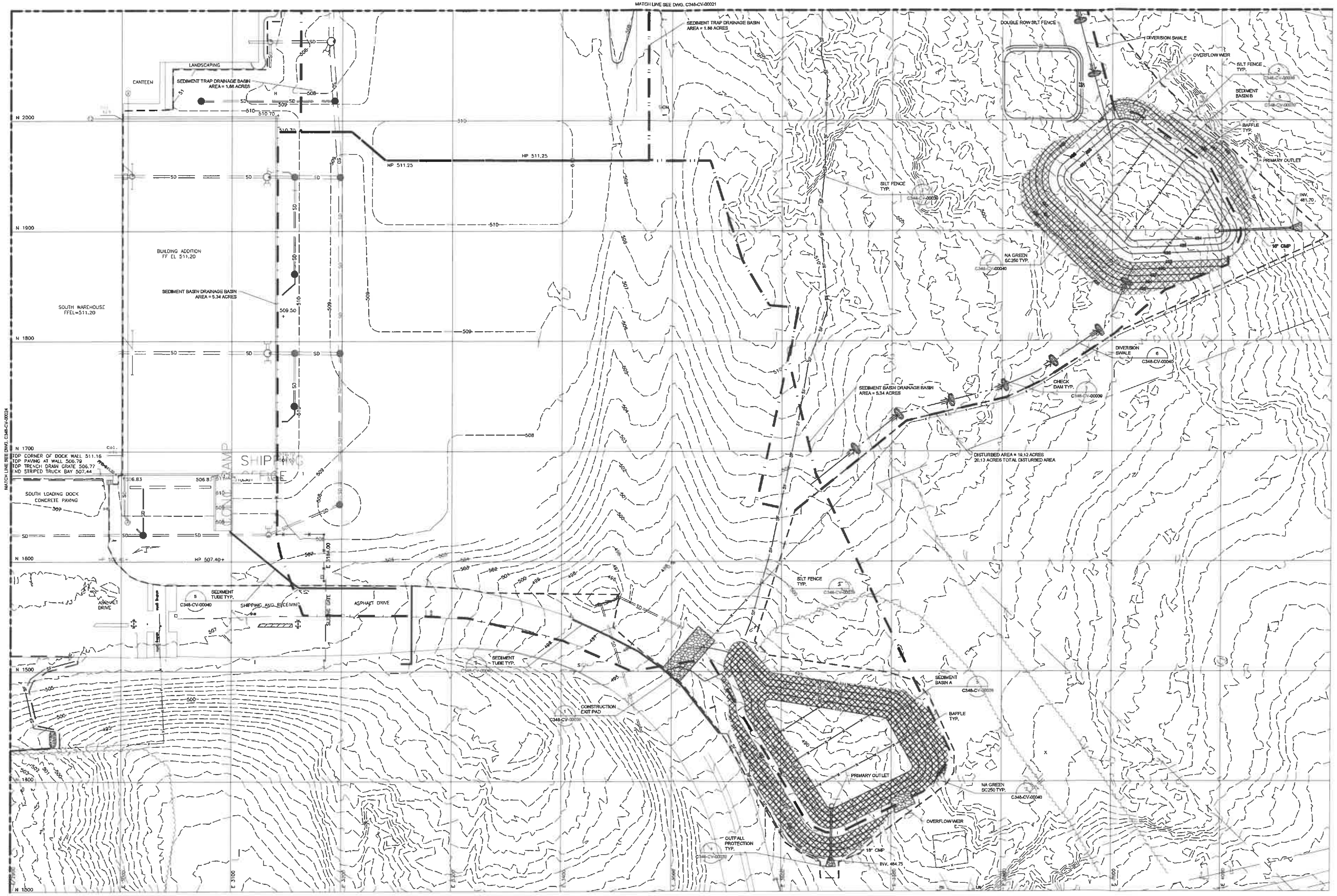
TITLE
CIVIL
PHASE I EROSION AND SEDIMENT CONTROL PLAN 4

Kimberly-Clark Corporation

DWG. NO. C348-CV-00024

SIZE ISSUE E C

NOTES:
FOR GENERAL NOTES SEE DWG. C348-CV-00035.



PRELIMINARY - NOT FOR CONSTRUCTION

THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES		ANGULAR TOLERANCE	DIMENSION & TOLERANCE
	.X ± .050 .XX ± .015 .XXX ± .005 INCHES	X. ± 1.30 X.X ± 0.40 X.XX ± 0.15 MILLIMETERS	X.X = ± 0° 30' X.XX = ± 0° 15'	PER ASME Y14.5 OR ISO STANDARDS

		K-C NUMBER		
DRAWN	FJ RAMSEUR	08	11	20
CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR ESTIMATE	FJR	8/13/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT	FJR	9/18/20	BRC
C			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

-INCH-

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Greenville, SC 29607
P.O. 10269 Greenville, SC 29603
Tel: 864.298.2000 - Fax: 864.298.2200
www.onealinc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 302000193

Seal
ROBERT FREDERICK WILL
LICENSED PROFESSIONAL ENGINEER
30499
STATE OF MISSISSIPPI

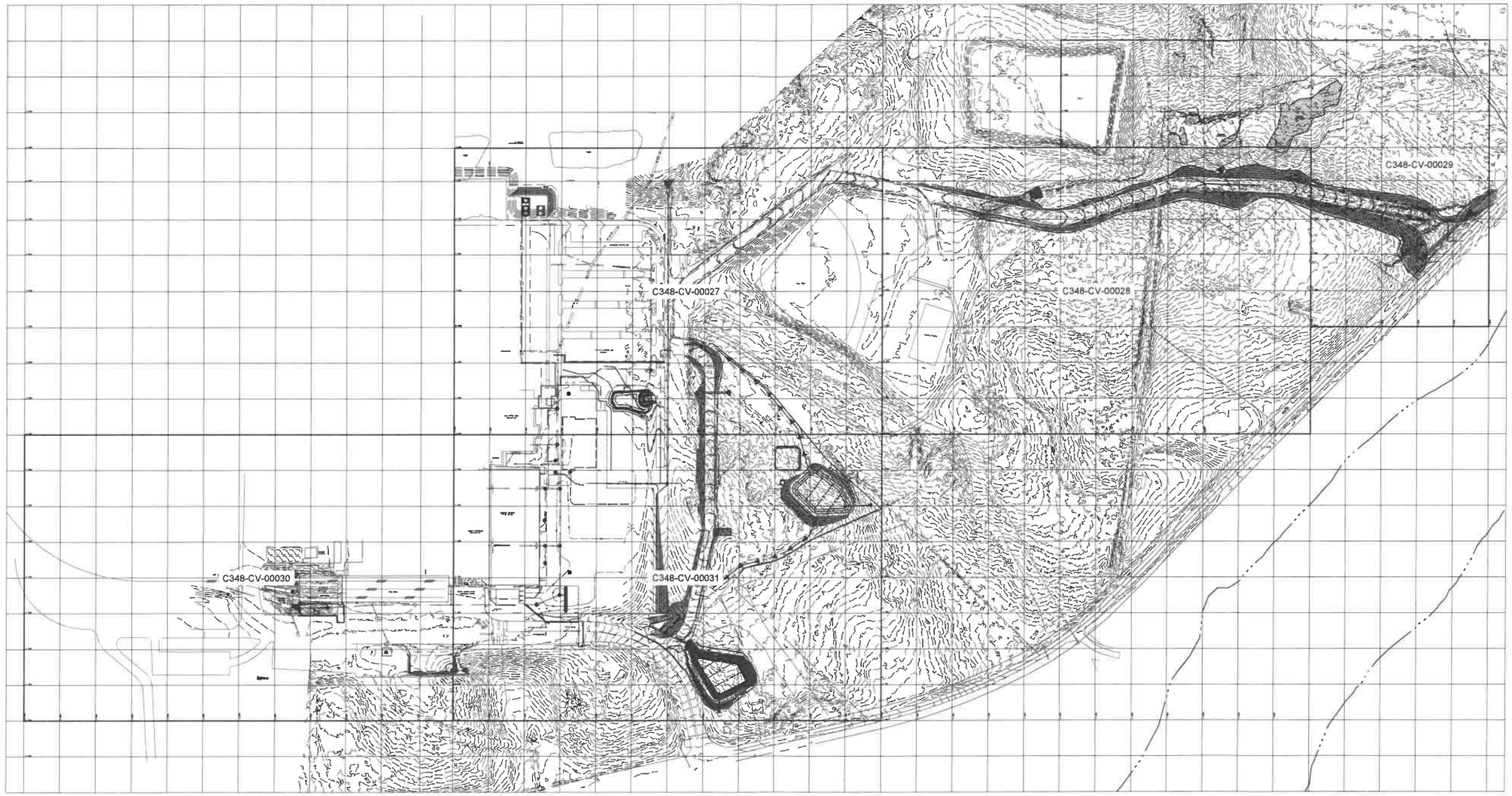
MNEMONIC -
SHEET NO. -

TITLE
CIVIL
PHASE I EROSION AND SEDIMENT CONTROL PLAN 5

Kimberly-Clark Corporation

DWG NO. C348-CV-00025
SIZE E
ISSUE C

NOTES:
FOR GENERAL NOTES SEE DWG. C348-CV-00008.



PRELIMINARY - NOT FOR CONSTRUCTION

THIRD ANGLE PROJECTION

DIMENSIONAL TOLERANCES (INCHES)		DIMENSIONAL TOLERANCES (MILLIMETERS)	
.X	± .050	X	± 1.30
.XX	± .015	X.X	± 0.40
.XXX	± .005	X.XX	± 0.15

ANGULAR TOLERANCE: X.X = ± 0° 30' ; X.XX = ± 0° 15'

DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS

	K–C NUMBER
DRAWN FJ RAMSEUR	08 11 20
CHECK RF WILL	08 12 20
APVD BR CHANDLER	08 12 20

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR ESTIMATE	FJR	8/13/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT	FJR	9/18/20	BRC
C			GENERAL REVISION, ISSUED FOR PERMIT / SIDS	FJR	10/2/20	BRC

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Greenville, SC 29607
P.O. 10888 Greenville, SC 29603
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www.oneal-inc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 3030001163

Seal: BRENT FREDERICK WILL, REGISTERED ENGINEER, 30489, STATE OF MISSISSIPPI

-INCH-

UNIT MARK: -
SHEET NO.: -

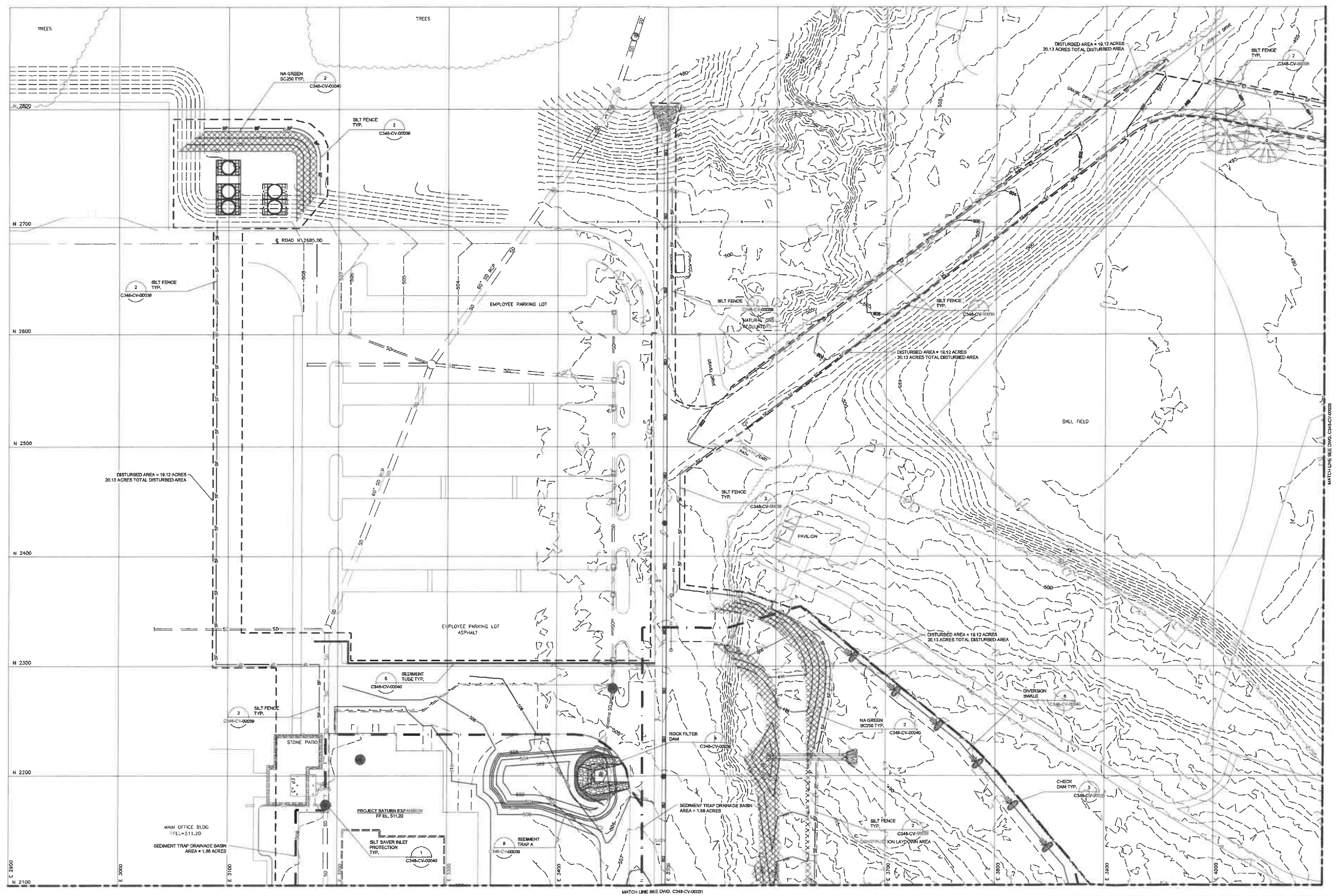
TITLE
CIVIL
OVERALL PHASE II EROSION AND SEDIMENT CONTROL PLAN

Kimberly-Clark Corporation

DWG. NO. C348-CV-00026

SIZE ISSUE E C

NOTES
FOR GENERAL NOTES SEE DWG. C348-CV-00035.



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Greenville, SC 29607
P.O. 10288 Greenville, SC 29603
Tel: 864.298.2000 - Fax: 864.298.2300
www.onealinc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 202000163

Seal
ROBERT FREDERICK WILL, III — LICENSED PROFESSIONAL ENGINEER — 20496 — STATE OF MISSISSIPPI

-INCH-

MNEMONIC	-	SHEET NO.	-

THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES INCHES	MILLIMETERS	ANGULAR TOLERANCE	DIMENSION & TOLERANCE
	.X ± .050 .XX ± .015 .XXX ± .005	X. ± 1.30 X.X ± 0.40 X.XX ± 0.15	X.X = ± 0° 30' X.XX = ± 0° 15'	PER ASME Y14.5 OR ISO STANDARDS

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		K-C NUMBER		
DRAWN	FJ RAMSEUR	08	11	20
CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

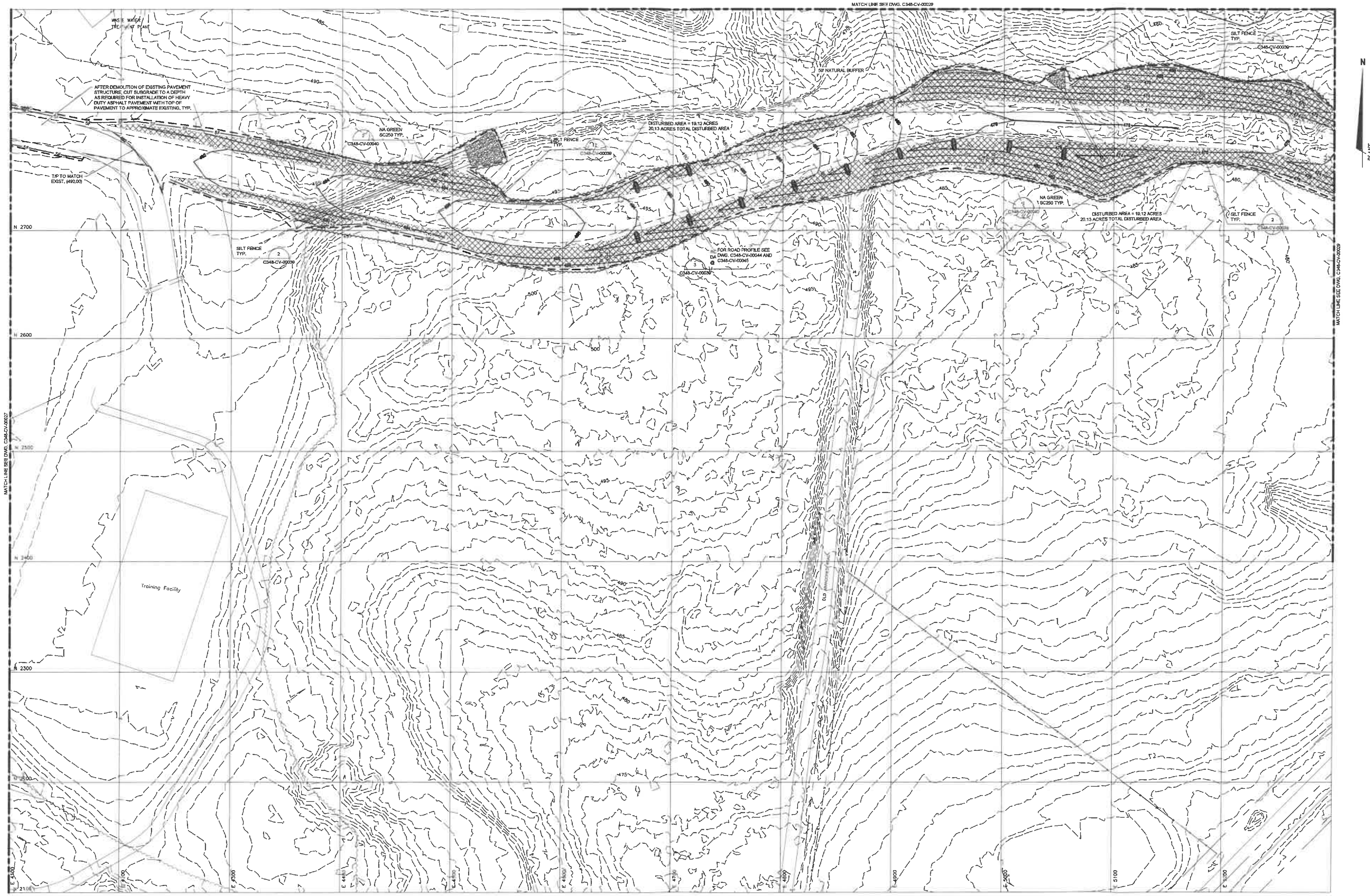
ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR PERMIT	FJR	9/18/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

TITLE
CIVIL
PHASE II EROSION AND SEDIMENT CONTROL PLAN 1

Kimberly-Clark Corporation

DWG. NO.	SIZE	ISSUE
C348-CV-00027	E	B

NOTES
FOR GENERAL NOTES SEE DWG. C348-CV-00026.



THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES .X ± .050 .XX ± .015 .XXX ± .005 INCHES	X. ± 1.30 X.X ± 0.40 X.XX ± 0.15 MILLIMETERS	ANGULAR TOLERANCE X.X = ± 0' 30' X.XX = ± 0' 15'	DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS	THIS DOCUMENT AND THE INFORMATION CONTAINED THEREON ARE CONFIDENTIAL AND THE EXCLUSIVE PROPERTY OF KIMBERLY-CLARK CORPORATION. USE ONLY FOR THE PURPOSE FOR WHICH THE DOCUMENT WAS PROVIDED. DO NOT REDISTRIBUTE, SHARE OR TRANSMIT TO ANY OTHER PARTIES.	

		K-C NUMBER		
DRAWN	FJ RAMSEUR	08	11	20
CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

-INCH-

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Greenville, SC 29607
P.O. 10299 Greenville, SC 29603
Tel: 864.298.2000 - Fax: 864.298.2300
www.onealinc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 202000169

Seal

MNEMONIC -
SHEET NO. -

TITLE
CIVIL
PHASE II EROSION AND SEDIMENT CONTROL PLAN 2

Kimberly-Clark Corporation

DWG. NO. C348-CV-00028
SIZE E
ISSUE A

NOTES
FOR GENERAL NOTES SEE DWG. C348-CV-00038.

O'NEAL
THE BUSINESS OF PROJECT DELIVERY

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL

Seal

THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES INCHES	MILLIMETERS	ANGULAR TOLERANCE	DIMENSION & TOLERANCE
	.X ± .050 .XX ± .015 .XXX ± .005	X. ± 1.30 X.X ± 0.40 X.XX ± 0.15	X.X = ± 0' 30' X.XX = ± 0' 15'	PER ASME Y14.5 OR ISO STANDARDS

		K-C NUMBER		
DRAWN	FJ RAMSEUR	08	11	20
CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

-INCH-

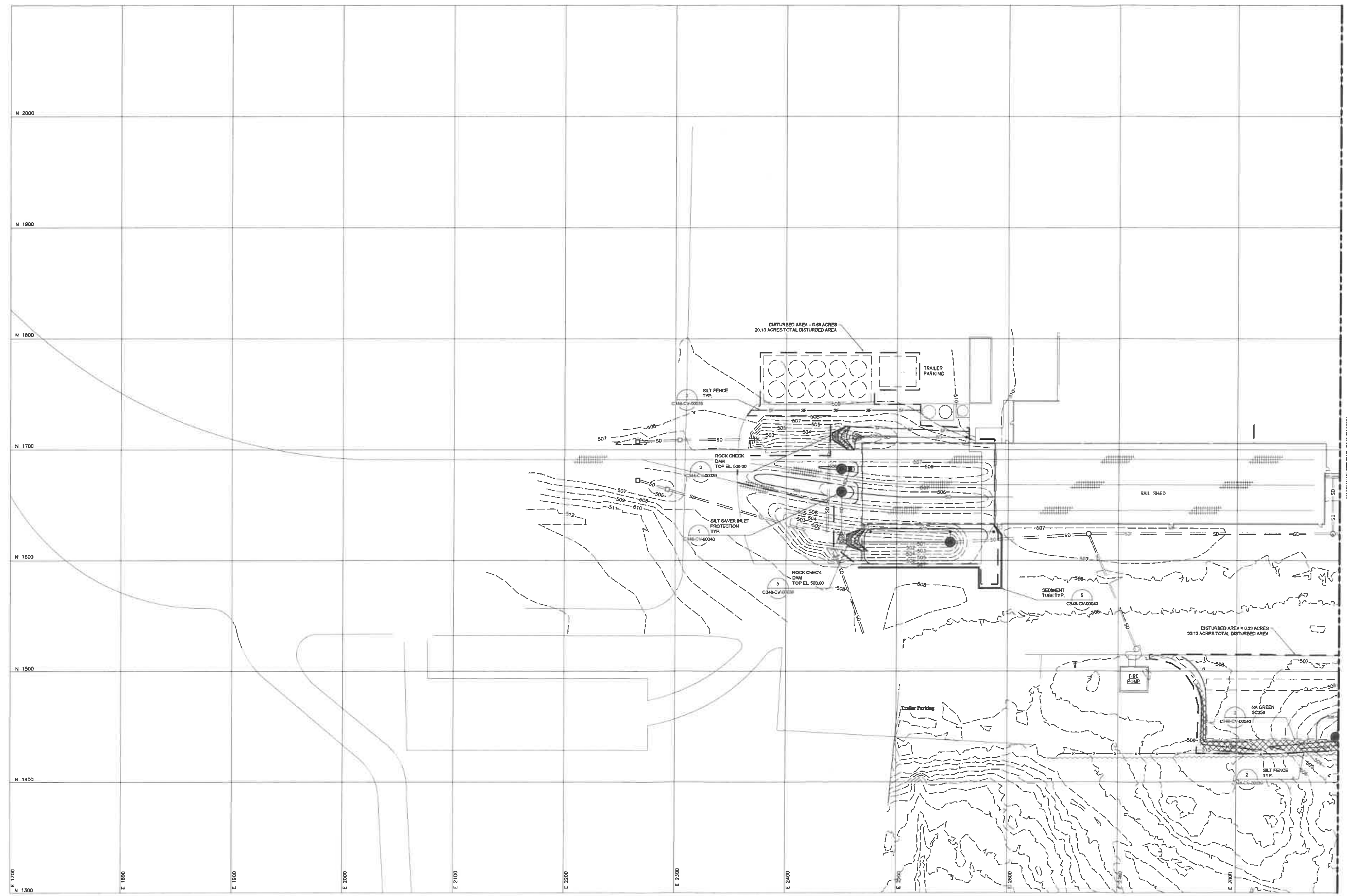
MNEMONIC: -
SHEET NO.: -

TITLE: CIVIL
PHASE II EROSION AND SEDIMENT CONTROL PLAN 3

Kimberly-Clark Corporation

DWG. NO. C348-CV-00029 SIZE E ISSUE A

NOTES
FOR GENERAL NOTES SEE DWG. C348-CV-00036.



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10 Falcon Crest Drive, Suite 300
Greenville, SC 29607
P.O. 10268 Greenville, SC 29603
www.onealinc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 302000183

Seal

ROBERT FREDERICK WILL, III
LICENSED PROFESSIONAL ENGINEER
30489
STATE OF MISSISSIPPI

-INCH-

MNEMONIC -
SHEET NO. -

THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES		ANGULAR TOLERANCE	DIMENSION & TOLERANCE
	.X ± .050 .XX ± .015 .XXX ± .005 INCHES	X. ± 1.30 X.X ± 0.40 X.XX ± 0.15 MILLIMETERS	X.X = ± 0° 30' X.XX = ± 0° 15'	PER ASME Y14.5 OR ISO STANDARDS

		K-C NUMBER		
DRAWN	FJ RAMSEUR	08	11	20
CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

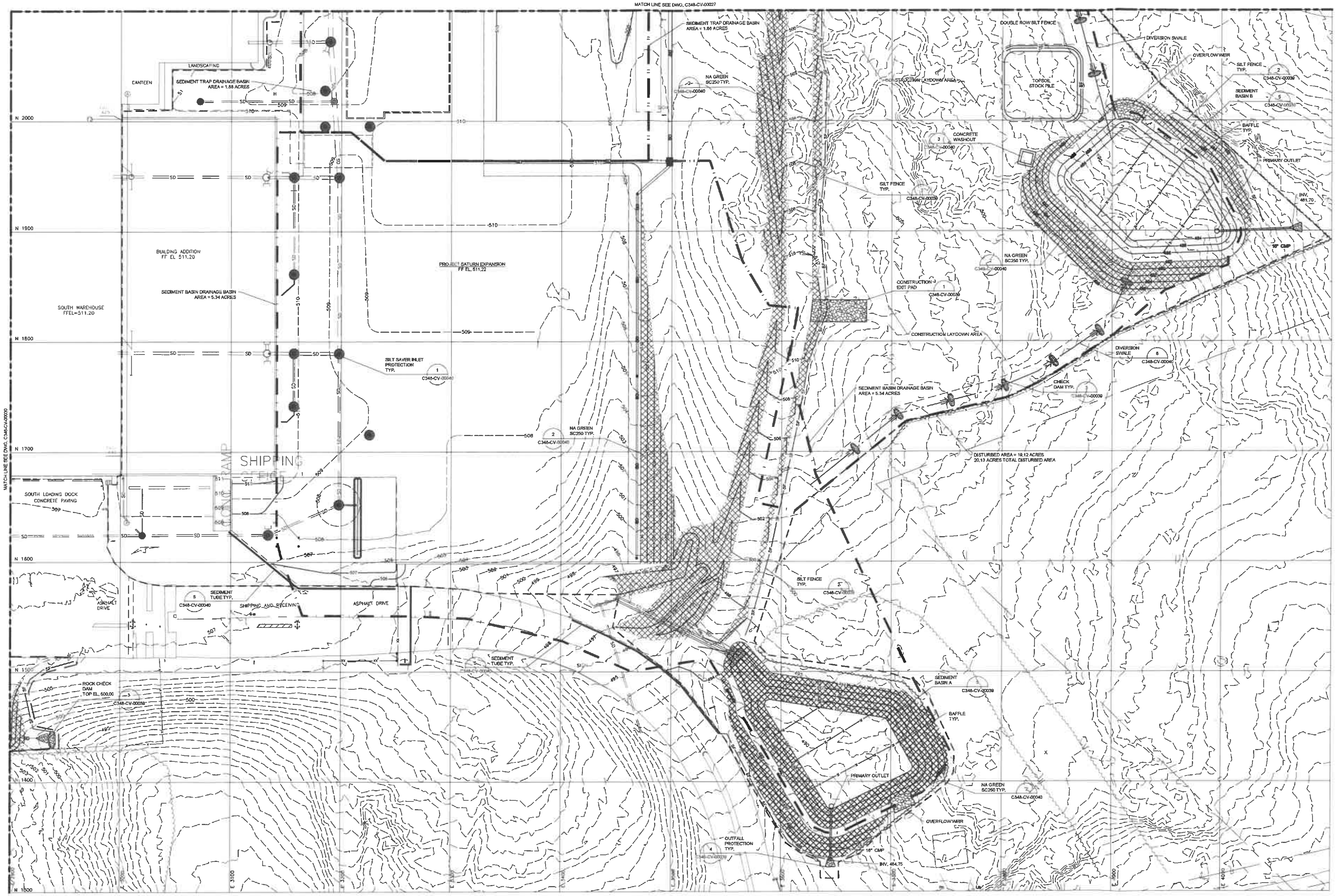
ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR PERMIT	FJR	9/18/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

TITLE
CIVIL
PHASE II EROSION AND SEDIMENT CONTROL PLAN 4

Kimberly-Clark Corporation

DWG. NO. C348-CV-00030 SIZE E ISSUE B

NOTES
FOR GENERAL NOTES SEE DWG. C348-CV-00035



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Greenville, SC 29607
P.O. 10289 Greenville, SC 29603
Tel: 864.298.2000 - Fax: 864.298.2300
www.onealinc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 302000183

Seal

K-C NUMBER	ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
	A			ISSUED FOR PERMIT	FJR	9/18/20	BRC
	B			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

DRAWN	FJ RAMSEUR	08 11 20
CHECK	RF WILL	08 12 20
APVD	BR CHANDLER	08 12 20

THIRD ANGLE PROJECTION

DIMENSIONAL TOLERANCES
INCHES: .X ± .050; .XX ± .015; .XXX ± .005
MILLIMETERS: X. ± 1.30; X.X ± 0.40; X.XX ± 0.15

ANGULAR TOLERANCE
X.X = ± 0° 30'
X.XX = ± 0° 15'

DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS

-INCH-

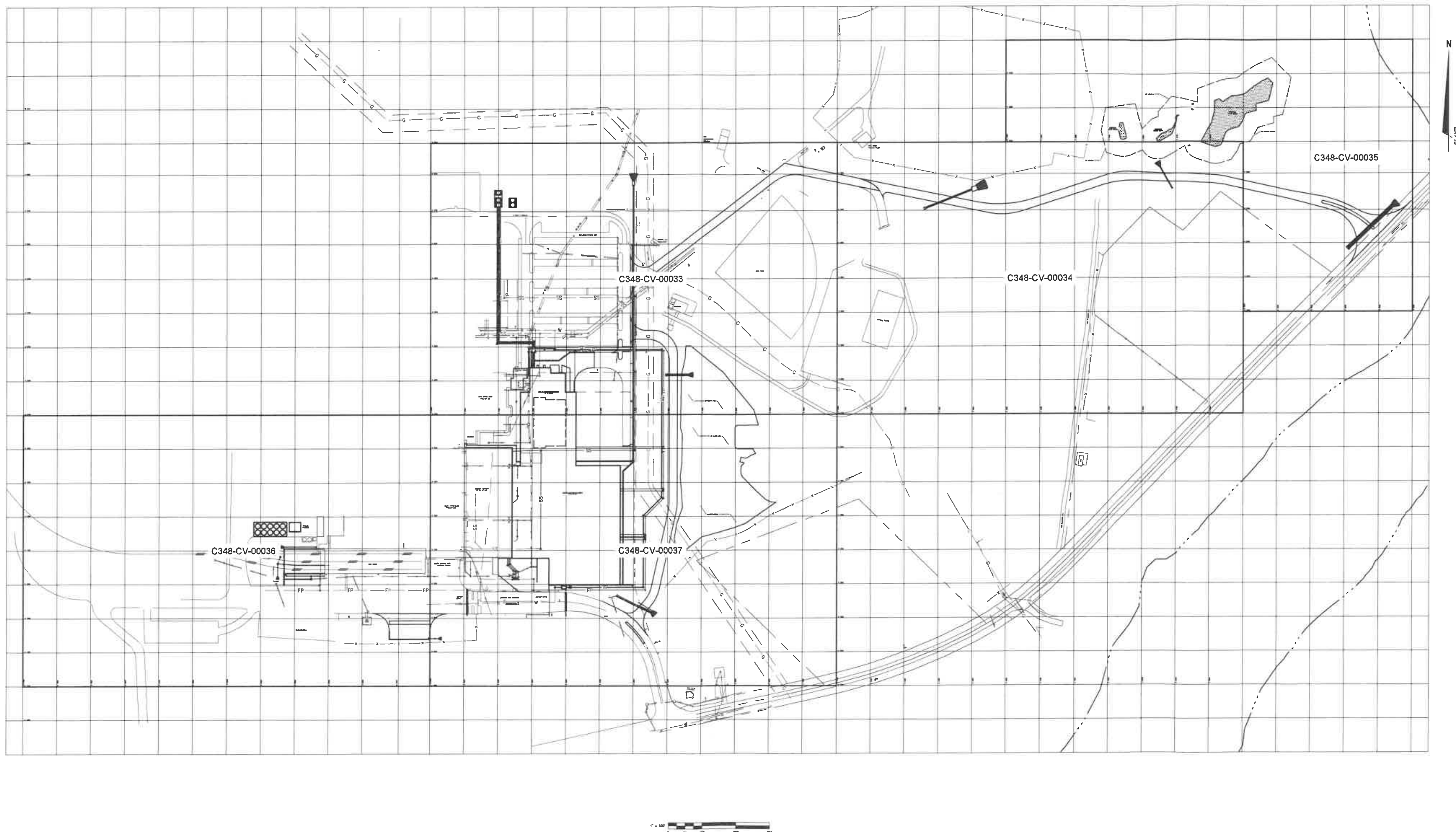
MNEMONIC -
SHEET NO. -

TITLE
CIVIL
PHASE II EROSION AND SEDIMENT CONTROL PLAN 5

Kimberly-Clark Corporation

DWG. NO. C348-CV-00031
SIZE E
ISSUE B

NOTES
FOR GENERAL NOTES SEE DWG. C348-CV-00030.



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THE BUSINESS OF PROJECT DELIVERY

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL

Seal

-INCH-

MNEMONIC -
SHEET NO. -

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR PERMIT	FJR	9/18/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

TITLE
CIVIL
OVERALL UNDERGROUND UTILITIES PLAN

Kimberly-Clark Corporation

DWG. NO. C348-CV-00032 SIZE E ISSUE B

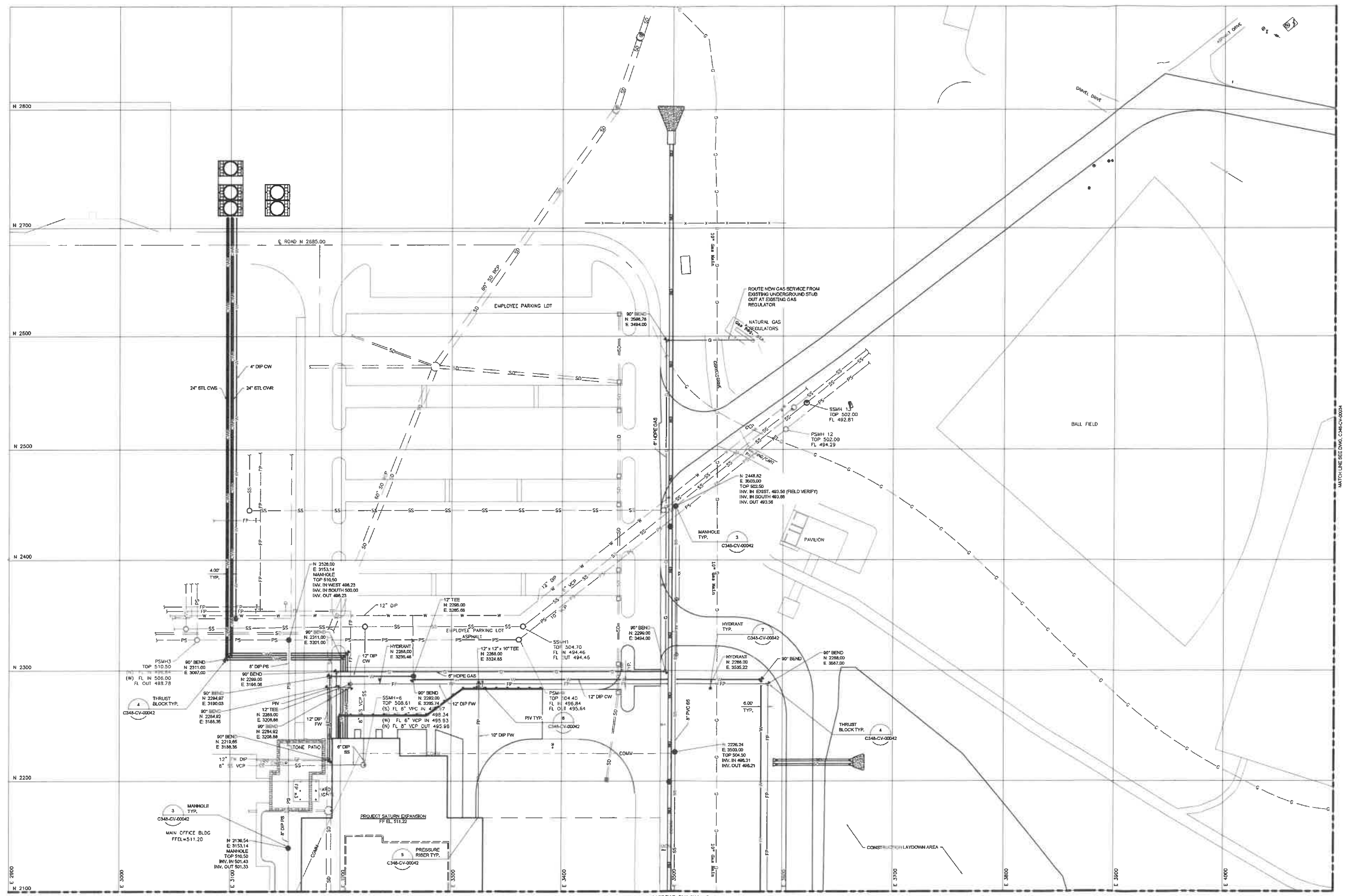
THIRD ANGLE PROJECTION

DIMENSIONAL	TOLERANCES	ANGULAR TOLERANCE
.X ± .050	X. ± 1.30	X.X = ± 0' 30'
.XX ± .015	X.X ± 0.40	X.XX = ± 0' 15'
.XXX ± .005	X.XX ± 0.15	
INCHES	MILLIMETERS	

DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS

		K-C NUMBER		
DRAWN	FJ RAMSEUR	08	11	20
CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

NOTES
FOR GENERAL NOTES SEE DWG. C348-CV-00038.



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10 Patewood Crest Drive, Suite 300
Greenville, SC 29607
P.O. 10259 Greenville, SC 29603
Tel: 864.298.2000 - Fax: 864.298.2200
www.onealinc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 302000168

Seal
ROBERT FREDERICK WILL III
LICENSED PROFESSIONAL ENGINEER
30499
STATE OF MISSISSIPPI

K-C NUMBER	ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
	A			ISSUED FOR PERMIT	FJR	9/18/20	BRC
	B			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

DRAWN	FJ RAMSEUR	08 11 20
CHECK	RF WILL	08 12 20
APVD	BR CHANDLER	08 12 20

THIRD ANGLE PROJECTION

DIMENSIONAL TOLERANCES

INCHES		MILLIMETERS	
.X	± .050	X.	± 1.30
.XX	± .015	X.X	± 0.40
.XXX	± .005	X.XX	± 0.15

ANGULAR TOLERANCE
X.X = ± 0° 30'
X.XX = ± 0° 15'

DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS

-INCH-

MNEMONIC -

SHEET NO. -

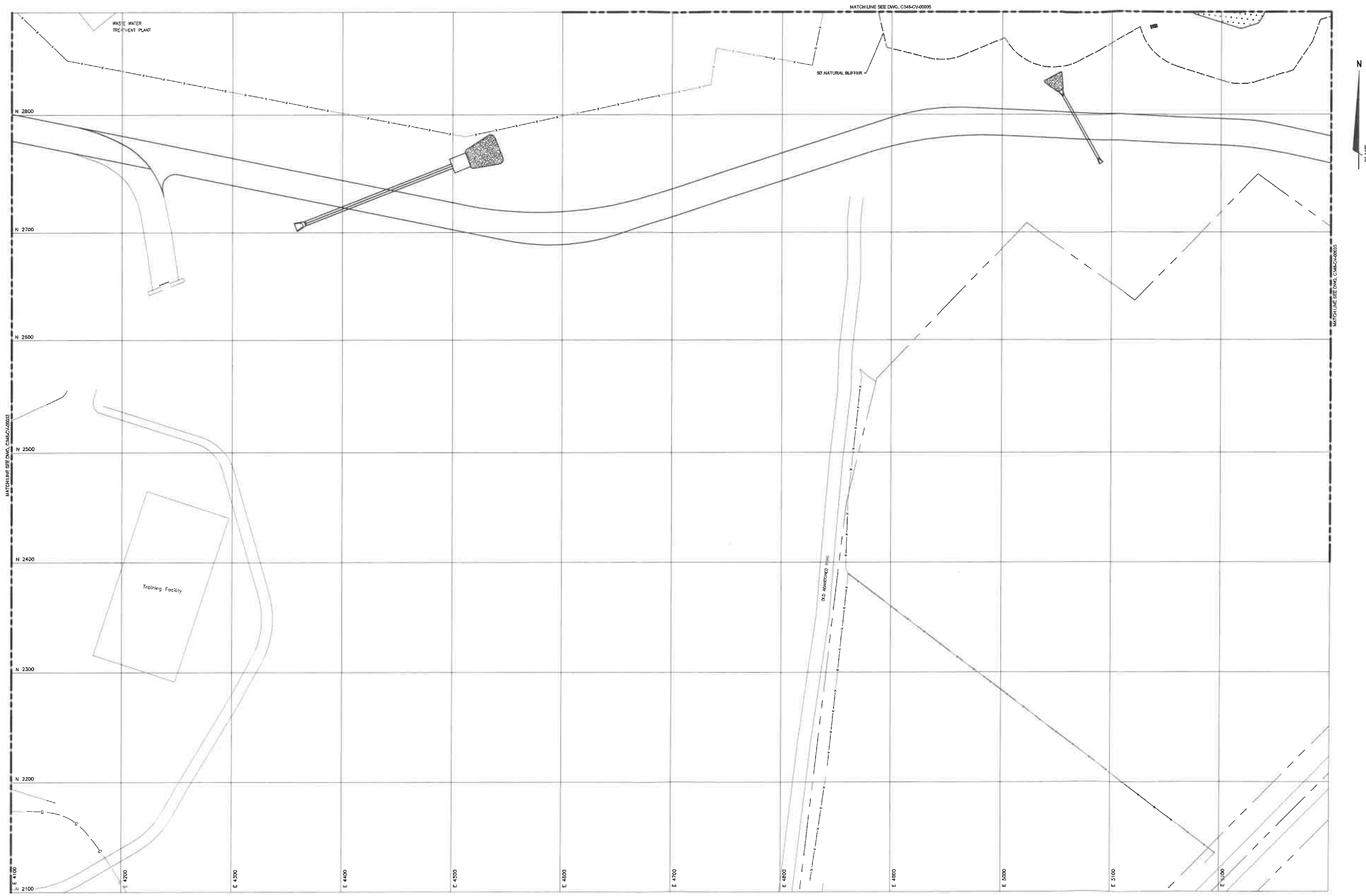
TITLE
CIVIL
UNDERGROUND UTILITIES PLAN 1

Kimberly-Clark Corporation

DWG. NO. C348-CV-00033

SIZE E ISSUE B

NOTES
FOR GENERAL NOTES SEE DWG. C348-CV-00030



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10 Falcon Crest Drive, Suite 300
Greenville, SC 29607
P.O. 10059 Greenville, SC 29603
Tel: 864.298.2000 - Fax: 864.298.2300
www.onealinc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 202000183

Seal: ROBERT FREDERICK WILL, III — LICENSED PROFESSIONAL ENGINEER — 30499 — STATE OF MISSISSIPPI

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

		K–C NUMBER		
DRAWN	FJ RAMSEUR	08	11	20
CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

THIRD ANGLE PROJECTION

DIMENSIONAL TOLERANCES
INCHES: .X ± .050; .XX ± .015; .XXX ± .005
MILLIMETERS: X. ± 1.30; X.X ± 0.40; X.XX ± 0.15

ANGULAR TOLERANCE
X.X = ± 0' 30'
X.XX = ± 0' 15'

DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS

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-INCH-

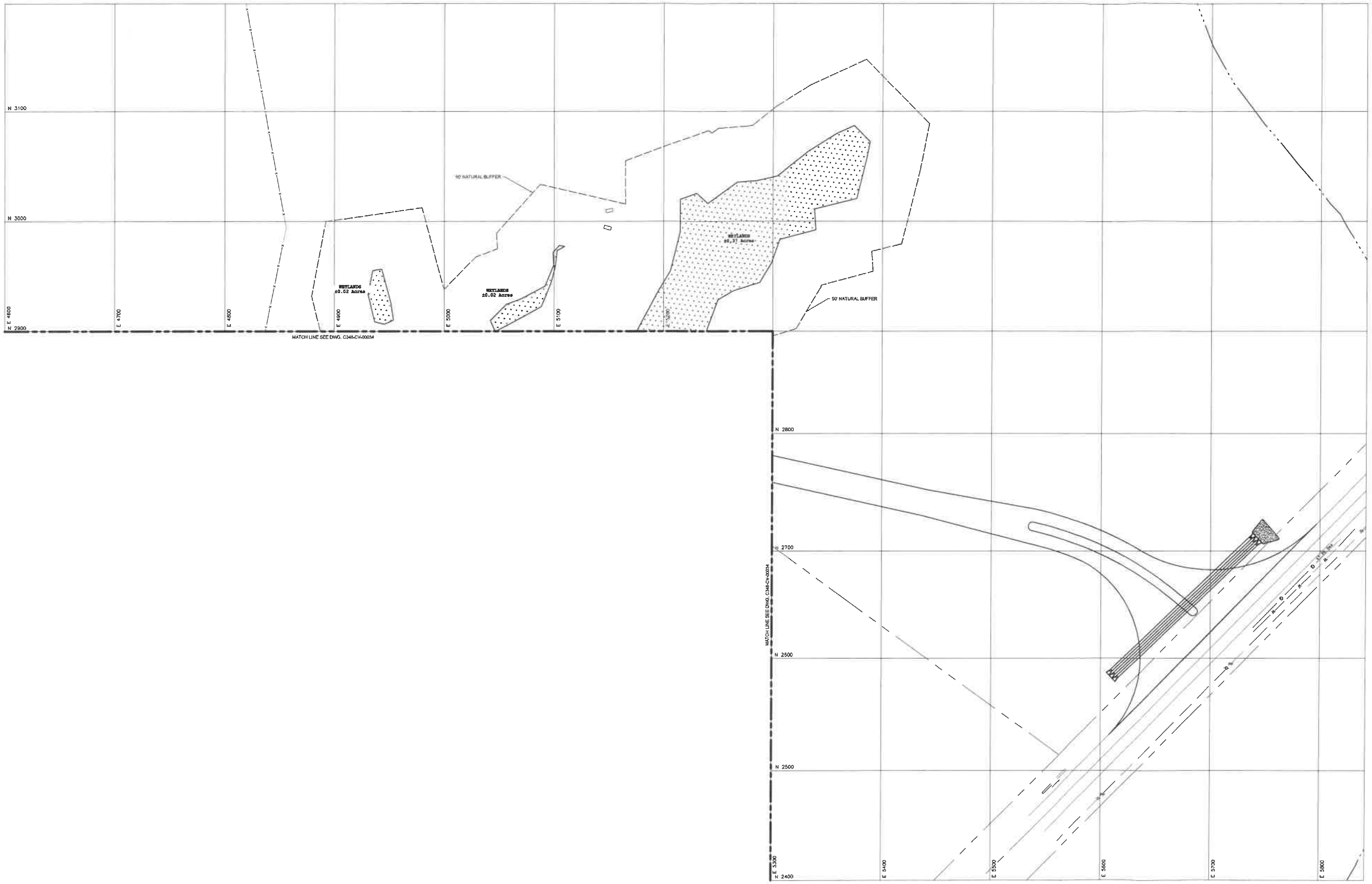
MNEMONIC: -
SHEET NO.: -

TITLE: CIVIL
UNDERGROUND UTILITIES PLAN 2

Kimberly-Clark Corporation

DWG. NO. C348-CV-00034
SIZE E
ISSUE A

NOTES
FOR GENERAL NOTES SEE DWG. C348-CV-00036.



PRELIMINARY - NOT FOR CONSTRUCTION

O'NEAL
THE BUSINESS OF PROJECT DELIVERY

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL

Seal

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ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

MNEMONIC -
SHEET NO. -

TITLE
CIVIL
UNDERGROUND UTILITIES PLAN 3

Kimberly-Clark Corporation

DWG. NO. C348-CV-00035 SIZE E ISSUE A

DRAWN	FJ RAMSEUR	08 11 20
CHECK	RF WILL	08 12 20
APVD	BR CHANDLER	08 12 20

K-C NUMBER

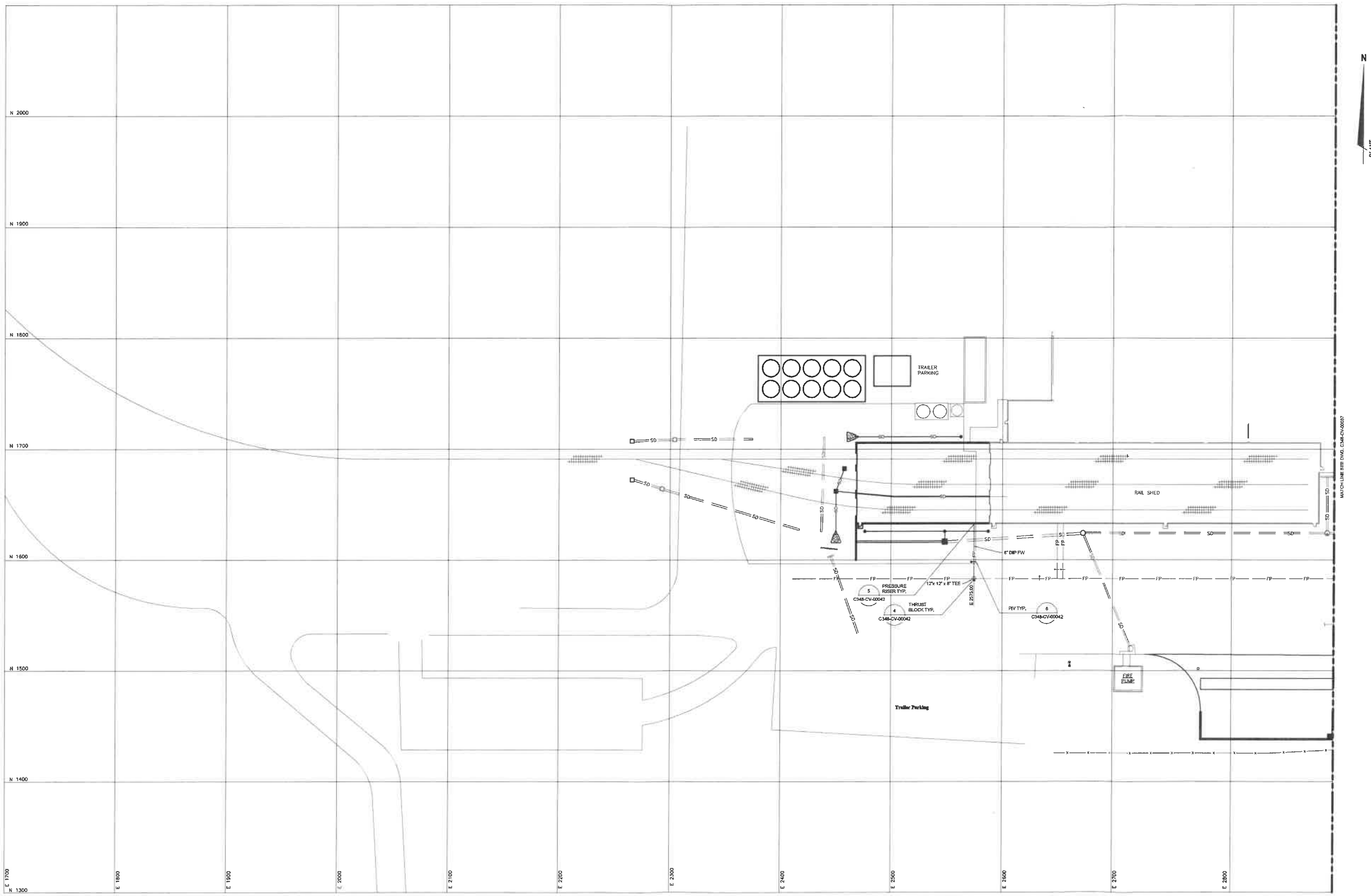
THIRD ANGLE PROJECTION

DIMENSIONAL TOLERANCES
INCHES: .X ± .050, .XX ± .015, .XXX ± .005
MILLIMETERS: X. ± 1.30, X.X ± 0.40, X.XX ± 0.15

ANGULAR TOLERANCE
X.X = ± 0° 30'
X.XX = ± 0° 15'

DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS

NOTES
FOR GENERAL NOTES SEE DWG. C348-CV-00038.



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Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL

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MNEMONIC -
SHEET NO. -

THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES INCHES	MILLIMETERS	ANGULAR TOLERANCE	DIMENSION & TOLERANCE
	.X ± .050 .XX ± .015 .XXX ± .005	X. ± 1.30 X.X ± 0.40 X.XX ± 0.15	X.X = ± 0' 30' X.XX = ± 0' 15'	PER ASME Y14.5 OR ISO STANDARDS

		K-C NUMBER		
DRAWN	FJ RAMSEUR	08	11	20
CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR PERMIT	FJR	9/18/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

TITLE
CIVIL
UNDERGROUND UTILITIES PLAN 4

Kimberly-Clark Corporation

DWG. NO.	SIZE	ISSUE
C348-CV-00036	E	B

NOTES:
FOR GENERAL NOTES SEE DWG. C348-CV-00036.

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O'NEAL
THE BUSINESS OF PROJECT DELIVERY
10 Falcon Crest Drive, Suite 303
Greenville, SC 29607
P.O. 10288 Greenville, SC 29603
Tel: 864.288.2000 - Fax: 864.288.2300
www.oneal-inc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 822000189

Seal
JEREMY FREDERICK WILL
REGISTERED
ENGINEER
20489
STATE OF MISSISSIPPI

THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES INCHES	DIMENSIONAL TOLERANCES MILLIMETERS	ANGULAR TOLERANCE	DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS
	.X ± .050 .XX ± .015 .XXX ± .005	X. ± 1.30 X.X ± 0.40 X.XX ± 0.15	X.X = ± 0° 30' X.XX = ± 0° 15'	

	K-C NUMBER
DRAWN FJ RAMSEUR	08 11 20
CHECK RF WILL	08 12 20
APVD BR CHANDLER	08 12 20

ISS NO	LOC	REVISIONS (INDICATED BY Δ)	BY	DATE	APP
A		ISSUED FOR PERMIT	FJR	8/18/20	BRC
B		GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2020	BRC

-INCH-

MNEMONIC -

SHEET NO. -

TITLE
CIVIL
UNDERGROUND UTILITIES PLAN 5

Kimberly-Clark Corporation

DWG NO C348-CV-00037

SIZE ISSUE E B

SEQUENCE OF CONSTRUCTION:

PHASE I

1. THE CONTRACTOR SHALL MAINTAIN ONE (1) COPY OF THE STAMPED PLANS AND COVERAGE LETTER ON-SITE AT ALL TIMES. THESE DOCUMENTS SHALL BE STORED IN THE CONTRACTOR'S JOB TRAILER OR WITHIN A WEATHER-TIGHT JOB BOX, MOUNTED AT A CONVENIENT AND ACCESSIBLE LOCATION.
2. THE CONTRACTOR SHALL STAGE MATERIALS AND EQUIPMENT IN THE TEMPORARY CONTRACTOR LAY DOWN AND STAGING AREA SHOWN ON THE PLANS. THE CONTRACTOR MAY UTILIZE A DIFFERENT LOCATION AS DESIRED, AT THE APPROVAL OF THE OWNER AND ENGINEER. EQUIPMENT RE-FUELING STATIONS SHALL BE LOCATED BY THE CONTRACTOR AND RED-LINED ON THE PLANS. ALL RE-FUELING STATIONS SHALL BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.
3. THE CONTRACTOR SHALL DETERMINE AND MARK THE LIMITS OF DISTURBANCE.
4. THE CONTRACTOR SHALL INSTALL PERIMETER SILT FENCE, SEDIMENT TUBE, AND CONSTRUCTION ENTRANCE BEST MANAGEMENT PRACTICES (BMPS) AS INDICATED ON THE DRAWINGS, PERFORMING CLEARING AND GRUBBING ONLY AS NECESSARY FOR INSTALLATION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PREVENTION OF SEDIMENT TRANSPORT FROM THE SITE DURING CONSTRUCTION ACTIVITIES. IF AT ANY POINT DURING CONSTRUCTION, SEDIMENT IS TRANSPORTED FROM THE SITE OR IMPACTS DOWNSTREAM PROPERTIES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF CONDITIONS DUE TO THE IMPACTS. IF THE CONTRACTOR IDENTIFIES AREAS OF THE SITE WHERE ADDITIONAL BMPS MAY BE NECESSARY DUE TO INCREMENTAL GRADING ACTIVITIES, THE ENGINEER SHALL BE NOTIFIED FOR REVIEW AND APPROVAL.
5. THE CONTRACTOR SHALL INSPECT AND MAINTAIN ALL BMPS THROUGHOUT CONSTRUCTION, UNTIL NOTIFIED IN WRITING BY THE ENGINEER THAT A BMP CAN BE REMOVED. INSPECTIONS SHALL BE AT LEAST WEEKLY FOR A MINIMUM OF 4 INSPECTIONS PER MONTH AND AS OFTEN AS NECESSARY TO INSURE THAT APPROPRIATE EROSION AND SEDIMENT CONTROLS HAVE BEEN CONSTRUCTED AND MAINTAINED AND TO DETERMINE IF ADDITIONAL OR ALTERNATIVE CONTROL MEASURES ARE REQUIRED.
6. BEGIN INSTALLATION OF THE SEDIMENT BASINS AND ROCK FILTER DAM BMPS. REFER TO DETAILS FOR FURTHER INFORMATION. CLEAR AND GRUB/REMOVE TOPSOIL ONLY IN THE AREA NECESSARY FOR INSTALLATION. THE BASIN SLOPES SHALL BE IMMEDIATELY STABILIZED BY RECEIVING A MINIMUM THICKNESS OF 4" OF TOPSOIL AND SHALL THEN BE SEEDED FOR THE ESTABLISHMENT OF PERMANENT VEGETATION AND LINED WITH NA GREEN SC250.
7. BEGIN ROUGH GRADING ACTIVITIES. THE CONTRACTOR SHALL STAGE GRADING IN A MANNER WHICH WILL MAINTAIN POSITIVE DRAINAGE TO THE INSTALLED BMPS THROUGHOUT CONSTRUCTION ACTIVITIES.
8. THE CONTRACTOR IS RESPONSIBLE THROUGHOUT CONSTRUCTION ACTIVITIES FOR THE MAINTENANCE AND ESTABLISHMENT OF ALL PERMANENT AND TEMPORARY VEGETATION.
9. ALL TOPSOIL SHALL BE STORED ON-SITE FOR REUSE IN THE DESIGNATED TOPSOIL STOCKPILE AREA. THE CONTRACTOR MAY DESIGNATE OTHER TOPSOIL STOCKPILE AREAS AT THEIR DISCRETION, HOWEVER, REINFORCED DOUBLE ROW SILT FENCE MUST BE PROVIDED AND MAINTAINED AROUND THE PERIMETER OF ALL STOCKPILES. THESE STOCKPILES MUST BE RED-LINED ON THE STAMPED APPROVED DRAWINGS, AND APPROVED BY THE ENGINEER.
10. THE CONTRACTOR SHALL VERIFY ALL BMPS REFERENCED IN PHASE I HAVE BEEN INSTALLED AND ARE PERFORMING AS EXPECTED PRIOR TO PROCEEDING WITH PHASE II.

PHASE II

11. INSPECT AND MAINTAIN ALL BMPS INSTALLED IN PHASE I. REMOVE SEDIMENT DEPOSITS AS NECESSARY PRIOR TO PROCEEDING WITH PHASE II ACTIVITIES. BMPS SHALL BE MAINTAINED BY THE CONTRACTOR AS NECESSARY THROUGHOUT CONSTRUCTION ACTIVITIES. INSPECTIONS SHALL BE AT LEAST WEEKLY FOR A MINIMUM OF 4 INSPECTIONS PER MONTH AND AS OFTEN AS NECESSARY TO INSURE THAT APPROPRIATE EROSION AND SEDIMENT CONTROLS HAVE BEEN CONSTRUCTED AND MAINTAINED AND TO DETERMINE IF ADDITIONAL OR ALTERNATIVE CONTROL MEASURES ARE REQUIRED.
12. CONTINUE ROUGH GRADING ACTIVITIES. THE CONTRACTOR SHALL STAGE GRADING IN A MANNER WHICH WILL MAINTAIN POSITIVE DRAINAGE TO THE INSTALLED BMPS THROUGHOUT CONSTRUCTION ACTIVITIES.
13. ANY AREAS WHERE GRADING ACTIVITIES CEASE FOR A PERIOD OF 14 DAYS OR LONGER SHALL BE SEEDED FOR THE ESTABLISHMENT OF TEMPORARY VEGETATION.
14. THE CONTRACTOR SHALL GRADE WITHIN THE LIMITS OF THE SITE CONTAINED BY THE DIVERSION SWALES. THE DIVERSION SWALES SHALL BE MAINTAINED IN A CLEAR, FLOWABLE CONDITION AT ALL TIMES THROUGHOUT THE GRADING ACTIVITIES.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND MAINTENANCE OF ALL SLOPES THROUGHOUT CONSTRUCTION ACTIVITIES, WHICH MAY REQUIRE MULTIPLE BMPS (TRACKING, STAIR STEP GRADING, SLOPE GROOVING, TEMPORARY GRASSING, PIPE SLOPE DRAINS, ETC.) UNTIL FINAL GRADES HAVE BEEN ACHIEVED. SURFACE RUNOFF SHALL BE DIRECTED AWAY FROM THE FACE OF ALL SLOPES TO THE GREATEST EXTENT POSSIBLE. UTILIZE BMPS MENTIONED ABOVE TO PROTECT SLOPE FACES. CUT AND FILL SLOPES FACES SHALL RECEIVE A MINIMUM THICKNESS OF 4" OF TOPSOIL AND SHALL THEN BE SEEDED FOR THE ESTABLISHMENT OF PERMANENT VEGETATION AND LINED WITH NA GREEN SC250 AS SOON AS DESIRED GRADES ARE ACHIEVED.
16. INSTALL CONCRETE WASH OUT FACILITIES AS NECESSARY THROUGHOUT THE SITE. THE CONTRACTOR SHALL RED-LINE THE APPROVED PLANS TO INDICATE THE WASH OUT LOCATIONS, AS APPROVED BY THE ENGINEER. ALL WASH OUTS SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED/REPLACED AS NECESSARY. ALL WASH OUT MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.
17. BEGIN INSTALLATION OF THE STORM DRAINAGE SYSTEM AS GRADES ALLOW. DEPENDING ON THE CONTRACTOR'S DESIRED INSTALLATION SEQUENCE, IT MAY BE NECESSARY TO CORE TEMPORARY DRAINAGE HOLES THROUGH THE SIDES OF STORM DRAIN STRUCTURES IN AREAS WHERE THE STRUCTURES EXTEND ABOVE ADJACENT GRADES. IF SUCH CONDITIONS ARE NECESSARY, THE CONTRACTOR SHALL PROVIDE INLET PROTECTION AROUND THE CORED HOLES UNTIL GRADES ARE RAISED TO ALLOW SURFACE DRAINAGE THROUGH THE TOP OF THE STRUCTURE. ALL CORED HOLES SHALL BE FILLED WITH NON-SHRINK GROUT UPON COMPLETION. THE CONTRACTOR SHALL IMMEDIATELY INSTALL INLET PROTECTION BMPS TO EACH STRUCTURE RECEIVING SURFACE FLOW.
18. THE CONTRACTOR SHALL CONTINUE GRADING ACTIVITIES, MAINTAINING POSITIVE DRAINAGE TO STORM DRAINAGE STRUCTURES PROTECTED BY INLET PROTECTION, AND ALSO AWAY FROM SLOPE FACES.
19. BEGIN FINE GRADING ACTIVITIES WITHIN THE BUILDING PLATEAU AREA FOR BUILDING AND EQUIPMENT PADS AND ALONG ACCESS ROADS AND DRIVEWAYS.
20. BEGIN PLACEMENT OF PAVEMENT AGGREGATE STONE BASE COURSE .
21. BEGIN PLACEMENT OF ASPHALT AND/OR CONCRETE PAVEMENT WHERE INDICATED ON THE LAYOUT AND PAVING PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF ANY PAVEMENT SECTIONS OR SUBGRADES DAMAGED BY CONSTRUCTION TRAFFIC.
22. THE CONTRACTOR SHALL REMOVE ALL DEPOSITED SEDIMENT FROM THE SEDIMENT BASINS AND SPREAD WITHIN THE TOPSOIL STOCKPILE AREA. IF NECESSARY, THE CONTRACTOR SHALL CLEAR REMAINING TOPSOIL FROM A PORTION OF THE AREA TO ALLOW PLACEMENT OF THE SEDIMENT, AND RESPREAD TOPSOIL OVER THE MOISTURE CONDITIONED SEDIMENT.
23. BEGIN CLOSURE OF THE TOPSOIL STOCKPILE AREA BY VERIFYING A MINIMUM THICKNESS OF 4" OF TOPSOIL AND SEEDING FOR PERMANENT VEGETATION TO ALL REMAINING AREAS ACHIEVING FINAL GRADES. ANY REMAINING TOPSOIL NOT UTILIZED CAN BE LEFT IN PLACE OR DISTRIBUTED AND SPREAD ACROSS LANDSCAPE AREAS.
24. ONCE ALL SEDIMENT HAS BEEN REMOVED FROM THE SEDIMENT BASINS, THE FAIRCLOTH SKIMMERS SHALL BE REMOVED AND THE BASIN WILL REMAIN TO SERVE AS A PERMANENT STORM WATER MANAGEMENT POND.
25. ONCE ALL DISTURBED AREAS HAVE ACHIEVED A MINIMUM UNIFORM PERMANENT VEGETATIVE DENSITY OF AT LEAST 70% IN ALL LOCATIONS OF THE SITE NOT COVERED WITH PAVEMENT,THE CONTRACTOR SHALL CONTACT THE ENGINEER. THE ENGINEER SHALL PREPARE AND SUBMIT THE NOTICE OF TERMINATION (NOT) AND CERTIFICATION LETTER.
26. UPON APPROVAL , THE NPDES PERMIT COVERAGE SHALL CEASE AND NO FURTHER LAND DISTURBANCE OR SITE WORK SHALL BE PERMITTED.

MDEQ STANDARD NOTES

1. IF NECESSARY, SLOPES, WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS, IN ADDITION TO HYDROSEEDING. IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE.
2. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED BELOW.
   - WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
3. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR WEEK. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY OR INCORRECTLY INSTALLED, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 24 HOURS OF IDENTIFICATION UNLESS PREVENTED BY UNSAFE WEATHER CONDITIONS DOCUMENTED ON THE FORM.
4. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL, COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE SEDIMENT BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE.
5. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
6. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
7. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT-LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.
8. ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A 50 FOOT UNDISTURBED NATURAL BUFFER SHALL BE MAINTAINED AROUND ALL WOS.
9. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.
10. A COPY OF THE SWPPP, INSPECTIONS RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.
11. INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS.
12. MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL.
13. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE.
14. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMPS (SEDIMENT BASIN, FILTER BAG, ETC.).
15. THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED:
   - WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL;
   - WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS;
   - FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; AND
   - SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
17. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.
18. IF EXISTING BMPS NEED TO BE MODIFIED OR IF ADDITIONAL BMPS ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR MISSISSIPPI WATER QUALITY STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMPS MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE.

GENERAL NOTES - DEMOLITION

1. ALL APPLICABLE EROSION CONTROL BMPS SHALL BE INSTALLED PRIOR TO INITIATION OF DEMOLITION.
2. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES, OF ALL EXISTING STRUCTURES, ABOVE AND BELOW GRADE (E.G. PAVEMENT, DRAINAGE, UTILITIES, ETC.), SUCH THAT THE PROPOSED IMPROVEMENTS SHOWN WITHIN THESE PLANS CAN BE CONSTRUCTED. ALL EXISTING STRUCTURES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE SPECIFICATIONS.
3. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING AND DISPOSING OF ALL DEBRIS FROM THE SITE IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISCONNECTION OF UTILITY SERVICES TO ANY EXISTING STRUCTURES PRIOR THEIR DEMOLITION. ALL EXISTING SERVICES TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION ACTIVITIES AND REPLACED OR REPAIRED BY THE CONTRACTOR IF DAMAGED.
5. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR CONFIRMATION OF ONSITE LOCATIONS OF EXISTING UTILITIES.
6. ALL EXISTING SEWERS, PIPING AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK.
7. ELECTRICAL, TELEPHONE, CABLE, WATER, FIBER OPTIC CABLE AND/OR GAS LINES REQUIRING REMOVAL OR RELOCATION SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY. ADEQUATE TIME SHALL BE PROVIDED FOR RELOCATION AND CLOSE COORDINATION WITH THE UTILITY COMPANY IS NECESSARY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FEES REQUIRED BY THE AFFECTED UTILITY COMPANY. CONTRACTOR SHALL PAY CLOSE ATTENTION TO EXISTING UTILITIES WITHIN ANY ROAD RIGHT OF WAY DURING CONSTRUCTION.
8. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES BY PROVIDING FENCING, BARRICADES, ENCLOSURES, ETC., PER THE SPECIFICATIONS AND INDUSTRY ACCEPTED BEST MANAGEMENT PRACTICES.
9. IF ACTIVITIES FOR REMOVAL AND/OR RELOCATION DAMAGE EXISTING FACILITIES WHICH ARE TO REMAIN, THEN THE CONTRACTOR SHALL PROVIDE NEW MATERIALS/STRUCTURES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, AT NO EXTRA COST TO THE OWNER. ALL CONSTRUCTION MATERIALS SHALL BE NEW, UNLESS OTHERWISE NOTED.
10. CONTRACTOR SHALL LIMIT SAW-CUT & PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE IT IS REQUIRED. IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDING PAVEMENT OR STRUCTURES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR IT'S REMOVAL AND REPAIR.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING/EXECUTING ANY REQUIRED UTILITY MAIN SHUT OFFS WITH THE CITY/COUNTY/UTILITY PROVIDER DURING CONSTRUCTION. ANY COSTS ASSOCIATED WITH UTILITY MAIN SHUT OFFS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO EXTRA COMPENSATION WILL BE PROVIDED.

GENERAL NOTES - SITE PREPARATION

1. TOPOGRAPHIC INFORMATION PROVIDED BY THE OWNER. ELEVATIONS ARE RELATIVE ONLY TO THE ELEVATIONS OF THE BENCH MARK INDICATED ON THE DRAWING (EXISTING FINISHED FLOOR ELEVATION).
2. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THAT ALL UNDERGROUND PIPES AND UTILITIES HAVE BEEN SHOWN AND THEIR LOCATION AND ELEVATIONS ARE INDICATED CORRECTLY. IF UNCHARTED OR INCORRECTLY SHOWN PIPES OR UTILITIES ARE FOUND, THE OWNER'S REPRESENTATIVE SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION.
3. A SUBSURFACE EXPLORATION OF THE SITE HAS BEEN PERFORMED BY SCOTT ENGINEERING COMPANY. THEIR REPORT IS AVAILABLE UPON REQUEST FOR INFORMATION ONLY AND IS NOT A WARRANTY OF SUBSURFACE CONDITIONS, NOR IS IT A PART OF THESE SPECIFICATIONS.
4. ALL NEW ELEVATIONS SHOWN ARE FINISHED GRADE ELEVATIONS. THE FOLLOWING SHALL BE DEDUCTED FOR SUBGRADE ELEVATION:

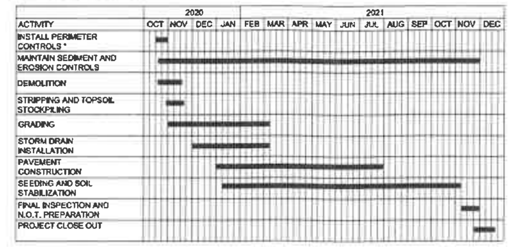
   BUILDING FLOOR - SEE STRUCTURAL DRAWINGS
   HEAVY DUTY ASPHALT PAVEMENT - 15"
   CONCRETE PAVEMENT - 13"

5. THE CREST AND TOE OF ALL SLOPES SHALL BE ROUND AND SMOOTH TO PERMIT EASY OPERATION OF GRASS MOWING MACHINES.
6. THE SLOPE RATIO OF FILL AND CUT SLOPES SHALL BE 3 HORIZONTAL TO 1 VERTICAL UNLESS NOTED OTHERWISE.
7. THE FINISHED EARTH SURFACE SHALL BE COVERED WITH TOPSOIL TO A DEPTH OF NOT LESS THAN 4 INCHES IN TURF AREAS AND 18" IN PLANTER AREAS USING STOCKPILED TOPSOIL. TOPSOIL SHALL BE TESTED ACCORDING TO THE CONTRACTOR'S SEED SUPPLIER'S RECOMMENDATIONS, AND AS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL CORRECT DEFICIENCIES PRIOR TO APPLYING PERMANENT SEEDING, THE FINAL GRADE SHALL BE AS SHOWN ON THE DRAWINGS.
8. GRADING SHALL CONFORM TO ELEVATIONS AND DIMENSIONS SHOWN WITHIN A TOLERANCE OF PLUS OR MINUS 0.10 FEET. FINAL GRADED SURFACE UNDER BUILDING SLABS SHALL BE WITHIN A TOLERANCE OF 1/4" WHEN MEASURED WITH A 10' STRAIGHT EDGE.
9. ON ALL AREAS, WHERE GRADING, EXCAVATING, AND FILLING ARE TO BE DONE, AND ON ALL BORROW AREAS, ALL TIMBER, BRUSH, STUMPS, ROOTS, RUBBISH, AND UNSUITABLE MATERIAL SHALL BE REMOVED. MATERIAL THUS REMOVED SHALL BE PILED AND DISPOSED OF AT LOCATIONS APPROVED BY THE OWNER'S REPRESENTATIVE AND IN ACCORDANCE WITH LOCAL LAWS AND REGULATIONS. CLEARING AND GRUBBING LIMITS SHALL BE 10 FEET BEYOND GRADING LIMITS. TREES OUTSIDE THESE LIMITS SHALL BE CAREFULLY PROTECTED DURING GRADING OPERATIONS. PERMITS REQUIRED FOR BURNING OF THE RUBBISH SHALL BE OBTAINED BY THE CONTRACTOR.
10. ALL EXISTING TOPSOIL SHALL BE STRIPPED FROM AREAS WHERE GRADING, EXCAVATING, AND FILLING ARE TO BE DONE. STOCKPILE TOPSOIL AT CONVENIENT LOCATIONS APPROVED BY THE OWNER'S REPRESENTATIVE AND AS SHOWN ON THE DRAWINGS.
11. AFTER STRIPPING AND ROUGH GRADING, AREAS TO PROVIDE SUPPORT FOR THE PAVEMENTS SHALL BE CAREFULLY INSPECTED FOR SOFT SURFICIAL SOILS AND PROOFROLLED WITH A HEAVY LOADED TANDEM AXLE DUMP TRUCK, OR SIMILAR APPROVED EQUIPMENT. THE PROOFROLLER SHALL MAKE FOUR PASSES OVER EACH LOCATION, WITH THE LAST TWO PASSES PERPENDICULAR TO THE FIRST TWO. ANY AREAS WHICH RUT OR DEFLECT SHALL BE UNDERCUT TO FIRMER SOILS. THE RESULTING UNDERCUT AREAS SHALL BE BACKFILLED IN 6 INCH COMPACTED LIFTS WITH SUITABLE FILL MATERIALS, COMPACTED, AND RETESTED. THE PROOFROLLING AND UNDERCUTTING OPERATIONS SHALL BE CAREFULLY MONITORED BY AN APPROVED GEOTECHNICAL ENGINEERING FIRM.
12. THE SOILS TO BE USED AS ENGINEERED FILL SHALL BE FREE OF DEBRIS AND HAVE LESS THAN 3 PERCENT (BY WEIGHT) OF FIBROUS ORGANICS, ROOTS, AND/OR OTHER DELETERIOUS MATERIALS WITH A MAXIMUM PARTICLE SIZE OF 3 INCHES MATTER. IT SHALL CONSIST OF SOILS HAVING A UNIFIED SOIL CLASSIFICATION OF CL, SM, SC, SW, SP, GW, GP, GM, AND GC, OR A COMBINATION OF THESE SOIL GROUPS WITH A MINIMUM OF 20 PERCENT PASSING THE NO. 200 SIEVE. THE FILL SHOULD EXHIBIT A MAXIMUM DRY DENSITY OF AT LEAST 90 102 POUNDS PER CUBIC FOOT, AS DETERMINED BY A STANDARD PROCTOR COMPACTION TEST (ASTM D 698), HAVE A LIQUID LIMIT (LL) LESS THAN 40 PERCENT, AND A PLASTICITY INDEX (PI) OF LESS THAN 20.. OPEN GRADED MATERIALS, SUCH AS GRAVELS WHICH CONTAIN VOID SPACE IN THEIR MASS (GP), SHOULD NOT BE USED IN STRUCTURAL FILLS UNLESS PROPERLY ENCAPSULATED WITH NON-WOVEN FILTER FABRIC OR WOVEN GEOTEXTILE.
13. THE BUILDING PADS AND PAVEMENT(S) SUBGRADES SHOULD BE DENSIFIED WITH A HEAVY-DUTY ROLLER TO ACHIEVE A UNIFORM SUBGRADE. THE SUBGRADES SHOULD BE THOROUGHLY PROOF ROLLED AFTER THE COMPLETION OF DENSIFICATION. ANY AREAS OBSERVED TO PUMP, OR DEMONSTRATE EXCESSIVE DEFLECTION OR RUTTING SHOULD BE UNDERCUT, BACKFILLED, AND PROPERLY COMPACTED. ALL BUILDING PAD SUBGRADES SHOULD BE GRADED IN A CROWNED CONDITION TO PROMOTE POSITIVE DRAINAGE OFF THE PAD AREAS DURING CONSTRUCTION ACTIVITIES, UNTIL SLAB PLACEMENT CAN BEGIN. REFER TO THE STRUCTURAL BASIS OF DESIGN FOR DETAILED INFORMATION REGARDING THE FOUNDATIONS AND FLOOR SYSTEMS.
14. ALL FILL USED FOR RAISING THE SITE GRADE OR FOR REPLACEMENT OF MATERIAL THAT IS UNDERCUT SHALL BE UNIFORMLY COMPACTED IN 6" LIFTS TO AT LEAST 95 PERCENT OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D 698) AND THE MOISTURE CONTENT DURING COMPACTION SHOULD BE MAINTAINED WITHIN -2 AND +3 PERCENTAGE POINTS OF THE OPTIMUM MOISTURE CONTENT DETERMINED IN THE LABORATORY. THE UPPER 18 INCHES OF SUBGRADE FILL BENEATH PAVEMENTS AND FLOOR SLABS SHALL BE COMPACTED TO 98 PERCENT OF THE SAME SPECIFICATIONS UNLESS OTHERWISE NOTED.
15. ENGINEERED STRUCTURAL FILL TO BE PLACED ON THE PREPARED SUB-GRADE BENEATH ALL FOUNDATION ELEMENTS SHALL CONSIST OF A SANDY CLAY MATERIAL AND SHOULD BE INSTALLED IN UNIFORM LIFTS NOT EXCEEDING 6 INCHES IN COMPACTED THICKNESS. IT SHOULD BE COMPACTED TO A DENSITY OF 98% OF STANDARD PROCTOR AND THE MOISTURE CONTENT DURING COMPACTION SHOULD BE MAINTAINED WITHIN -2 AND +3 PERCENTAGE POINTS OF THE OPTIMUM MOISTURE CONTENT DETERMINED IN THE LABORATORY. IT IS RECOMMENDED THAT GRANULAR BASE MATERIAL BE PLACED UNDER SELECTED FOUNDATION ELEMENTS. THE GRANULAR MATERIAL SHOULD CONSIST OF WELL-GRADED CRUSHED LIMESTONE WITH MAXIMUM AGGREGATE SIZE NOT EXCEEDING ¾ INCH. IT SHOULD BE INSTALLED ONTO THE PREPARED SUB-GRADE. FOUNDATION EXCAVATION, OR COMPACTED FILL SECTION IN COMPACTED 6-INCH LAYERS. A MINIMUM THICKNESS OF SIX INCHES OF GRANULAR BASE MATERIAL IS REQUIRED THAT IS COMPACTED TO 98% OF STANDARD PROCTOR.
16. TEMPORARY DEWATERING MEASURES SHOULD BE PROVIDED DURING CONSTRUCTION ACTIVITIES FOR EXCAVATIONS OF ALL TYPES, WHICH WILL BE THE RESPONSIBILITY OF THE SUBCONTRACTOR PERFORMING THE AFFECTED SCOPE OF WORK. FURTHER, ANY SOIL/SUBGRADE STABILIZATION REQUIREMENTS ARE NOT INCLUDED IN THIS BASIS AND WILL BE IDENTIFIED BASED ON THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
17. THE CONTRACTOR SHOULD REFER TO THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS FOR UNDERCUT/BACKFILL AND/OR MOISTURE CONDITIONING OF THE EXISTING SOILS WITHIN THE AREA OF THE PROPOSED IMPROVEMENTS.
18. FILL AREAS SHALL BE CROWNED AND SEALED BY ROLLING IN ANTICIPATION OF WET WEATHER TO PREVENT WATER PENETRATION INTO THE FILL SECTION AT THE END OF EACH DAY. ANY FILL AREA SURFACE THAT BECOMES SATURATED DUE TO WET WEATHER MUST BE EITHER REMOVED OR REWORKED BY DISCING, BLADING, OR OTHER MEANS, THEN ALLOWED TO THOROUGHLY DRY AND BE RECOMPACTED PRIOR TO ADDITIONAL FILL LAYERS BEING PLACED.
19. PAVEMENT SECTIONS SHALL CONSIST OF A HOT MIXED ASPHALT (HMA) SURFACE COURSE PLACED ON A ASPHALTIC CONCRETE BINDER COURSE ON A GRADED AGGREGATE BASE (GAB) COURSE, AS SHOWN ON THE DRAWINGS. THE BASE SHALL BE TOPPED WITH A PRIME COAT OF CUT-BACK ASPHALT MC-30, APPLIED AT THE RATE OF 0.30 GALLON PER SQUARE YARD. THE HMA BINDER MIX SHALL BE TOPPED WITH A TACK COAT APPLIED AT THE RATE OF 0.10 GALLON PER SQUARE YARD. THE HOT MIXED ASPHALT (HMA) SURFACE COURSE SHALL BE HMA SURFACE COURSE TYPE C AND SHALL BE CONSTRUCTED IN COMPLIANCE WITH THE "MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION, SECTION 400, 401, AND 403. THE HMA BINDER COURSE SHALL BE TYPE C AND SHALL BE CONSTRUCTED IN COMPLIANCE WITH THE "MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION, SECTION 400, 401, AND 402. THE GRADED AGGREGATE BASE (GAB) COURSE SHALL BE CONSTRUCTED IN COMPLIANCE WITH THE SAME SPECIFICATIONS, SECTION 300.

HEAVY DUTY PAVEMENT	8"	GRADED AGGREGATE BASE (GAB) COURSE
	4"	HMA BINDER COURSE
	3"	HMA SURFACE COURSE
LIGHT DUTY PAVEMENT	6"	GRADED AGGREGATE BASE (GAB) COURSE
	2"	HMA SURFACE COURSE

20. UNLESS NOTED OTHERWISE, REINFORCED CONCRETE PIPE (RCP) SHALL BE CLASS 3, WALL B, TONGUE AND GROOVE, CONFORMING TO ASTM C76 (AASHTO M170), EXCEPT AS NOTED ON PLANS. JOINTS TO BE RUBBER OR FLEXIBLE PLASTIC GASKETS CONFORMING TO AASHTO M198.
21. ALL DIMENSIONS SHOWN ARE FROM FACE OF BUILDING OR FACE OF CURB, EXCEPT AS NOTED.
22. PAVEMENT MARKINGS SHALL BE OF COLOR AND WIDTH TO MATCH EXISTING, APPLIED PER THE MANUFACTURER'S RECOMMENDATIONS, AT LEAST 14 DAYS AFTER SURFACE COURSE PLACEMENT, WITH A SECOND COAT APPLIED AT LEAST 30 DAYS AFTER THE INITIAL COAT. CROSS-HATCHED WALKWAYS AND/OR LOADING AREAS SHALL UTILIZE THE STRIPE SIZE, SPACING AND ORIENTATION PROVIDED IN THE ADA PARKING SPACE DETAIL.
23. CONCRETE PAVEMENT SHALL BE PLACED IN ACCORDANCE WITH THE "MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION, SECTION 500 AND SHALL HAVE COMPRESSIVE STRENGTH, fc, OF 4,000 PSI AT 28 DAYS.
24. ELEVATIONS ARE BASED ON EXISTING TOPOGRAPHIC INFORMATION SUPPLIED BY THE OWNER AND SHOULD BE VERIFIED IN THE FIELD.
25. UNLESS OTHERWISE NOTED, SEEDING AND MULCHING SHALL BE PERFORMED IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY SPECIFICATIONS.
26. ON SITE EROSION AND SEDIMENT CONTROL SHALL BE PROVIDED AS REQUIRED BY LOCAL AND STATE AUTHORITIES AND AS SHOWN ON THE DRAWINGS.

ESTIMATED CONSTRUCTION SCHEDULE



* THE INSTALLATION OF EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES SHALL OCCUR PRIOR TO OR CONCURRENT WITH LAND DISTURBING ACTIVITY.

SEEDING NOTES

1. AREAS TO BE GRASSED SHALL BE DEFINED AS ALL AREAS OF THE SITE WITHIN THE GRADING LIMITS NOT OCCUPIED BY PAVING, CRUSHED STONE SURFACING, OR STRUCTURES. GRASSING SHALL INCLUDE FINAL SHAPING, LIMING, FERTILIZING, POLYACRYLAMIDES, SEEDING, AND MULCHING. PRIOR TO SEEDING AND FERTILIZING ACTIVITIES, THE CONTRACTOR SHALL TEST THE SOIL CONDITIONS AND PROVIDE SEEDING AND FERTILIZER RATES AS RECOMMENDED BY THE SEED SUPPLIER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING TEMPORARY AND/OR PERMANENT VEGETATION THROUGHOUT CONSTRUCTION ACTIVITIES, UNTIL THE NOTICE OF TERMINATION HAS BEEN FILED BY THE OWNER AND FINALIZED BY MDEQ.
2. FERTILIZE TOPSOIL FOR PLANTING GRASS WITH COMMERCIAL FERTILIZER CONTAINING 8 PERCENT NITROGEN, 24 PERCENT PHOSPHOROUS, AND 24 PERCENT POTASH AT A RATE OF 350 POUNDS PER ACRE. APPLY AGRICULTURAL LIMESTONE AT A RATE OF 70 POUNDS PER 1,000 SQUARE FEET. LIMESTONE SHALL BE GROUND DOLOMITIC LIMESTONE ACCEPTABLE AS AGRICULTURAL LIMESTONE CONTAINING NOT LESS THAN 85% TOTAL CARBONATES. LIMESTONE SHALL MEET THE REQUIREMENTS OF THE SOUTH CAROLINA DEPARTMENT OF AGRICULTURE. FERTILIZER TYPE AND APPLICATION RATES SHALL BE VERIFIED/MODIFIED BY THE SEED SUPPLIER.
3. POLYACRYLAMIDES (PAM), MANUFACTURED BY APPLIED POLYMER SYSTEMS, INC. OR APPROVED EQUAL, SHALL BE APPLIED TO ALL AREAS TO BE GRASSED PER TESTING RESULTS AND MANUFACTURER'S RECOMMENDATIONS.
4. GRASS SEED SHALL CONSIST OF SELECTION OR A BLEND AS INDICATED BELOW OR AS RECOMMENDED BY A QUALIFIED SEED DISTRIBUTOR AND APPROVED BY THE ENGINEER. ALL SEED SHALL CONFORM TO STATE LAWS AND TO ALL REQUIREMENTS AND REGULATIONS OF THE MISSISSIPPI DEPARTMENT OF AGRICULTURE & COMMERCE/USDA.
5. ALL REQUIRED LIME, PAM, AND FERTILIZER SHALL BE THOROUGHLY AND EVENLY INCORPORATED WITH THE SOIL TO A MINIMUM DEPTH OF 2" BY DISCING OR OTHER APPROVED METHODS. IN AREAS INACCESSIBLE TO POWER EQUIPMENT, IT SHALL BE INCORPORATED WITH THE SOIL BY USE OF HAND TOOLS AND ROLLED. SOIL SHALL BE LEVELED OFF, RAKED SMOOTH, AND ROLLED FOR RECEPTION OF SEED.
6. SEED SHALL BE APPLIED BY AN ACCEPTED METHOD UTILIZING A MINIMUM OF 2 PASSES AT RIGHT ANGLES. RAKE SEED LIGHTLY INTO THE TOP 1/8" OF SEED BED. PROTECT SEEDED AREAS AGAINST EROSION BY SPREADING STRAW AT A UNIFORM RATE OF 2 TONS PER ACRE. TACK STRAW WITH ASPHALT TACK COAT AT A RATE OF 300 POUNDS PER ACRE. MANUFACTURED EROSION CONTROL MATS MAY BE USED IN PLACE OF STRAW MULCH OR AS REQUIRED BY THE PLANS.
7. MAINTAIN GRASSING AS REQUIRED TO ESTABLISH A SATISFACTORY STAND OF GRASS. FOR PURPOSE OF GRASSING, A SATISFACTORY STAND OF GRASS IS DEFINED AS A FULL COVER, OVER AREAS TO BE SEEDED, ALIVE AND GROWING, AND LEAVING NO BARE SPOTS LARGER THAN 2'x2' WITHIN A RADIUS OF 10 FEET (70% MINIMUM COVERAGE).

Commonly Used Plants for Temporary Cover

Species	Seeding Rates/Ac	Planting Time	Desired pH Range	Fertilization Rate/Acre	Method of Establishment	Zone of Adaptability
Wheat	90 lbs. alone	9/1 – 11/30	6.0 – 7.0	600 lbs. 13-13-13	Seed	All
Ryegrass	30 lbs.	9/1 – 11/30	6.0 – 7.0	500 lbs. 13-13-13	Seed	All
White Clover	5 lbs	9/1 – 11/30	6.0 – 7.0	400 lbs. 13-13-13	Seed	All
Crimson Clover	25 lbs. alone 15 lbs. mix	9/1 – 11/30	6.0 – 7.0	400 lbs. 13-13-13	Seed	All
Hairy Vetch	30 lbs.	9/1 – 11/30	6.0 – 7.0	400 lbs. 13-13-13	Seed	All
Browntop Millet	40 lbs alone 15 lbs. mix	4/1 – 8/30	6.0 – 7.0	600 lbs. 13-13-13	Seed	All

Commonly Used Plants for Permanent Cover with Seeding Rates and Dates

Species	Seeding Rates/Ac	Planting Time	Desired pH Range	Fertilization Rate/Acre	Method of Establish-ment	Zone of Adaptability	Native / Introduced
Common Bermuda	15 lbs. alone 10lbs. mix	3/1 – 7/15 9/1 – 11/30	6.0 – 7.0	600 lbs. 13-13-13	Seed or sod	All	Introduced * Potential for invasive-ness
Bahia	40 lbs. alone 30 lbs. mix	3/1 – 7/15 9/1 – 11/30	6.0 – 7.0	600 lbs. 13-13-13	Seed	Central and South	Introduced
Fescue	40 lbs. alone 30 lbs. mix	9/1 – 11/30	6.0 – 7.0	600 lbs. 13-13-13	Seed	North and Central	Native
Saint Augustine	--	3/1 – 7/15	6.0 – 7.0	600 lbs 13-13-13	Sod only	Central and South	Native
Centipede	4 lbs. alone 2.5 lbs mix	3/1 – 7/15	6.0 – 7.0	600 lbs 13-13-13	Seed or sod	All	Introduced
Carpet Grass	15 lbs. alone 10 lbs. mix	3/1 – 7/15	6.0 – 7.0	600 lbs 13-13-13	Seed or sod	All	Native
Zoysia Grass	--	3/1 – 7/15	6.0 – 7.0	600 lbs. 13-13-13	Sod only	All	Introduced
Creeping Red Fescue	30 lbs. alone 22.5 lbs mix	9/1 – 11/30	6.0 – 7.0	600 lbs. 13-13-13	Seed	All	Native
Weeping Lovegrass	10 lbs. alone 5 lbs. mix	3/1 – 7/15	6.0 – 7.0	600 lbs 13-13-13	Seed	All	Introduced
*Wheat	90 lbs alone	9/1 – 11/30	6.0 – 7.0	600 lbs 13-13-13	Seed	All	Native
*Ryegrass	30 lbs.	9/1 – 11/30	6.0 – 7.0	600 lbs 13-13-13	Seed	All	Native
*White Clover	5 lbs.	9/1 – 11/30	6.0 – 7.0	400 lbs 6-24-24	Seed	All	Introduced
*Crimson Clover	15 lbs.	9/1 – 11/30	6.0 – 7.0	400 lbs 6-24-24	Seed	All	Introduced
Sericea Lespedeza	40 lbs.	3/1 – 7/15 9/1 – 11/30	6.0 – 7.0	400 lbs. 13-13-13	Seed	All	Introduced
*Hairy Vetch	30 lbs.	9/1 – 11/30	6.0 – 7.0	400 lbs 6-24-24	Seed	All	Introduced
*Browntop Millet	40 lbs. alone 15 lbs. mix	4/1 – 8/30	6.0 – 7.0	600 lbs 13-13-13	Seed	All	Introduced

* Note on Annuals: For permanent seeding, annuals can only be used in a mixture with perennials

WATER SYSTEM NOTES

1. PRIOR TO PLACING THE DOMESTIC WATER LINE IN SERVICE, THE PIPE SHALL BE HYDROSTATICALLY TESTED IN ACCORDANCE WITH AWWA C600, SECTION 4. THE LINE SHALL THEN BE FLUSHED CLEAN OF EXISTING WATER AND DISINFECTED BY FILLING THE LINE WITH A 50 PPM CHLORINE SOLUTION AND LET STAND FOR 24 HOURS MINIMUM FOR A CHLORINE RESIDUAL OF 10 PPM. SUBMIT TWO SAMPLES TAKEN AT LEAST 24 HOURS APART TO A PRIVATE LABORATORY APPROVED BY MDEQ. IF ANALYSES SHOW POSITIVE RESULTS, REPEAT DISINFECTION, FLUSHING AND SAMPLING UNTIL WATER UNTIL ACCEPTABLE CHLORINE REMAINS IN WATER COMING FROM SYSTEM.
2. THRUST BLOCKING REQUIREMENTS ARE THE SAME AS FIRE PROTECTION REQUIREMENTS.
3. HYDROSTATICALLY TEST PIPING AT 1.5 TIMES THE WORKING PRESSURE FOR 2 HOURS. PERFORM TEST PER AWWA STANDARDS.
4. DISINFECT WATER SYSTEM PER AWWA C651.
5. UNDERGROUND POTABLE WATER PIPE SHALL BE AWWA C151, CLASS 51 DUCTILE IRON PIPE WITH AWWA C110 FITTINGS, AWWA C104 CEMENT MORTAR, SEAL COATED LINING, AND AWWA C111 GASKETS UNLESS NOTED OTHERWISE ON PLANS. PIPE AND ASSOCIATED FITTINGS AND JOINTS SHALL BE UL LISTED AND FM APPROVED UNLESS OTHERWISE APPROVED BY THE OWNER.

FIRE PROTECTION NOTES

1. SEE GENERAL UTILITY NOTES, THIS DRAWING.
2. UNDERGROUND FIRE PROTECTION PIPE SHALL BE AWWA C151, CLASS 51 DUCTILE IRON PIPE WITH AWWA C110 FITTINGS, AWWA C104 CEMENT MORTAR, SEAL COATED LINING, AND AWWA C111 GASKETS, INSTALLED IN ACCORDANCE WITH NFPA 24. PIPE AND ASSOCIATED FITTINGS AND JOINTS SHALL BE UL LISTED AND FM APPROVED UNLESS OTHERWISE APPROVED BY THE OWNER. ALL WATER LINES USED FOR FIRE PROTECTION SUPPLY SHALL COMPLY WITH NFPA 24. SIGNAGE SHALL BE PROVIDED FOR NEW FIRE DEPARTMENT CONNECTIONS IN ACCORDANCE WITH INTERNATIONAL FIRE CODE (IFC) 912.5. MATCH NEARBY EXISTING SIGNAGE WHERE APPLICABLE. ALL NEW HYDRANTS SHALL BE FLOW TESTED AND PAINTED IN ACCORDANCE WITH NFPA 24. CLEAR SPACING AROUND HYDRANTS SHALL BE PROVIDED AT ALL TIMES IN ACCORDANCE WITH IFC SECTION 507.5.5. EXISTING OR NEW HYDRANTS MUST NOT BE BLOCKED DURING CONSTRUCTION IN ACCORDANCE WITH IFC SECTION 507.5.4. FIRE HYDRANTS MUST BE INSTALLED AND IN SERVICE BEFORE COMBUSTIBLE CONSTRUCTION MATERIALS ARE BROUGHT TO THE SITE, PER IFC 3312.1.
3. ALL DIMENSIONS SHOWN ARE FROM CENTER LINE OF FIRE PROTECTION LINE, EXCEPT AS NOTED.
4. CONCRETE THRUST BLOCKS, TIE RODS, OR MEGALUG RESTRAINT HARNESS TO BE INSTALLED WHERE REQUIRED AS PER NFPA 24, APPENDIX A. THRUST BLOCKS SHALL BE SIZED ACCORDING TO SAME. A DETAIL HAS BEEN PROVIDED FOR GENERAL GUIDANCE. WRAP PIPE FITTINGS WITH POLYETHYLENE PRIOR TO POURING THRUST BLOCKS.
5. TIE RODS TO BE STEEL WITH A MIN. ALLOWABLE WORKING STRESS OF 40 K.S.I. AND A MIN. YIELD STRESS OF 70 K.S.I.. RODS SHALL BE COATED WITH ASPHALTIC BASE MASTIC TO PREVENT CORROSION. TIE RODS TO BE SAME DIA. AS FLANGE BOLTS.
7. FLUSH ALL PIPING ACCORDING TO NFPA 24, SECT. 10.10.2.1 AND FM GLOBAL PROPERTY LOSS PREVENTION DATA SHEET 3-10, SECT. 2.1.5.8 TO REMOVE FOREIGN MATTER FROM PIPING. REQUIRED VELOCITIES AND FLOW RATES SHALL BE OBTAINED FOR EACH FLUSH. FLUSHING SHALL BE CONDUCTED AT ALL SYSTEM ENDS AND ABOVE GROUND FIRE PROTECTION SYSTEM RISERS. TEMPORARY RISERS AND HOSE DEVICES WILL BE REQUIRED WHERE SYSTEM ENDS ARE LOCATED BELOW GRADE. DAMAGE AS A RESULT OF FLUSHING SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER. CONTRACTOR SHALL SUBMIT A FLUSHING PLAN FOR REVIEW AND APPROVAL BY ENGINEER AND OWNER.
8. TESTING PRESSURE FOR THE FIRE PROTECTION SYSTEM EQUIPMENT SHALL NOT EXCEED MANUFACTURER'S ALLOWABLE TEST PRESSURE. IF A PIECE OF EQUIPMENT LIMITS TESTING PER NFPA 24, THEN THE EQUIPMENT SHALL BE PROTECTED OR REMOVED FOR THE SYSTEM TEST.
9. ALL EQUIPMENT AND MATERIALS, WHERE APPLICABLE, SHOULD BE FM APPROVED AND THE INSTALLATION SHOULD BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND FM GLOBAL RECOMMENDED GOOD PRACTICES.
10. ALL PIPE MATERIALS AND INSTALLATION ARE TO BE IN ACCORDANCE WITH THE LATEST EDITIONS OF NFPA NUMBERS 13 & 24.
11. HYDROSTATICALLY TEST PIPING AT 200PSI (13.8 BAR) OR 50 PSI IN EXCESS OF THE SYSTEM WORKING PRESSURE FOR 2 HOURS PER NFPA 24, SECT. 10.10.2.2 AND FM GLOBAL PROPERTY LOSS PREVENTION DATA SHEET 3-10, SECT. 2.1.5.6.
12. VALVES AND HYDRANTS SHALL BE UL AND FM LISTED.
13. NEW HYDRANTS TO BE MUELLER CENTURION.
14. FIRE DEPARTMENT CONNECTIONS SHALL BE 2-1/2" SIAMESE WITH 6" CONNECTION TO LOOP IN ACCORDANCE WITH NFPA 24.
15. MINIMUM COVER OVER PIPE TO BE 3'-6".

SANITARY SEWER NOTES

MATERIAL SPECIFICATIONS

ALL MATERIALS, DEVICES, FITTINGS, ETC. SHALL BE SUITABLE FOR UNDERGROUND SEWER SERVICE.

1. PVC PIPE FOR GRAVITY SANITARY SEWER SHALL BE SDR 35 PVC. INSTALL IN ACCORDANCE WITH LOCAL PLUMBING CODE.
2. MANHOLES SHALL BE PRE-CAST CONCRETE WITH 5" MINIMUM WALL THICKNESS AND 48" MINIMUM INSIDE DIAMETER. MANHOLES SHALL MEET ASTM C478. INSTALLATION SHALL MEET ASTM C891. JOINT SEALANT SHALL BE MANUFACTURED AND INSTALLED SUCH THAT THEY MEET VACUUM TESTING REQUIREMENTS.
3. RING AND COVER SHALL BE MINIMUM 24" DIAMETER ENTRY. RING AND COVER SHALL BE CAST IRON MEETING ASTM A48 CLASS 35B.
4. MISCELLANEOUS CONCRETE SHALL BE 3,500 PSI COMMERCIAL READY MIX WITH 5-7% ENTRAINED AIR. PLACE CONCRETE PER ACI 318.
5. REINFORCING STEEL SHALL BE GRADE 60 MEETING ASTM A615.
6. CLEANOUTS TO BE PLACED AT 100' MAXIMUM INCREMENTS ALONG SERVICE LINES.

DEFLECTION TESTING

1. DEFLECTION TESTING OF ALL FLEXIBLE PIPE SHALL BE REQUIRED. THE TEST SHALL BE CONDUCTED AFTER THE BACKFILL HAS BEEN IN PLACE AT LEAST 24 HOURS. WRITTEN REPORT TO BE PREPARED AND TO INCLUDE TEST RESULTS, TEST TIME, TEST DATE, AND LAYOUT SKETCH OF TEST AREA.
2. NO PIPE SHALL EXCEED A DEFLECTION OF 5%.
3. THE TEST SHALL BE RUN WITH A RIGID BALL OR AN ENGINEER-APPROVED 9-ARM MANDREL HAVING A DIAMETER EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE. THE TEST MUST BE PERFORMED BY MANUALLY PULLING THE TEST DEVICE THROUGH THE LINE.

LOW PRESSURE AIR TESTING

1. LOW PRESSURE AIR-TESTING SHALL BE PERFORMED AS PER ASTM C-828 ON ALL GRAVITY PIPE. THE TIME REQUIRED FOR THE PRESSURE TO DROP FROM THE STABILIZED 3.5 psig TO 2.5 psig SHOULD BE GREATER THAN OR EQUAL TO THE MINIMUM CALCULATED TEST TIME. WRITTEN REPORT TO BE PREPARED AND TO INCLUDE TEST RESULTS, TEST TIME, TEST DATE, AND LAYOUT SKETCH OF TEST AREA.
2. THE TABLE GIVES THE MINIMUM TEST TIMES AND ALLOWABLE AIR LOSS VALUES FOR VARIOUS PIPE SIZE PER 100 FT.

PIPE SIZE (INCHES)	TIME, T (sec/100 FT)	ALLOWABLE AIR LOSS, Q (ft3/min)
6	42	2.0
8	72	2.0
10	90	2.5
12	108	3.0

VACUUM TESTING OF MANHOLES

THE METHOD OF VACUUM TESTING MANHOLES REQUIRES THE USE OF THE FOLLOWING CRITERIA (THIS METHOD IS APPLICABLE TO ALL MANHOLES):

1. ALL LIFTING HOLES AND EXTERIOR JOINTS SHALL BE FILLED AND POINTED WITH NON-SHRINK GROUT FOR CONCRETE MANHOLES OR SEALED WITH COMPATIBLE SEALANT FOR OTHER MATERIALS. THE EXTERIOR OF THE MANHOLE MUST BE PAINTED AS THE VACUUM IS BEING APPLIED TO SEAL THE PORES OF THE CONCRETE.
2. MANHOLES ARE TO BE TESTED IMMEDIATELY AFTER ASSEMBLY OR CONSTRUCTION AND BEFORE BACKFILLING. NO STANDING WATER SHALL BE ALLOWED IN THE MANHOLE EXCAVATION WHICH MAY AFFECT THE ACCURACY OF THE TEST.
3. ALL PIPES AND OTHER OPENINGS INTO THE MANHOLE SHALL BE SUITABLY PLUGGED IN SUCH A MANNER AS TO PREVENT DISPLACEMENT OF THE PLUGS WHILE THE VACUUM IS PILLED.
4. INSTALLATION AND OPERATION OF THE VACUUM EQUIPMENT AND INDICATING DEVICES SHALL BE IN ACCORDANCE WITH EQUIPMENT SPECIFICATIONS AND INSTRUCTIONS PROVIDED BY THE MANUFACTURER.
5. THE TEST HEAD MAY BE PLACED IN THE CONE SECTION OF THE MANHOLE. THE RIM-CONE IS NOT USUALLY TESTED.
6. A VACUUM OF 10.0 INCHES OF MERCURY SHALL BE DRAWN. THE TIME FOR THE VACUUM TO DROP TO 9.0 INCHES OF MERCURY SHALL BE RECORDED.
7. ACCEPTANCE FOR 4 FT. DIAMETER MANHOLES SHALL BE DEFINED AS WHEN THE TIME TO DROP TO 9 INCHES OF MERCURY MEETS OR EXCEEDS THE FOLLOWING:

MANHOLE DEPTH	DIAMETER	TIME TO DROP 1" HG
4 FT. TO 10 FT.	4 FT.	75 SECONDS
10 FT. TO 15 FT.	4 FT.	90 SECONDS
15 FT. TO 25 FT.	4 FT.	105 SECONDS

8. FOR MANHOLES 5 FT. IN DIAMETER, ADD AN ADDITIONAL 15 SECONDS AND FOR MANHOLES 6 FT. IN DIAMETER, ADD ADDITIONAL 30 SECONDS TO THE TIME REQUIREMENTS FOR FOUR FOOT DIAMETER MANHOLES.
9. IF THE MANHOLE FAILS THE TEST, NECESSARY REPAIRS SHALL BE MADE AND THE VACUUM TEST REPEATED UNTIL THE MANHOLE PASSES THE TEST.
10. IF THE MANHOLE JOINT MASTIC OR GASKET IS DISPLACED DURING THE VACUUM TEST, THE MANHOLE SHALL BE DISASSEMBLED AND THE SEAL REPLACED.

NATURAL GAS SYSTEM NOTES

1. NATURAL GAS PIPING SHALL BE SDR 11 PE 2406/2708 AND SHALL MEET THE REQUIREMENTS OF ASTM D 2513 AND ASTM D 3350. ALL PIPE AND FITTINGS SHALL BE PREPARED USING SOCKET FUSION TECHNIQUES AS OUTLINED IN ASTM F 2620. THE TEMP, TIMES, AND PRESSURES OF FUSION SHALL BE PER THE PIPE MANUFACTURER'S RECOMMENDATIONS.
2.
3. ALL APPROPRIATE SHUT OFF VALVES TO BE INSTALLED PRIOR TO USING GAS LINE FOR SERVICE.
4. LEAK TESTING SHALL BE PERFORMED ONCE ALL JOINTS HAVE PROPERLY CURED IN ACCORDANCE WITH ASME B31.3, SECTION A345.

GENERAL NOTES - ROOF DRAINAGE

1. ALL STRUCTURES DESIGNATED "RD" SHALL BE ADS DRAIN BASINS WITH SOLID H-20 COVERS, OR APPROVED EQUAL. STRUCTURES SHALL BE FLUSH WITH ADJACENT FINISHED GRADES AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
2. HDPE PIPING SHALL BE ADS DUAL WALL/N-12 SMOOTH INNER SURFACE PIPE, OR APPROVED EQUAL. PIPE SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS. ADS N-12 END CAPS SHALL BE USED AT THE ENDS OF HEADER PIPES WHICH ARE NOT CONNECTED TO DRAIN BASINS.
3. DOWNSPOUT BOOT CONNECTORS SHALL BE PIEDMONT DOWNSPOUT ADAPTERS (DENVER, NC - 877-489-0911), OR APPROVED EQUAL. DOWNSPOUT ADAPTERS SHALL BE SIZED BASED ON DOWNSPOUT DIMENSIONS PROVIDED ON THE PARTIAL ROOF PLANS (RE: ARCH) AND FOUNDATION PLANS (RE: STRUCT). DOWNSPOUT PROVIDER SHALL PREPARE FABRICATION DRAWINGS/TAKEOFF AND SIZING FOR EACH DOWNSPOUT APPLICATION AS NECESSARY. OWNER'S LOGO MAY BE INCORPORATED ON THE ADAPTER AT THE OWNER'S DISCRETION. INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
4. LEADER LINES FROM DOWNSPOUT ADAPTERS SHALL BE 6"Ø ADS N-12 HDPE FOR DOWNSPOUT SIZES UP TO AND INCLUDING 4"X5" AND 12"Ø ADS N-12 HDPE FOR DOWNSPOUT SIZES GREATER THAN 4"X5". LEADERS SHALL BE CONNECTED TO HEADERS USING ADS FABRICATED N-12 TEE OR WYE CONNECTIONS, UNLESS NOTED OTHERWISE ON THE DRAWINGS. USE ADS FABRICATED N-12 REDUCERS AS NECESSARY AT DOWNSPOUT ADAPTER CONNECTIONS.

PROCESS SEWER NOTES

MATERIAL SPECIFICATIONS

ALL MATERIALS, DEVICES, FITTINGS, ETC. SHALL BE SUITABLE FOR UNDERGROUND SEWER SERVICE.

1. SHALL BE AWWA C151, CLASS 51 DUCTILE IRON PIPE WITH AWWA C110 FITTINGS, AWWA C104 CEMENT MORTAR, SEAL COATED LINING, AND AWWA C111 GASKETS UNLESS NOTED OTHERWISE ON PLANS. INSTALL IN ACCORDANCE WITH LOCAL PLUMBING CODE.
2. MANHOLES SHALL BE PRE-CAST CONCRETE WITH 5" MINIMUM WALL THICKNESS AND 48" MINIMUM INSIDE DIAMETER. MANHOLES SHALL MEET ASTM C478. INSTALLATION SHALL MEET ASTM C891. JOINT SEALANT SHALL BE MANUFACTURED AND INSTALLED SUCH THAT THEY MEET VACUUM TESTING REQUIREMENTS.
3. RING AND COVER SHALL BE MINIMUM 24" DIAMETER ENTRY. RING AND COVER SHALL BE CAST IRON MEETING ASTM A48 CLASS 35B.
4. MISCELLANEOUS CONCRETE SHALL BE 3,500 PSI COMMERCIAL READY MIX WITH 5-7% ENTRAINED AIR. PLACE CONCRETE PER ACI 318.
5. REINFORCING STEEL SHALL BE GRADE 60 MEETING ASTM A615.
6. CLEANOUTS TO BE PLACED AT 100' MAXIMUM INCREMENTS ALONG SERVICE LINES.

LOW PRESSURE AIR TESTING

1. LOW PRESSURE AIR-TESTING SHALL BE PERFORMED AS PER ASTM C-828 ON ALL GRAVITY PIPE. THE TIME REQUIRED FOR THE PRESSURE TO DROP FROM THE STABILIZED 3.5 psig TO 2.5 psig SHOULD BE GREATER THAN OR EQUAL TO THE MINIMUM CALCULATED TEST TIME. WRITTEN REPORT TO BE PREPARED AND TO INCLUDE TEST RESULTS, TEST TIME, TEST DATE, AND LAYOUT SKETCH OF TEST AREA.
2. THE TABLE GIVES THE MINIMUM TEST TIMES AND ALLOWABLE AIR LOSS VALUES FOR VARIOUS PIPE SIZE PER 100 FT.

PIPE SIZE (INCHES)	TIME, T (sec/100 FT)	ALLOWABLE AIR LOSS, Q (ft3/min)
6	42	2.0
8	72	2.0
10	90	2.5
12	108	3.0

VACUUM TESTING OF MANHOLES

THE METHOD OF VACUUM TESTING MANHOLES REQUIRES THE USE OF THE FOLLOWING CRITERIA (THIS METHOD IS APPLICABLE TO ALL MANHOLES):

1. ALL LIFTING HOLES AND EXTERIOR JOINTS SHALL BE FILLED AND POINTED WITH NON-SHRINK GROUT FOR CONCRETE MANHOLES OR SEALED WITH COMPATIBLE SEALANT FOR OTHER MATERIALS. THE EXTERIOR OF THE MANHOLE MUST BE PAINTED AS THE VACUUM IS BEING APPLIED TO SEAL THE PORES OF THE CONCRETE.
2. MANHOLES ARE TO BE TESTED IMMEDIATELY AFTER ASSEMBLY OR CONSTRUCTION AND BEFORE BACKFILLING. NO STANDING WATER SHALL BE ALLOWED IN THE MANHOLE EXCAVATION WHICH MAY AFFECT THE ACCURACY OF THE TEST.
3. ALL PIPES AND OTHER OPENINGS INTO THE MANHOLE SHALL BE SUITABLY PLUGGED IN SUCH A MANNER AS TO PREVENT DISPLACEMENT OF THE PLUGS WHILE THE VACUUM IS PILLED.
4. INSTALLATION AND OPERATION OF THE VACUUM EQUIPMENT AND INDICATING DEVICES SHALL BE IN ACCORDANCE WITH EQUIPMENT SPECIFICATIONS AND INSTRUCTIONS PROVIDED BY THE MANUFACTURER.
5. THE TEST HEAD MAY BE PLACED IN THE CONE SECTION OF THE MANHOLE. THE RIM-CONE IS NOT USUALLY TESTED.
6. A VACUUM OF 10.0 INCHES OF MERCURY SHALL BE DRAWN. THE TIME FOR THE VACUUM TO DROP TO 9.0 INCHES OF MERCURY SHALL BE RECORDED.
7. ACCEPTANCE FOR 4 FT. DIAMETER MANHOLES SHALL BE DEFINED AS WHEN THE TIME TO DROP TO 9 INCHES OF MERCURY MEETS OR EXCEEDS THE FOLLOWING:

MANHOLE DEPTH	DIAMETER	TIME TO DROP 1" HG
4 FT. TO 10 FT.	4 FT.	75 SECONDS
10 FT. TO 15 FT.	4 FT.	90 SECONDS
15 FT. TO 25 FT.	4 FT.	105 SECONDS

8. FOR MANHOLES 5 FT. IN DIAMETER, ADD AN ADDITIONAL 15 SECONDS AND FOR MANHOLES 6 FT. IN DIAMETER, ADD ADDITIONAL 30 SECONDS TO THE TIME REQUIREMENTS FOR FOUR FOOT DIAMETER MANHOLES.
9. IF THE MANHOLE FAILS THE TEST, NECESSARY REPAIRS SHALL BE MADE AND THE VACUUM TEST REPEATED UNTIL THE MANHOLE PASSES THE TEST.
10. IF THE MANHOLE JOINT MASTIC OR GASKET IS DISPLACED DURING THE VACUUM TEST, THE MANHOLE SHALL BE DISASSEMBLED AND THE SEAL REPLACED.

GENERAL UTILITY NOTES

1. UTILITY CONTRACTOR SHALL COORDINATE ALL UTILITIES WITH GENERAL CONTRACTOR FOR BUILDING CONSTRUCTION.
2. ALL PIPE MATERIALS SHALL BE OF DOMESTIC ORIGIN AND MANUFACTURE.
3. CUT PIPE TRENCHES NO MORE THAN 18" WIDER THAN PIPE AND PROVIDE ROUNDED, FIRM BEDDING SURFACE CONFORMING TO BOTTOM ONE-FOURTH OF PIPE FOR ENTIRE LENGTH. ANY REQUIRED FILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR, ASTM D-698.
4. PROVIDE A MINIMUM OF 3'-6" OF COVER OVER ALL UNDERGROUND PRESSURIZED UTILITY LINES. PROVIDE BENDS AS NECESSARY TO ALLOW FOR ROUTING ABOVE AND/OR BELOW GRAVITY LINES OR OTHER PRESSURE LINES AS NEEDED. ALTHOUGH OVER/UNDER BREAKS MAY BE INDICATED ON THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING AND IDENTIFYING THESE LOCATIONS, AND PHASING THE INSTALLATION OF ALL UTILITIES (INCLUDING ROOF DRAIN CONNECTIONS) TO ACCOMMODATE INSTALLATION OF THE GRAVITY LINES AT THEIR DESIGN INVERT ELEVATIONS.
5. CONTRACTOR SHALL CONFIRM EXISTING SOIL CORROSIVITY CONDITIONS IN ACCORDANCE WITH APPENDIX A OF AWWA 105. BASED ON THESE RESULTS, POLYETHYLENE ENCASEMENT SHALL BE INSTALLED FOR DUCTILE IRON PIPE SYSTEMS IN ACCORDANCE WITH AWWA 105, IF REQUIRED
6. PROVIDE WARNING TAPE ABOVE ALL PLASTIC UTILITY LINES. TAPE SHALL BE SOLID BLUE, 6" WIDE POLYETHYLENE, 4 MILS THICK WITH METALLIC CORE. TAPE SHALL BE PRINTED "CAUTION-UTILITY BURIED BELOW".
7. MANHOLE TOPS TO BE 6" ABOVE FINISHED GRADE IN LAWN AREAS AND MATCH FINISHED GRADE IN PAVED AREAS.
8. MAINTAIN A MINIMUM OF 12" VERTICAL CLEARANCE BETWEEN WATER LINES AND OTHER UTILITIES WHERE CROSSING OCCURS, EXCEPT WHERE CROSSING SEWER LINES, USE A MINIMUM OF 18" VERTICAL CLEARANCE. MAINTAIN A MINIMUM OF 5' HORIZONTAL CLEARANCE BETWEEN WATER LINES AND OTHER UTILITIES WHERE PARALLEL, EXCEPT WHERE PARALLEL WITH SEWER LINES, USE A MINIMUM OF 10' HORIZONTAL CLEARANCE.
9. ALL PIPE MATERIALS SHALL BE CARRIED BY SUPPORTING THE OUTSIDE OF THE PIPE AND SET IN PLACE. DRAGGING AND DROPPING PIPE MATERIALS INTO TRENCHES AND CARRYING BY SUPPORTING FROM THE INSIDE OF THE PIPE IS PROHIBITED.
10. TRACER WIRES WITH TEST BOXES SHALL BE INSTALLED IN ADDITION TO THE WARNING TAPE WHEN PVC/HDPE IS SUBSTITUTED FOR DIP IN PRESSURIZED PIPE APPLICATIONS.

PRELIMINARY - NOT FOR CONSTRUCTION

N

O'NEAL
THE BUSINESS OF PROJECT DELIVERY
10 Falcon Crest Drive, Suite 300
Greenville, SC 29607
P.O. 10289 Greenville, SC 29603
Tel: 864.298.2000 - Fax: 864.298.2200
www.onealinc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 202000163

Seal
ROBERT FREDERICK WILL
STATE OF MISSISSIPPI

THIRD ANGLE PROJECTION

DIMENSIONAL TOLERANCES INCHES		MILLIMETERS	
.X	± .050	X.	± 1.30
.XX	± .015	X.X	± 0.40
.XXX	± .005	X.XX	± 0.15

ANGULAR TOLERANCE
X.X = ± 0° 30'
X.XX = ± 0° 15'

DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS

		K-C NUMBER		
DRAWN	FJ RAMSEUR	08	11	20
CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR PERMIT	FJR	9/18/20	BRC
B			ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

-INCH-

MNEMONIC -
SHEET NO. -

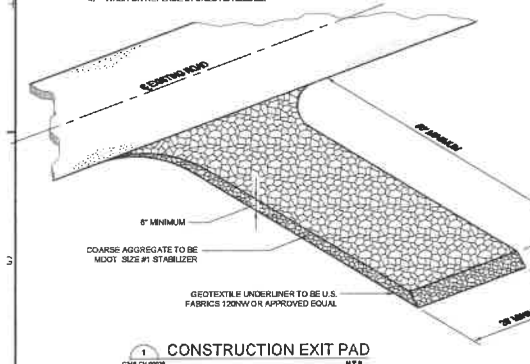
TITLE
CIVIL
MISCELLANEOUS SECTIONS AND DETAILS

Kimberly-Clark Corporation

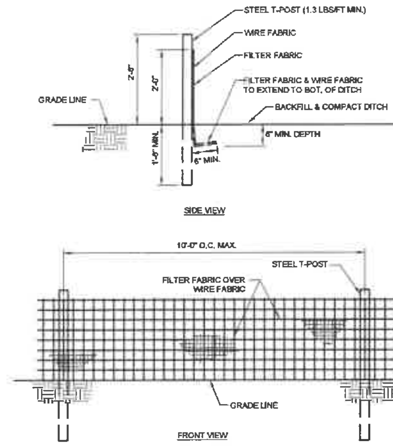
DWG. NO. C348-CV-00038
SIZE E
ISSUE B

INSPECTION AND MAINTENANCE

1. INSPECT EVERY 7 CALENDAR DAYS AND WITHIN 24-HOURS AFTER EACH RAINFALL EVENT THAT PRODUCES ½-INCHES OR MORE OF PRECIPITATION, OR AFTER HEAVY USE.
2. CHECK FOR MUD AND SEDIMENT BUILDUP AND PAD INTEGRITY.
3. MAKE DAILY INSPECTIONS DURING PERIODS OF WET WEATHER. MAINTENANCE IS REQUIRED MORE FREQUENTLY IN WET WEATHER CONDITIONS. RESHAPE THE STONE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.
4. WASH OR REPLACE STONES AS NEEDED.



1 CONSTRUCTION EXIT PAD
N.T.S.



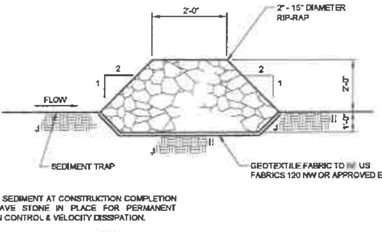
2 SILT FENCE
N.T.S.

INSPECTION AND MAINTENANCE

1. INSPECT EVERY 7 CALENDAR DAYS AND WITHIN 24-HOURS AFTER EACH RAINFALL EVENT THAT PRODUCES ½-INCHES OR MORE OF PRECIPITATION. CHECK FOR SEDIMENT BUILDUP AND FENCE INTEGRITY. CHECK WHERE RUNOFF HAS ERODED A CHANNEL BENEATH THE FENCE, OR WHERE THE FENCE HAS SAGGED OR COLLAPSED BY FENCE OVERTOPPING.
2. IF THE FENCE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE SECTION OF FENCE IMMEDIATELY.
3. REMOVE SEDIMENT ACCUMULATED ALONG THE FENCE WHEN IT REACHES 1/3 THE HEIGHT OF THE FENCE, ESPECIALLY IF HEAVY RAINS ARE EXPECTED.
4. REMOVE TRAPPED SEDIMENT FROM THE SITE OR STABILIZE IT ON SITE.
5. REMOVE SILT FENCE WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED OR AFTER TEMPORARY BEST MANAGEMENT PRACTICES (BMPS) ARE NO LONGER NEEDED.
6. PERMANENTLY STABILIZE DISTURBED AREAS RESULTING FROM FENCE REMOVAL.

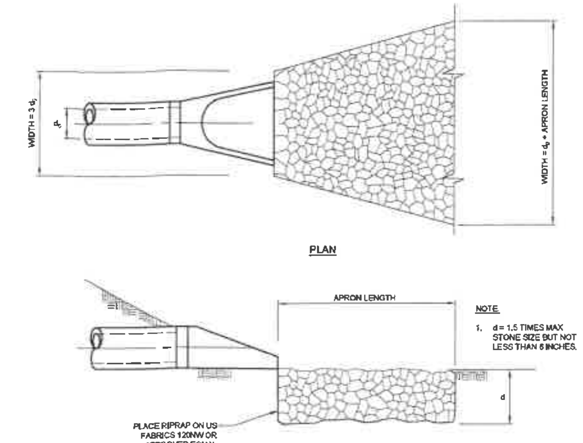
NOTES

1. FILTER FABRIC TO BE TYPE A PER MDEQ E&SC HANDBOOK VOLUME 1.
2. THE WOVEN FENCING SHALL BE FASTENED TO THE UPSTREAM SIDE OF THE POSTS BY STAPLES OR WIRES TIES.
3. GEOTEXTILE FABRIC SHALL BE SECURELY FASTENED TO THE WOVEN WIRE FENCING.
4. USE GROUND TREE MULCH AVAILABLE FROM DEMOLITION OF ON-SITE TREES BETWEEN DOUBLE ROW FENCE. MAX DEPTH OF 6" BELOW TOP OF FABRIC.



NOTE
REMOVE SEDIMENT AT CONSTRUCTION COMPLETION AND LEAVE STONE IN PLACE FOR PERMANENT EROSION CONTROL & VELOCITY DISSIPATION.

3 ROCK CHECK DAM
N.T.S.

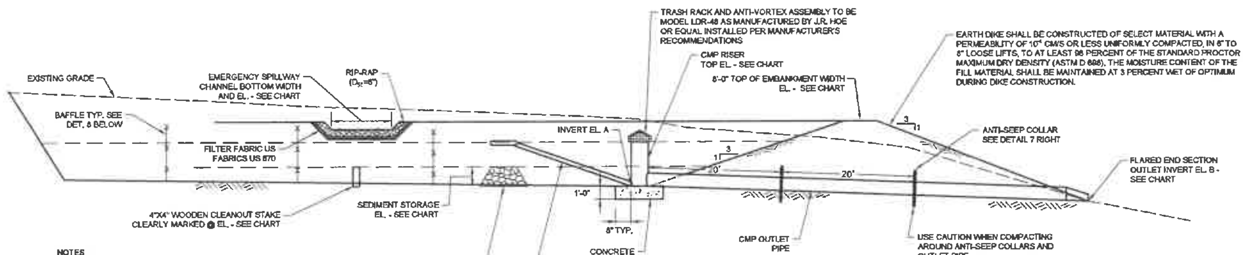


NOTE
1. d = 1.5 TIMES MAX STONE SIZE BUT NOT LESS THAN 6 INCHES.

PIPE OUTLET DESCRIPTION	PIPE SIZE	W	APRON LENGTH	RIP RAP SIZE D_{50} (FEET)
WEST RAIL SHED CULVERT	12".	7'	6'	0.5'
RAIL SHED ROOF DRAINS	8"	7'	6'	0.5'
TRAILER STORAGE AREA CULVERT	12"	7'	6'	0.5'
PLANT EAST ROOF DRAINS	36"	26'	22'	0.5'
NORTH TEMPORARY ACCESS ROAD CULVERTS	2-18"	15.5'	10'	0.5'
SOUTH TEMPORARY ROAD CULVERTS	2-18" AND 1-12"	19.5'	10'	0.5'
SEDIMENT BASIN A	15"	9.5'	8'	0.5'
SEDIMENT BASIN B	15"	9.5'	8'	0.5'
PLANT ENTRANCE ROAD EAST CULVERTS	3 - 24"	24'	14'	0.5'
PLANT ENTRANCE ROAD CULVERT CULVERT	24"	16'	14'	0.5'
PLANT ENTRANCE ROAD WEST CULVERT	48"	30'	26'	0.8'

THE DIAMETER OF THE LARGEST STONE SIZE SHALL BE 1.5 TIMES THE d_{50} SIZE FOR EACH APRON.

4 STORM WATER OUTLET PROTECTION AT FLARED END SECTION
N.T.S.

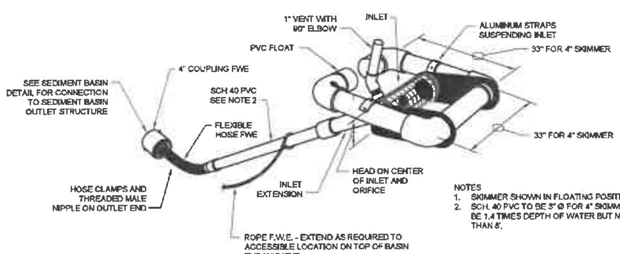


NOTES

1. SEDIMENT CLEAN OUT IS REQUIRED UNTIL SITE VEGETATION IS ESTABLISHED. UNLESS NOTED OTHERWISE, AFTER SITE VEGETATION STABILIZATION, REMOVE ACCUMULATED SEDIMENT, GRADE BOTTOM TO PROVIDE POSITIVE DRAINAGE, SEED, FERTILIZE, AND MULCH.
2. EACH ANTI-SEEP COLLAR TO BE CONSTRUCTED OF REINFORCED CONCRETE. (SEE DET. X ON DWG XXXXXX)

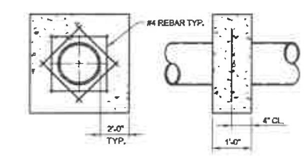
5 SEDIMENT BASIN
N.T.S.

SEDIMENT BASIN SIZING		
	SEDIMENT BASIN A	SEDIMENT BASIN B
DRAINAGE BASIN SIZE	5.34 ACRES	5.10 ACRES
REQ'D SEDIMENT BASIN VOLUME	19,224 CF	18,360 CF
PROVIDED SEDIMENT BASIN VOLUME	30,380 CF	40,710 CF
SEDIMENT STORAGE ELEVATION	[illegible]	485.00
SEDIMENT CLEANOUT EL.	[illegible]	[illegible]
BASIN TOP EL.	491.30	[illegible]
10 YEAR RETSTORM EVENT EL.	[illegible]	[illegible]
BASIN BOTTOM EL.	[illegible]	[illegible]
CMP RISER SIZE	48"	48"
RISER ORIFICE SIZE	4"	4"
TOP OF RISER EL.	491.00	486.00
INVERT A EL.	485.00	482.00
INVERT B EL.	484.75	481.70
OUTFALL PIPE	15" CMP	15" CMP
SKIMMER SIZE	4"	4"
SKIMMER ORIFICE DIAMETER	3.4"	3.3"
EMERGENCY SPILLWAY WIDTH	20'-0"	20'-0"
EMERGENCY SPILLWAY EL.	[illegible]	[illegible]
EMERGENCY SPILLWAY CAP. REQUIRED	[illegible]	[illegible]
EMERGENCY SPILLWAY CAP. PROVIDED	12 CFS	52 CFS



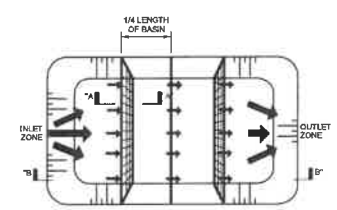
NOTES
1. SKIMMER SHOWN IN FLOATING POSITION.
2. SCH. 40 PVC TO BE 3" Ø FOR 4" SKIMMER PIPE TO BE 1.4 TIMES DEPTH OF WATER BUT NOT LESS THAN 8'.

6 FAIRCLOTH SKIMMER
N.T.S.



NOTE
1. COLLAR SHALL BE CONSTRUCTED OF CONCRETE WITH A COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.
2. COLLAR SHALL NOT BE CLOSER THAN 2 FEET TO A PIPE JOINT.

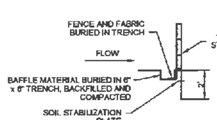
7 ANTI-SEEP COLLAR
N.T.S.



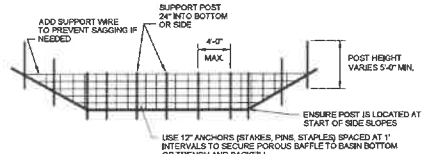
PLAN

NOTES

1. BAFFLE MATERIAL SHOULD BE SECURED AT THE BOTTOM AND SIDES USING STAPLES OR BY TRENCHING AS FOR SILT FENCE.
2. MOST OF THE SEDIMENT WILL ACCUMULATE IN THE 1ST BAY, AND SHOULD BE READILY ACCESSIBLE FOR MAINTENANCE.
3. BAFFLE SHALL BE 700 G/M² COIR MESH BLANKET.
4. PROVIDE 3 ROWS OF BAFFLES EVENLY SPACED AT 1/4 BASIN LENGTH. (2 ROWS IF BASIN IS LESS THAN 25 FEET IN LENGTH)
5. TOPS OF BAFFLES SHOULD BE 2 INCHES LOWER THAN THE TOP OF THE BERMS.
6. WOOD POSTS ARE NOT ALLOWED.
7. ATTACH POROUS MATERIAL ON UPSTREAM SIDE OF STEEL POST WITH HEAVY DUTY PLASTIC OR WIRE TIES EVENLY SPACED TO PREVENT SAGGING OR TEARING OF BAFFLE MATERIAL.

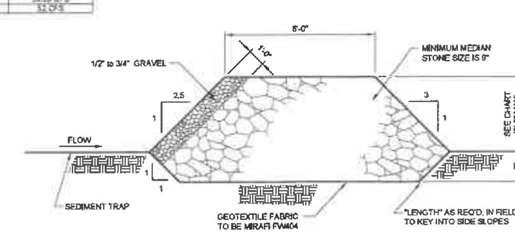


SECTION A-A



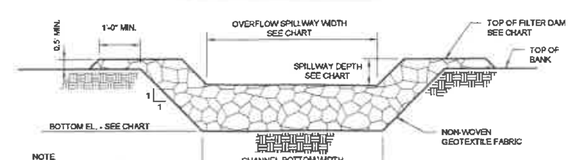
SECTION B-B

8 POROUS BAFFLE DETAIL
N.T.S.



SECTION THROUGH FILTER DAM

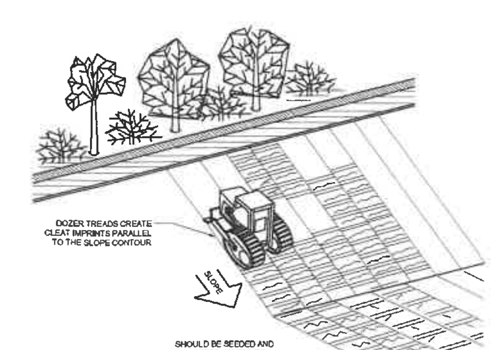
SEDIMENT TRAP/ROCK FILTER DAM SIZING	
	SEDIMENT TRAP A
DRAINAGE BASIN SIZE	1.68 ACRES
TOP OF FILTER DAM EL.	506.00
BOTTOM OF TRAP EL.	[illegible]
SEDIMENT TRAP CAPACITY TO OVERFLOW WEIR	7,000 CF
OVERFLOW SPILLWAY EL.	[illegible]
OVERFLOW SPILLWAY WIDTH	15'-0"
10 YEAR/24 HR STORM EL.	[illegible]
SEDIMENT CLEANOUT EL.	[illegible]



NOTE
ROCK FILTER DAM TO BE REMOVED BY CONTRACTOR AFTER CONSTRUCTION IS COMPLETE AND GRASSING IS ESTABLISHED

SECTION THROUGH FILTER DAM AT OVERFLOW SPILLWAY

9 ROCK FILTER DAM
N.T.S.



10 SLOPE TRACKING
N.T.S.

PRELIMINARY - NOT FOR CONSTRUCTION

O'NEAL
THE BUSINESS OF PROJECT DELIVERY
10 Falcon Crest Drive, Suite 300
Greenville, SC 29607
P.O. 10369 Greenville, SC 29603
Tel: 864.298.2000 - Fax: 864.298.2200
www.onealinc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 202000183

Seal
ROBERT FREDERICK WILL, III
LICENSED PROFESSIONAL ENGINEER
STATE OF MISSISSIPPI

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR PERMIT	FJR	9/18/20	BRC
B			ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

	K-C NUMBER		
DRAWN FJ RAMSEUR	08	11	20
CHECK RF WILL	08	12	20
APVD BR CHANDLER	08	12	20

THIRD ANGLE PROJECTION

DIMENSIONAL TOLERANCES
INCHES: .X ± .050, .XX ± .015, .XXX ± .005
MILLIMETERS: X. ± 1.30, X.X ± 0.40, X.XX ± 0.15

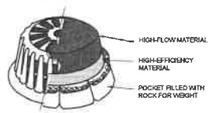
ANGULAR TOLERANCE
X.X = ± 0° 30'
X.XX = ± 0° 15'

DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS

-INCH-
MNEMONIC -
SHEET NO. -

TITLE
CIVIL
MISCELLANEOUS SECTIONS AND DETAILS

Kimberly-Clark Corporation
DWG. NO. C348-CV-00039
SIZE E
ISSUE B



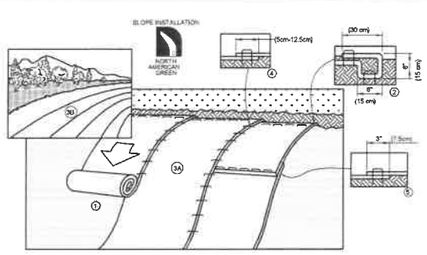
TYPICAL CONSTRUCTION SEQUENCE FOR SILT-SAVER FRAME AND FILTER

1. EXCAVATE APPROXIMATELY 4" TO 6" BELOW THE TOP OF THE INLET STRUCTURE.
2. PLACE THE FRAME ONTO THE INLET STRUCTURE, ENSURING PROPER SEATING OF FRAME TO STRUCTURE.
3. SLIDE THE FILTER OVER THE FRAME.
4. FILL THE FILTER POCKETS WITH SOIL, #57 GRAVEL OR EQUIVALENT. THE FILTER POCKETS SHOULD BE COMPLETELY FILLED TO ENSURE A GOOD SEAL BETWEEN THE GROUND AND INLET STRUCTURE.
5. BACK FILL AROUND THE FRAME AND FILTER ASSEMBLY IS NOT REQUIRED TO COMPLETE INSTALLATION, HOWEVER, BACK FILLING MAY BE NECESSARY TO COMPLETE EXCAVATION REQUIREMENTS FOR THE SITE.

MAINTENANCE

ALL TEMPORARY EROSION, SEDIMENTATION, & POLLUTION CONTROL PRACTICES SHOULD BE INSPECTED DAILY. CONTRACTOR SHALL REMOVE SEDIMENT AND DISPOSE OF IN A PROPER MANNER. INSPECT R-103A DAILY FOR CUTS, ABRASIONS, AND PROPER INSTALLATION. REPLACE OR REPOSITION AS NECESSARY.

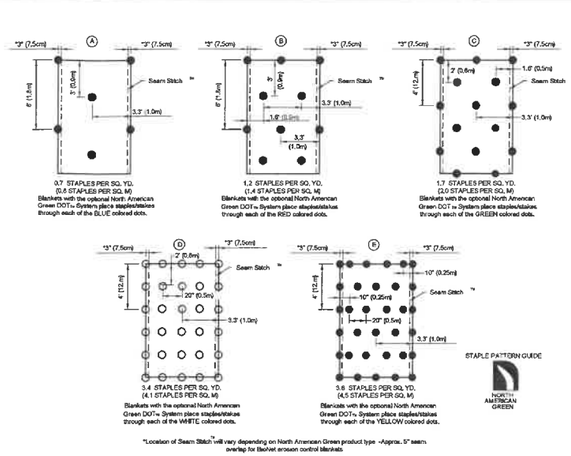
1 C348-CV-00040 "SILT-SAVER" INLET PROTECTION N.T.S.



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2'-0" (6cm-12.5cm) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5cm) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE BLANKET WIDTH. NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

14648 HIGHWAY 41 NORTH, EVANSVILLE, INDIANA 47725
USA 1-800-772-2040 CANADA 1-800-448-2040 www.nagreen.com

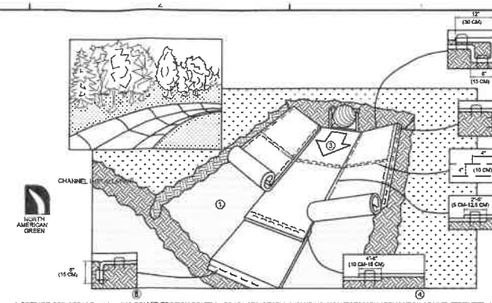
2 SLOPE INSTALLATION



*Location of Seam Stitch will vary depending on North American Green product type. Approx. 5" seam overlap for BioNet erosion control blankets

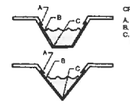
STAPLE PATTERN GUIDE

NA GREEN SC250 TURF REINFORCING MAT
2 N.T.S.



1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECPs), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE RECP's IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30 CM) OF RECP's EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) ACROSS THE WIDTH OF THE RECP's.
3. ROLL CENTER RECP's IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. PLACE CONSECUTIVE RECP's END OVER END (SHINGLE STYLE) WITH A 4"- 8" (10 CM- 15 CM) OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10 CM) APART AND 4" (10 CM) ON CENTER TO SECURE RECP's.
5. FULL LENGTH EDGE OF RECP's AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT RECP's MUST BE OVERLAPPED APPROXIMATELY 2" - 5" (5 CM -12.5 CM) (DEPENDING ON RECP's TYPE) AND STAPLED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT (9 M - 12 M) INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10 CM) APART AND 4" (10 CM) ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE RECP's MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

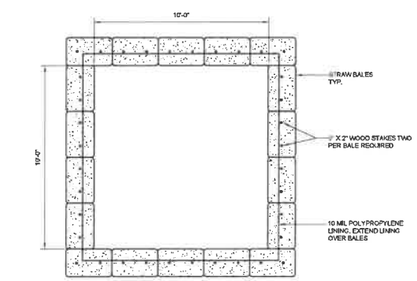
* IN LOOSE SOIL CONDITIONS THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.



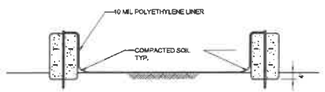
CRITICAL POINTS
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

NOTE
* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.
** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 cm) MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.

CHANNEL INSTALLATION



PLAN



SECTION

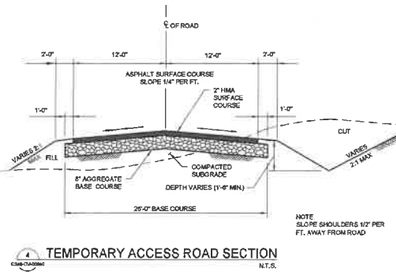
3 C348-CV-00040 CONCRETE WASHOUT AREA N.T.S.

WASHOUT AREA MAINTENANCE

1. INSTALL SIGNAGE IDENTIFYING THE LOCATION OF CONCRETE WASHOUT SYSTEMS.
2. INSPECT DAILY AND AFTER EACH STORM EVENT.
3. INSPECT THE INTEGRITY OF THE OVERALL STRUCTURE INCLUDING, WHERE APPLICABLE, THE CONTAINMENT SYSTEM.
4. INSPECT SYSTEM FOR LEAKS, SPILLS, AND TRACKING OF SOIL BY EQUIPMENT.
5. INSPECT POLYETHYLENE LINING FOR FAILURE, INCLUDING TEARS AND PUNCTURES.
6. ONCE CONCRETE WASTES HARDEN, REMOVE AND DISPOSE OF MATERIAL.
7. EXCESS CONCRETE SHOULD BE REMOVED WHEN THE WASHOUT SYSTEM REACHES FIFTY PERCENT OF DESIGN CAPACITY. USE OF THE SYSTEM SHOULD BE DISCONTINUED UNTIL APPROPRIATE MEASURES CAN BE INITIATED TO CLEAN THE STRUCTURE.
8. UPON REMOVAL OF SOLIDS, INSPECT THE STRUCTURE. REPAIR STRUCTURE AS NEEDED OR CONSTRUCT A NEW SYSTEM.
9. DISPOSE OF ALL CONCRETE IN A LEGAL MANNER. REUSE THE MATERIAL ON SITE, RECYCLE, OR HAUL THE MATERIAL TO AN APPROVED CONSTRUCTION/DEMOLITION LANDFILL SITE. RECYCLING OF MATERIAL IS ENCOURAGED. THE WASTE MATERIAL CAN BE USED FOR MULTIPLE APPLICATIONS INCLUDING BUT NOT LIMITED TO ROADSIDE AND BUILDING. THE AVAILABILITY FOR RECYCLING SHOULD BE CHECKED LOCALLY.
10. THE PLASTIC LINER SHOULD BE REPLACED AFTER EACH CLEANING. THE REMOVAL OF MATERIAL WILL USUALLY DAMAGE THE LINING.
11. THE CONCRETE WASHOUT SYSTEM SHOULD BE REPAIRED AND ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASH.
12. CONCRETE WASHOUT SYSTEMS ARE DESIGNED TO PROMOTE EVAPORATION. HOWEVER, IF THE LIQUIDS DO NOT EVAPORATE AND THE SYSTEM IS NEAR CAPACITY IT MAY BE NECESSARY TO VACUUM OR REMOVE THE LIQUIDS AND DISPOSE OF THEM IN AN ACCEPTABLE METHOD. DISPOSAL MAY BE ALLOWED AT THE LOCAL SANITARY SEWER AUTHORITY PROVIDED THEIR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMITS ALLOW FOR THE ACCEPTANCE OF THIS MATERIAL. ANOTHER OPTION WOULD BE TO UTILIZE A SECONDARY CONTAINMENT SYSTEM FOR THE BASIN FOR FURTHER DEWATERING.
13. INSPECT CONSTRUCTION ACTIVITIES ON A REGULAR BASIS TO ENSURE SUBBUBS, CONTRACTORS, AND OTHERS ARE UTILIZING DESIGNATED WASHOUT AREAS. IF CONCRETE WASTE IS BEING DISPOSED OF IMPROPERLY, IDENTIFY THE VIOLATORS AND TAKE APPROPRIATE ACTION.
14. WHEN CONCRETE WASHOUT SYSTEMS ARE NO LONGER REQUIRED, THE CONCRETE WASHOUT SYSTEMS SHALL BE CLOSED. DISPOSE OF ALL HARDENED CONCRETE AND OTHER MATERIALS USED TO CONSTRUCT THE SYSTEM.
15. HOLES, DEPRESSIONS AND OTHER LAND DISTURBANCES ASSOCIATED WITH THE SYSTEM SHOULD BE BACKFILLED, GRADED, AND STABILIZED.

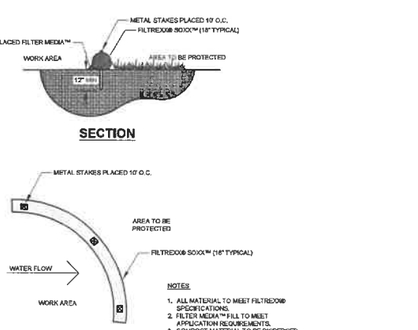
WASHOUT PROCEDURES

1. DO NOT LEAVE EXCESS MUD IN CHUTES OR HOPPER AFTER THE POUR. EVERY EFFORT SHOULD BE MADE TO EMPTY THE CHUTES AND HOPPER AT THE POUR. THE LESS MATERIAL LEFT IN THE CHUTES AND HOPPER, THE QUICKER AND EASIER THE CLEANOUT. SMALL AMOUNTS OF EXCESS CONCRETE (NOT WASHOUT WATER) MAY BE DISPOSED OF IN AREAS THAT WILL NOT RESULT IN FLOW TO AN AREA THAT IS TO BE PROTECTED.
2. AT WASHOUT LOCATION, SCRAPE AS MUCH MATERIAL FROM THE CHUTES AS POSSIBLE BEFORE WASHING THEM. USE NON-WATER CLEANING METHODS TO MINIMIZE THE CHANCE FOR WASTE TO FLOW OFF SITE.
3. REMOVE AS MUCH MUD AS POSSIBLE WHEN WASHING OUT.
4. STOP WASHING OUT IN AN AREA IF YOU OBSERVE WATER RUNNING OFF THE DESIGNATED AREA OR IF THE CONTAINMENT SYSTEM IS LEAKING OR OVERFLOWING AND INEFFECTIVE.
5. DO NOT BACK FLUSH EQUIPMENT AT THE PROJECT SITE. BACK FLUSHING SHOULD BE RESTRICTED TO THE PLANT AS IT SIGNIFICANTLY LARGE VOLUMES OF WASTE THAT MORE THAN LIKELY WILL EXCEED THE CAPACITY OF MOST WASHOUT SYSTEMS. IF AN EMERGENCY ARISES, BACK FLUSH SHOULD ONLY BE PERFORMED WITH THE PERMISSION OF AN ON-SITE MANAGER OF THE PROJECT.
6. DO NOT USE ADDITIVES WITH WASH WATER. DO NOT USE SOLVENTS OR ACIDS THAT MAY BE USED AT THE TARGET PLANT.



NOTE
SLOPE SHOULDERS 1/2" PER FT. AWAY FROM ROAD

4 C348-CV-00040 TEMPORARY ACCESS ROAD SECTION N.T.S.



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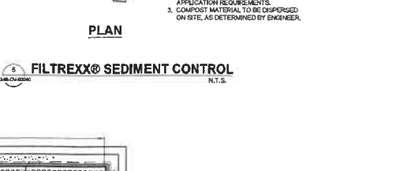
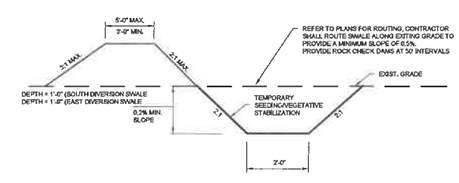


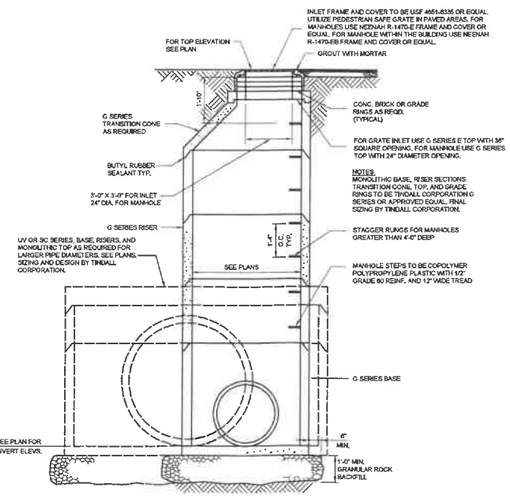
NOTES:
1. ALL MATERIAL TO MEET FILTREXX® SPECIFICATIONS.
2. FILTER MEDIA™ FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

PLAN

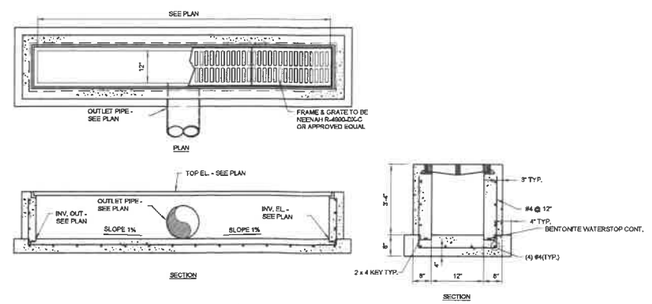
5 C348-CV-00040 FILTREXX® SEDIMENT CONTROL N.T.S.



6 C348-CV-00040 EROSION CONTROL PHASE DIVERSION SWALE N.T.S.



PRECAST STORM DRAINAGE MANHOLE OR GRATE INLET
7 C348-CV-00040 N.T.S.



8 C348-CV-00040 TRENCH DRAIN N.T.S.

PRELIMINARY - NOT FOR CONSTRUCTION

O'NEAL
THE BUSINESS OF PROJECT DELIVERY
10 Patton Creek Drive, Suite 300
Greenville, SC 29607
P.O. 10288 Greenville, SC 29603
Tel: 864.288.3200 - Fax: 864.288.3200
www.oneal-inc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 3038001169

Seal

THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES (INCHES)	DIMENSIONAL TOLERANCES (MILLIMETERS)	ANGULAR TOLERANCE	DIMENSION & TOLERANCE PER
	.X ± .050 .XX ± .015 .XXX ± .005	X. ± 1.30 X.X ± 0.40 X.XX ± 0.15	X.X = ± 0° 30' X.XX = ± 0° 15'	ASME Y14.5 OR ISO STANDARDS

	K-C NUMBER			
DRAWN	FJ RAMSEUR	08	11	20
CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

ISS	NO	LOC	REVISIONS (INDICATED BY Δ)	BY	DATE	APP
A			ISSUED FOR PERMIT	FJR	9/18/20	BRC
B			ISSUED FOR PERMIT / BID8	FJR	10/2/20	BRC

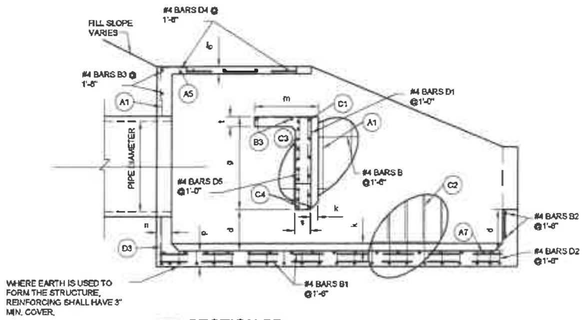
UNIT MARK: -
SHEET NO: -

TITLE
CIVIL
MISCELLANEOUS SECTIONS AND DETAILS

Kimberly-Clark Corporation

DWG. NO. C348-CV-00040
SIZE ISSUE E B

-INCH-
ACAD RICH



SECTION BB
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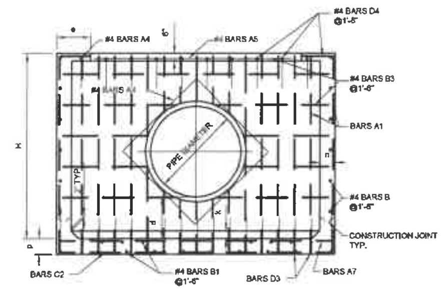

SECTION CC
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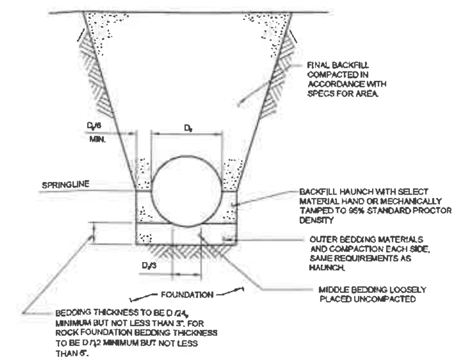
DIMENSIONS

PIPE SIZE DIA. IN.	PIPE SIZE AREA S.F.	Q (MAX.) (CFS)	FT.-IN. W	H	L	a	b	c	d	e	f	g	m	INCHES n	p	s	t	k	CONCRETE CLASS I C.Y.	REINF. STEEL LBS.
30	4.91	59	9-0	6-3	10-6	4-7	6-1	3-4	1-4	1-2	2-6	3-0	1-11	6	6 1/2	7	7	3	6.72	736
36	7.07	85	10-5	7-3	12-4	5-3	7-1	3-10	1-7	1-3	3-0	3-6	2-3	7	7 1/2	8	8	3	10.34	1,072
42	9.62	115	11-10	8-0	14-0	6-0	8-0	4-5	1-9	1-6	3-0	3-11	2-6	8	8 1/2	9	8	4	14.82	1,429
48	12.57	151	13-3	9-0	15-8	6-9	8-11	4-11	2-0	1-7	3-0	4-5	2-10	9	9 1/2	10	8	4	20.36	2,000
54	15.90	191	14-6	9-9	17-4	7-4	10-0	5-5	2-2	1-10	3-0	4-11	3-0	10	10 1/2	10	8	4	27.19	2,659
60	13.63	236	16-1	10-9	19-0	8-0	11-0	5-11	2-5	1-11	3-0	5-4	3-4	11	11 1/2	11	8	6	34.49	3,552
66	23.76	285	17-3	11-6	20-8	8-8	11-10	6-5	2-7	2-1	3-0	5-9	3-7	12	12 1/2	12	8	6	42.82	4,472
72	28.27	339	18-6	12-3	22-0	9-3	12-9	6-11	2-9	2-3	3-0	6-2	3-9	12	12 1/2	12	8	8	50.88	5,426

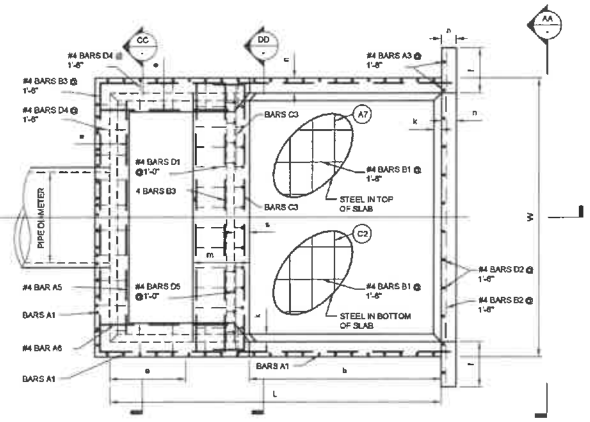
NOTE
CONCRETE VOLUME AND REINFORCING STEEL WEIGHT PROVIDED FOR CONVENIENCE ONLY. CONTRACTOR SHALL PERFORM INDEPENDENT MATERIAL TAKE OFF TO VERIFY.



BEDDING SHALL CONSIST OF ASTM C33 #4 STONE

2 RIGID PIPE BEDDING
C348-CV-00041
N.T.S.

NOTES
1. PIPE SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, LATEST EDITION.
2. BACKFILL SHALL BE TAMPED IN 6" LAYERS.
3. FOR WET OR UNSTABLE SOILS ENCOUNTERED IN BOTTOM OF EXCAVATED TRENCH, EXCAVATE MINIMUM 6" BELOW BELL. BACKFILL WITH WASHED CRUSHED STONE.
4. ALL TRENCH WORK SHALL BE IN COMPLIANCE WITH THE LATEST OSHA REGULATIONS.
5. SELECT NATIVE BACKFILL IS EXCAVATED FROM THE TRENCH FREE OF ROCKS, FOREIGN MATERIAL, AND FROZEN EARTH. UNSUITABLE NATIVE SOIL SHALL NOT BE USED.
6. BEDDING MATERIAL TO BE CLASS I, II, OR III.
7. INITIAL BACKFILL TO BE CLASS I, II, OR III IN THE PIPE ZONE EXTENDING MOT LESS THAN 6" ABOVE CROWN OF PIPE.



PLAN
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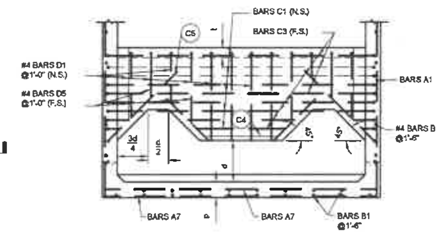

SECTION DD
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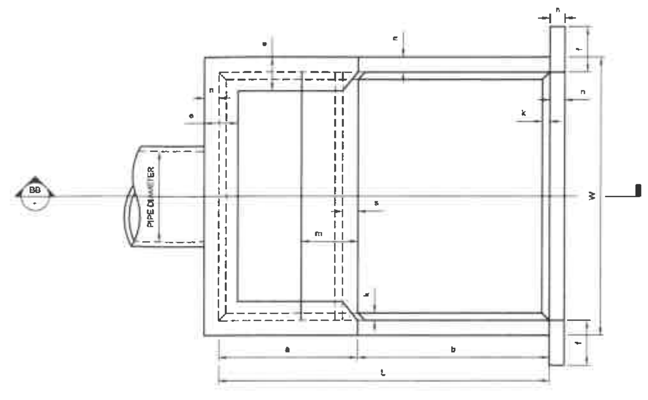

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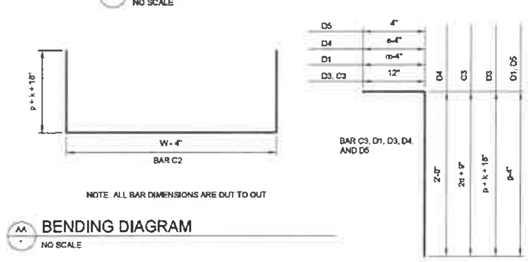
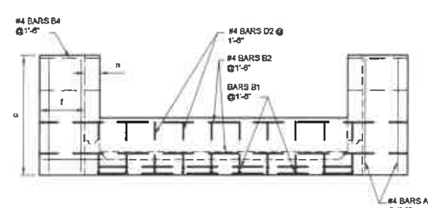
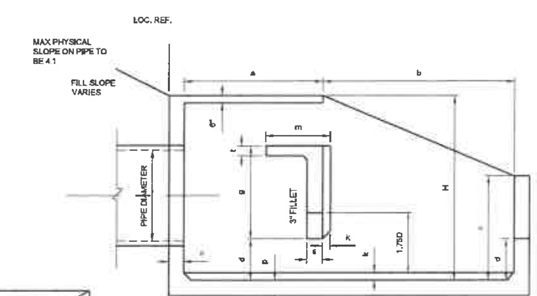


NOTE: ALL BAR DIMENSIONS ARE OUT TO OUT

AA BENDING DIAGRAM
NO SCALE



SECTION AA



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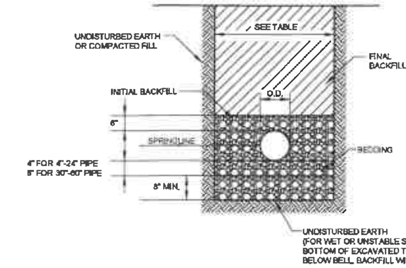


PIPE DIA.	MIN. TRENCH WIDTH
4"	21"
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
60"	96"

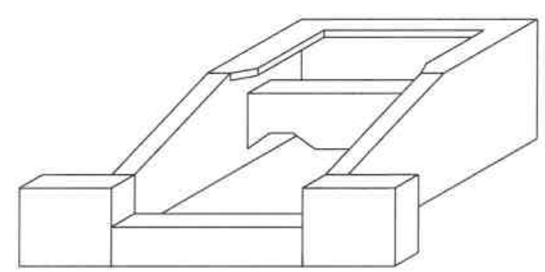
3 HDPE PIPE BEDDING
N.T.S.

BARS

PIPE SIZES	A1 SIZE (NO.)	A1 SPACING (FT.-IN.)	A7 SIZE (NO.)	A7 SPACING (FT.-IN.)	C1 SIZE (NO.)	C1 SPACING (FT.-IN.)	C2 SIZE (NO.)	C2 SPACING (FT.-IN.)	C3 SIZE (NO.)	C3 SPACING (FT.-IN.)	D3 SIZE (NO.)	D3 SPACING (FT.-IN.)
30"	4	0-9 1/2	4	1-6	5	0-11	4	0-9 1/2	5	0-5 1/2	4	0-8 1/2
36"	5	1-0	4	1-6	5	0-10	5	1-0	5	0-5	5	1-0
42"	5	0-11	4	1-6	6	1-1	5	0-11	6	0-6 1/2	5	0-11
48"	5	0-9 1/2	4	1-0	6	1-0	5	0-9 1/2	6	0-6	5	0-9 1/2
54"	5	0-8 1/2	4	0-10	7	1-1	5	0-6 1/2	7	0-6 1/2	5	0-8 1/2
60"	6	0-10	5	1-1	7	1-0	6	0-10	7	0-6	6	0-10
66"	6	0-8 1/2	5	0-11 1/2	7	0-11	6	0-8 1/2	7	0-5 1/2	6	0-8 1/2
72"	6	0-7 1/2	5	0-10	7	0-10	6	0-7 1/2	7	0-5	6	0-7 1/2

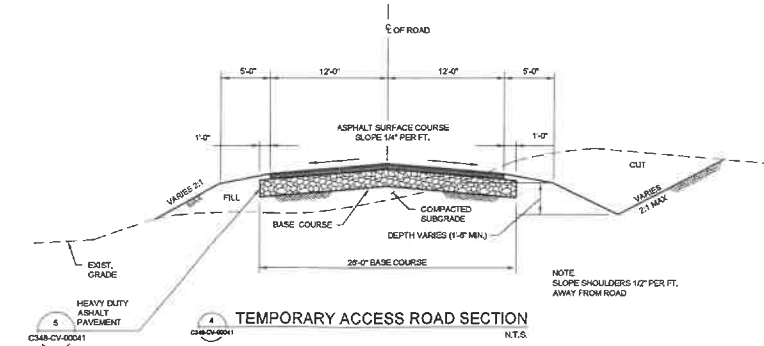
NOTE
BARS C4 AND C5 (N.S. AND F.S.) EQUIVALENT IN SIZE TO C3 (CUT AND BEND AS REQUIRED).

GENERAL NOTES
1. CHAMFER ALL EXPOSED EDGES 3/4".
2. REINFORCING STEEL SHALL HAVE 2" MIN. COVER (U.N.O.)



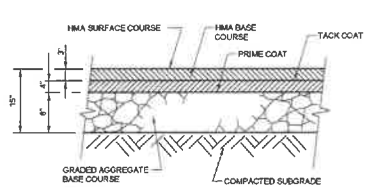
PERSPECTIVE
NO SCALE

1 ENERGY DISSIPATOR HEADWALL
C348-CV-00041
NO SCALE

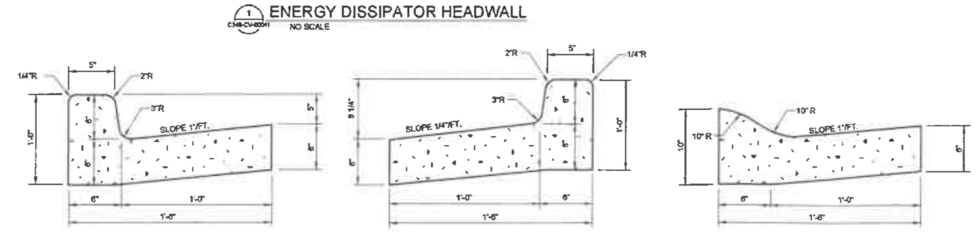


NOTE
SLOPE SHOULDERS 1/2" PER FT. AWAY FROM ROAD

4 TEMPORARY ACCESS ROAD SECTION
C348-CV-00041
N.T.S.



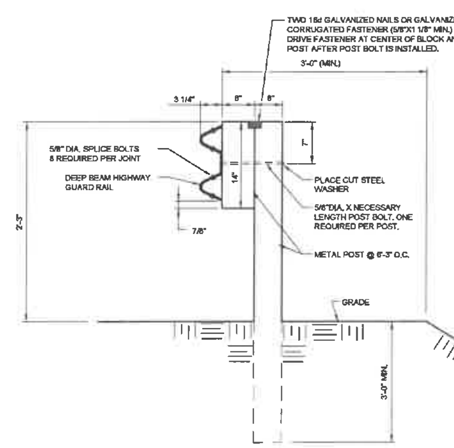
5 HEAVY DUTY ASPHALT PAVEMENT
C348-CV-00041
N.T.S.



NOTES

1. CURB AND GUTTER TO BE CONSTRUCTED IN 10 FT. LENGTHS.
2. 1/2" EXPANSION JOINTS SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 50 FT., AT THE ENDS AND MID-POINT OF RETURNS, AND AT ANY POINT WHERE THE NEW CURB & GUTTER ABUTS OTHER CONCRETE STUCTURES.
3. 5 FT. LONG TRANSITIONS SHALL BE PROVIDED BETWEEN NORMAL GUTTER AND PITCHED GUTTER UNLESS OTHERWISE NOTED.
4. PITCHED GUTTER SHALL BE USED WHERE DRAINAGE IS REQUIRED AWAY FROM THE FACE OF CURB.
5. DOT STANDARD SPEC. CURB AND GUTTER 2' WIDE SECTION MAY BE SUBSTITUTED FOR THAT SHOWN.

6 CONCRETE CURB AND GUTTER
C348-CV-00041
N.T.S.



7 GUARD RAIL
C348-CV-00041
N.T.S.

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THE BUSINESS OF PROJECT DELIVERY
10 Falcon Crest Drive, Suite 300, Greenville, SC 29607
P.O. 10369 Greenville, SC 29603
Tel: 864.298.2000 - Fax: 864.298.2300
www.onealinc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 3030000153

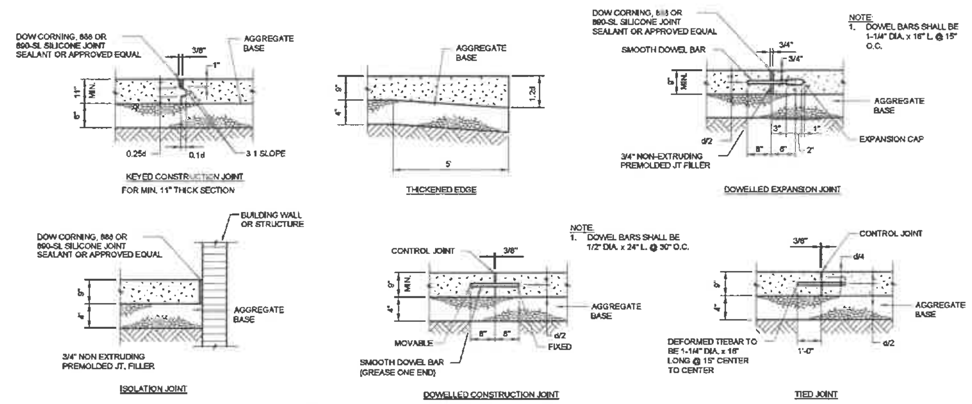
Seal
ROBERT FREDERICK WILL, III
REGISTERED PROFESSIONAL ENGINEER
No. 20498
STATE OF MISSISSIPPI

THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES INCHES	MILLIMETERS	ANGULAR TOLERANCE	DIMENSION & TOLERANCE
	.X ± .050 .XX ± .015 .XXX ± .005	X. ± 1.30 X.X ± 0.40 X.XX ± 0.15	X.X = ± 0' 30' X.XX = ± 0' 15'	PER ASME Y14.5 OR ISO STANDARDS

					K-C NUMBER
DRAWN	FJ RAMSEUR	08	11	20	
CHECK	RF WILL	08	12	20	
APVD	BR CHANDLER	08	12	20	

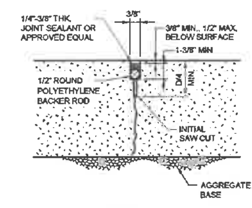
ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR PERMIT	FJR	9/18/20	BRC
B			GENERAL REVISION, ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

-INCH-
MNEMONIC: -
SHEET NO.: -
TITLE: CIVIL
MISCELLANEOUS SECTIONS AND DETAILS
Kimberly-Clark Corporation
DWG. NO. C348-CV-00041
SIZE E
ISSUE B

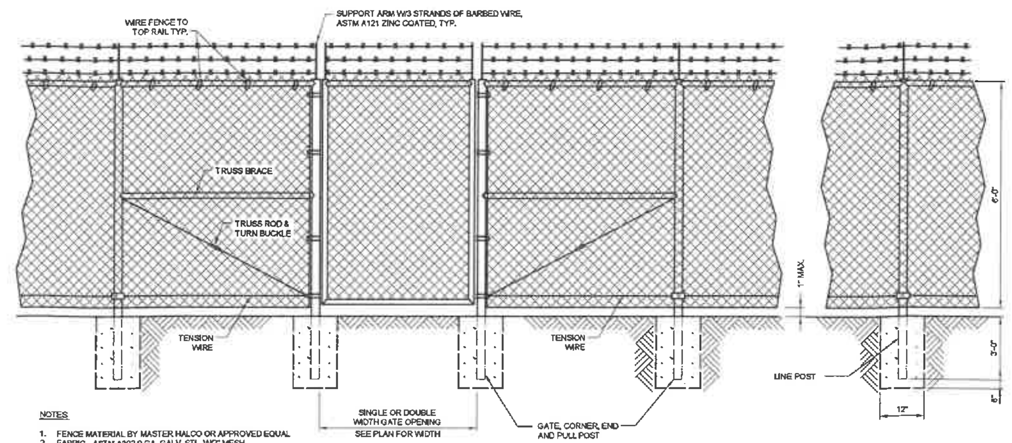


NOTES
1. SEE PLANS FOR LOCATIONS OF JOINTS, PAVEMENT THICKNESS (d) AND REINFORCING (IF REQUIRED)
2. JOINT SEALANT TO BE DOW CORNING, 888 OR 890-SL SILICONE JOINT SEALANT, OR APPROVED EQUAL. INSTALL JOINT SEALANT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
3. CONCRETE PAVEMENT TO HAVE FLEXURAL STRENGTH OF 550 P.S.I. AT 14 DAYS.
4. CONCRETE PAVEMENT TO HAVE AIR ENTRAINMENT TO THE PERCENTAGES BELOW.

MAXIMUM SIZE AGGREGATE, IN.	ENTRAINED AIR, PERCENT
3/4, 1	6 +/- 1
3/4, 1/2	7 1/2 +/- 1

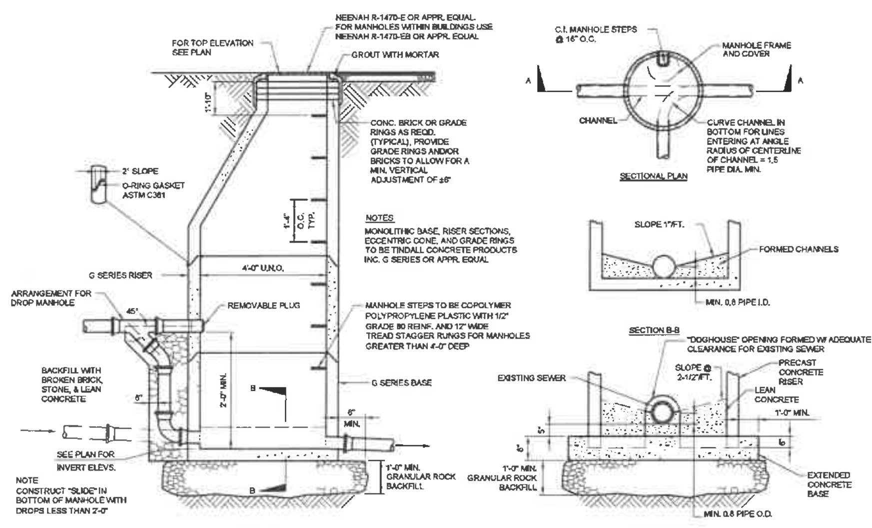


1 CONCRETE PAVEMENT JOINTS
N.T.S.



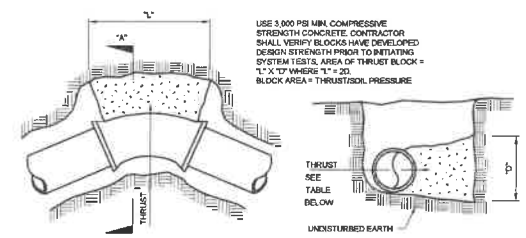
NOTES
1. FENCE MATERIAL BY MASTER HALCO OR APPROVED EQUAL
2. FABRIC - ASTM A392 9 GA. GALV. STL. W/2" MESH
3. TOP RAIL 1-5/8" O.D., 1.35 LBS./FT.
4. LINE POSTS, 2-3/8" O.D., 2.75 LBS./FT.
5. END AND CORNER POSTS, 4" O.D., 5.56 LBS./FT.
6. SWING GATE POSTS, TO 6' HIGH, 3", OVER 6' HIGH, 4"
7. BOTTOM TENSION WIRE 7 GA. STEEL

2 CHAIN LINK FENCE
N.T.S.



NOTES
1. THE DOGHOUSE MANHOLE SHALL BE PRECAST WITH AN EXTENDED BASE FORMED AT LEAST 1'-0" BEYOND THE OUTSIDE DIAMETER OF THE MANHOLE. NO FIELD MODIFIED MANHOLES SHALL BE ALLOWED.
2. DOGHOUSE MANHOLES SHALL BE REQUIRED TO PASS THE SAME VACUUM TESTING REQUIREMENTS AS A STANDARD MANHOLE.
3. AFTER COMPLETION OF NEW SEWER LINE CONNECTIONS, A TABLE SHALL BE FORMED IN THE DOGHOUSE MANHOLE.
4. THE TOP SECTION OF THE EXISTING LINE SHALL BE REMOVED ONCE THE FORMED INVERT HAS BEEN COMPLETED.

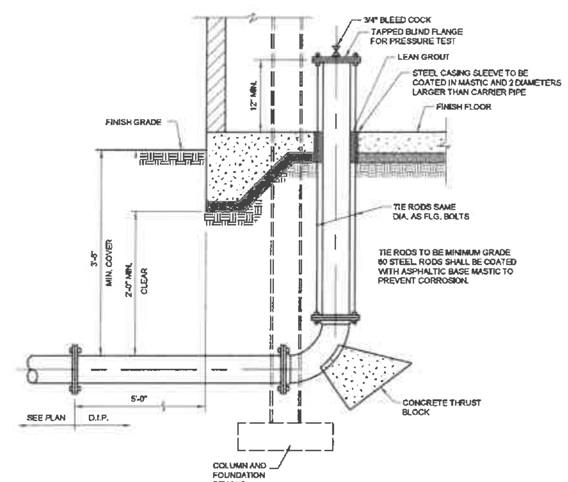
3 PRECAST PROCESS OR SANITRY SEWER MANHOLE
N.T.S.



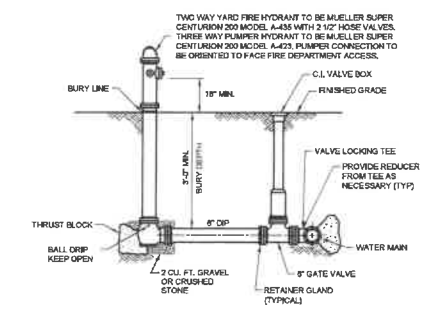
THRUST TABULATION (KIP @ 200 PSIG)					
PIPE DIA.	11 1/4°	22 1/2°	45°	90°	PLUG TEE OR 90° BEND
4"	0.7	1.4	2.8	5.1	3.6
6"	1.5	2.9	5.7	10.6	7.5
8"	2.5	5.0	9.8	18.2	12.9
10"	3.8	7.5	14.8	27.4	19.3
12"	5.4	10.7	20.9	38.7	27.4
14"	7.4	14.6	28.6	52.8	37.4
16"	9.3	18.5	36.4	67.2	47.5
18"	12.0	23.6	46.4	85.6	60.5
20"	14.4	28.6	56.1	103.6	73.2
24"	20.5	40.8	80.0	147.8	104.5
30"	31.5	62.7	123.0	227.4	160.8

FOR DIFFERENT PRESSURES LOADS MAY BE CALCULATED PROPORTIONALLY. THRUST REACTION MUST BE SIZED FOR TEST PRESSURES.

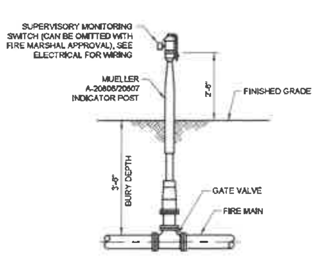
4 CONCRETE THRUST BLOCK
N.T.S.



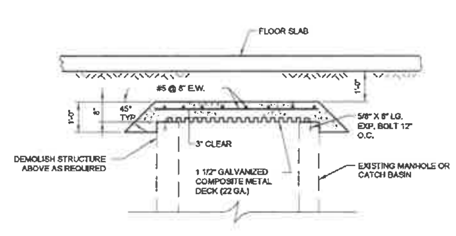
5 PRESSURE RISER
N.T.S.



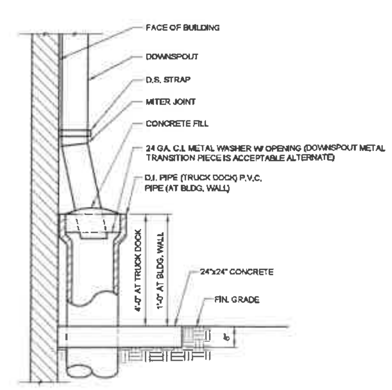
6 FIRE HYDRANT
N.T.S.



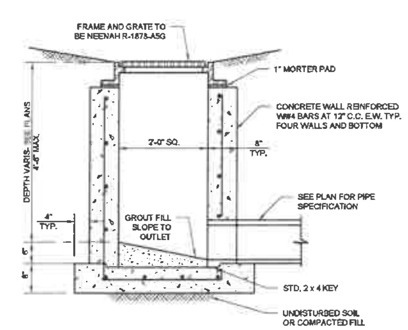
7 POST INDICATOR VALVE
N.T.S.



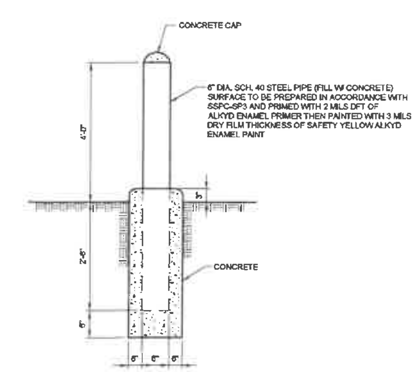
8 EXISTING STRUCTURE CAP
N.T.S.



9 DOWNSPOUT BOOT
N.T.S.



10 CAST-IN-PLACE DROP INLET
N.T.S.



11 GUARD POST
N.T.S.

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Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 303000153

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THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES		ANGULAR TOLERANCE	DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS
	.X ± .050 .XX ± .015 .XXX ± .005 INCHES	X. ± 1.30 X.X ± 0.40 X.XX ± 0.15 MILLIMETERS	X.X = ± 0° 30' X.XX = ± 0° 15'	

	K-C NUMBER		
DRAWN FJ RAMSEUR	08	11	20
CHECK RF WILL	08	12	20
APVD BR CHANDLER	08	12	20

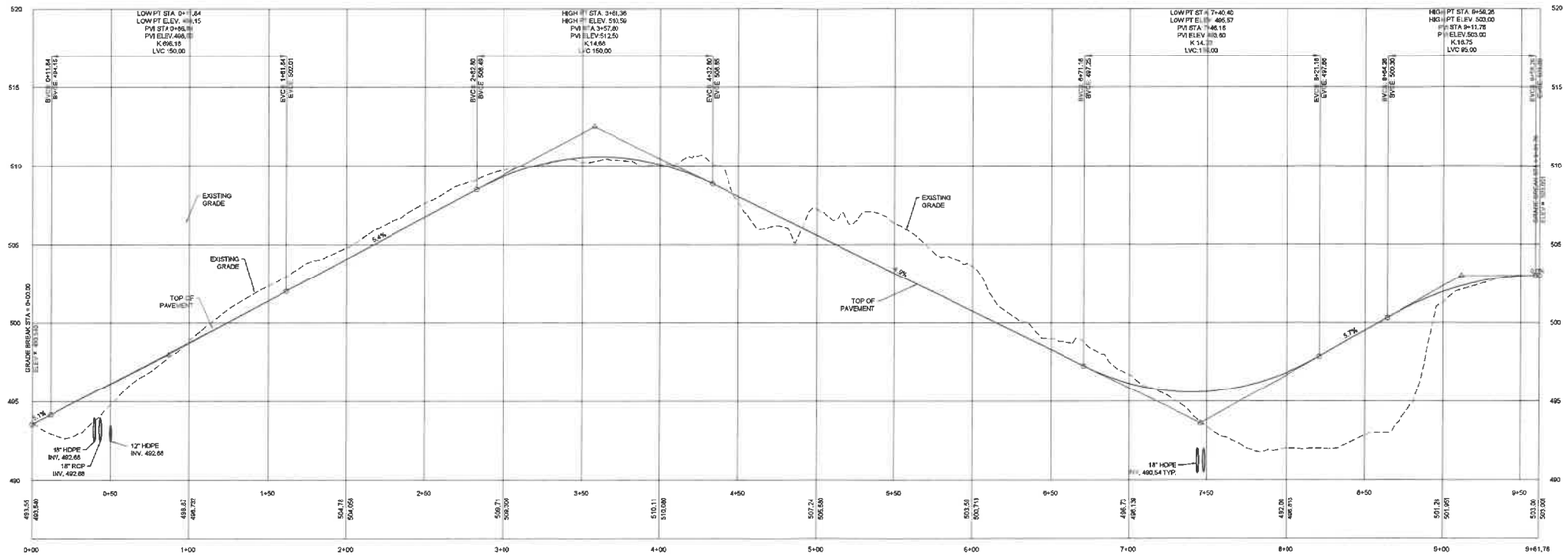
ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR PERMIT / BIDS	FJR	10/2020	BRC

MNEMONIC - SHEET NO. -

TITLE
CIVIL
MISCELLANEOUS SECTIONS AND DETAILS

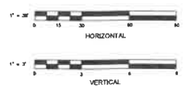
Kimberly-Clark Corporation

DWG. NO. C348-CV-00042 SIZE E ISSUE A



PLANT ENTRANCE ROAD PROFILE

TEMPORARY ACCESS ROAD PROFILE



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THE BUSINESS OF PROJECT DELIVERY
10 Falcon Crest Drive, Suite 800
Greenville, SC 29607
P.O. 10889 Greenville, SC 29603
Tel: 864.288.3000 - Fax: 864.288.3300
www.oneal-inc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 203000165

Seal

-INCH-

MNEMONIC -

SHEET NO. -

ISS	NO	LOC	REVISIONS (INDICATED BY Δ)	BY	DATE	APP
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TITLE
CIVIL
ROAD PROFILES

Kimberly-Clark Corporation

DWG. NO. C348-CV-00043

SIZE ISSUE E A

K-C NUMBER

DRAWN	FJ RAMSEUR	08 | 11	20
CHECK	RF WILL	08 | 12	20
APVD	BR CHANDLER	08 | 12	20

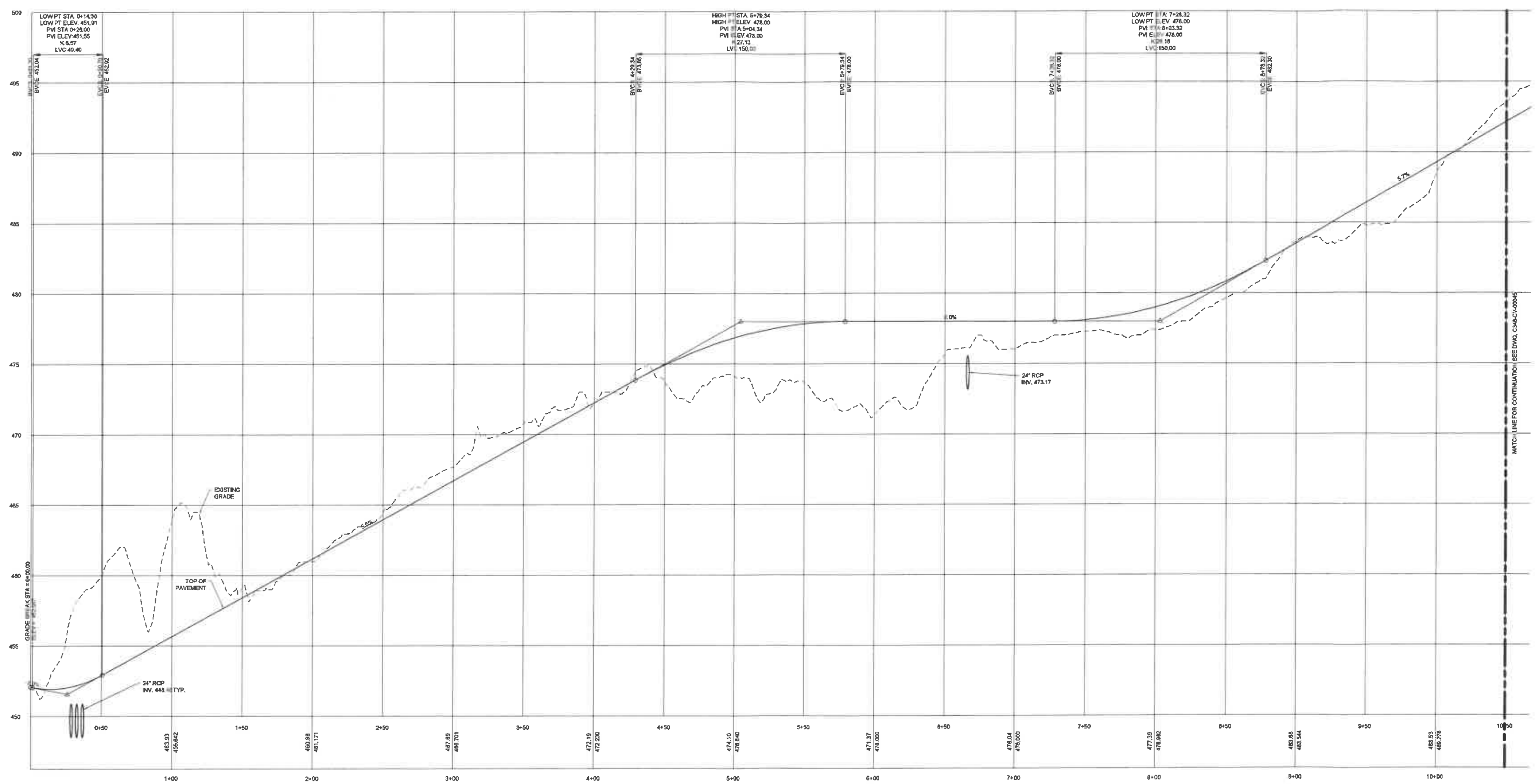
THIRD ANGLE PROJECTION

DIMENSIONAL TOLERANCES (INCHES): X ± .050, .XX ± .015, .XXX ± .005

DIMENSIONAL TOLERANCES (MILLIMETERS): X. ± 1.30, X.X ± 0.40, X.XX ± 0.15

ANGULAR TOLERANCE: X.X = ± 0° 30', X.XX = ± 0° 15'

DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS



PLANT ENTRANCE ROAD PROFILE

PRELIMINARY - NOT FOR CONSTRUCTION

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THE BUSINESS OF PROJECT DELIVERY

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL

THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES (INCHES)	DIMENSIONAL TOLERANCES (MILLIMETERS)	ANGULAR TOLERANCE	DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS
	.X ± .050	X. ± 1.30	X.X = ± 0° 30'	
	.XX ± .015	X.X ± 0.40	X.XX = ± 0° 15'	
	.XXX ± .005	X.XX ± 0.15		

	Name			
DRAWN	FJ RAMSEUR	08	11	20
CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

K-C NUMBER

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

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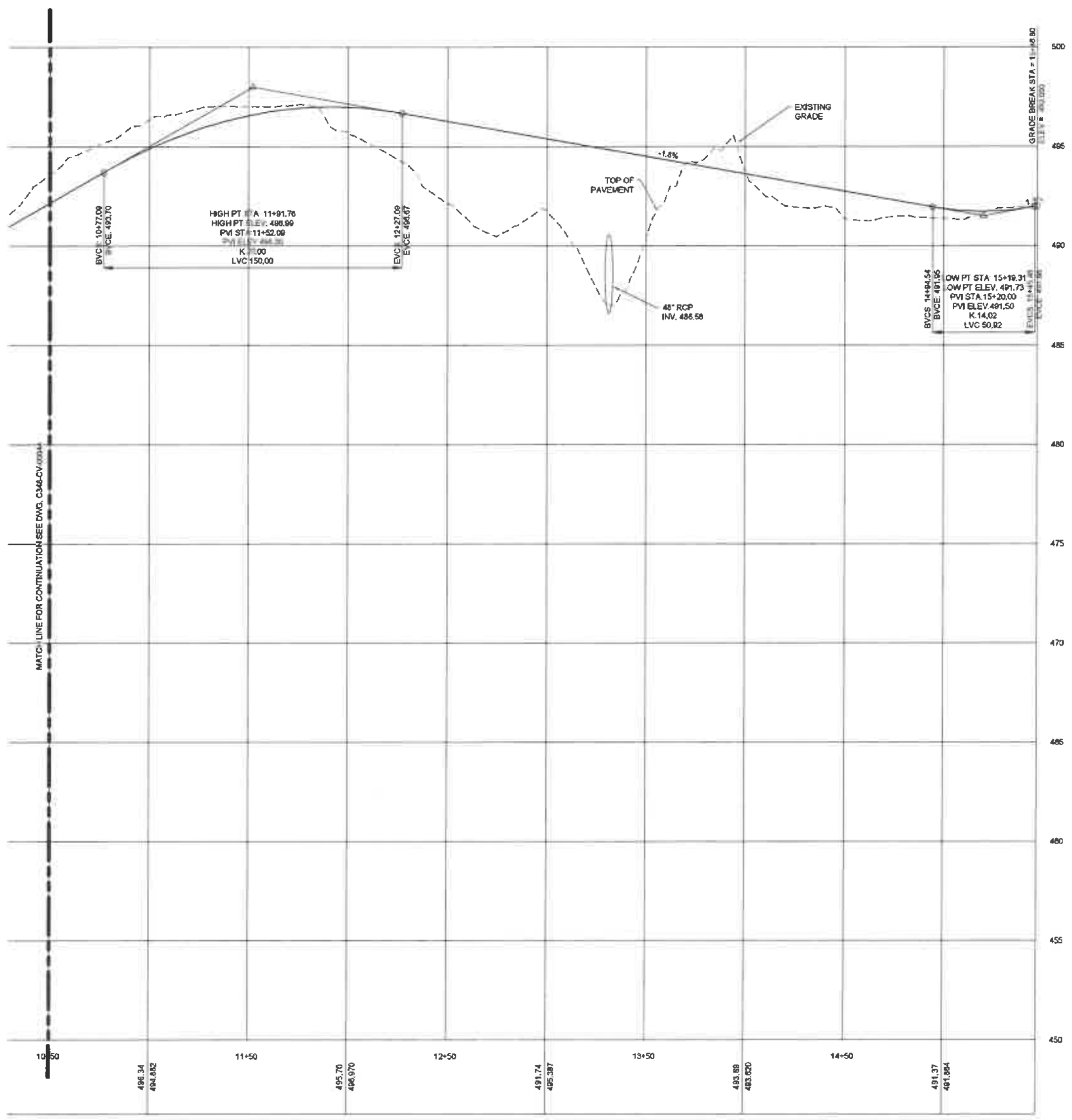
MNEMONIC - SHEET NO. -

TITLE: CIVIL ROAD PROFILES

Kimberly-Clark Corporation

DWG. NO. C348-CV-00044 SIZE E ISSUE A



PLANT ENTRANCE ROAD PROFILE

HORIZONTAL

VERTICAL

PRELIMINARY - NOT FOR CONSTRUCTION

THIRD ANGLE PROJECTION	DIMENSIONAL TOLERANCES INCHES	MILLIMETERS	ANGULAR TOLERANCE	DIMENSION & TOLERANCE PER ASME Y14.5 OR ISO STANDARDS
	.X ± .050	X. ± 1.30	X.X = ± 0' 30'	
	.XX ± .015	X.X ± 0.40	X.XX = ± 0' 15'	
	.XXX ± .005	X.XX ± 0.15		

		K-C NUMBER		
DRAWN	FJ RAMSEUR	08	11	20
CHECK	RF WILL	08	12	20
APVD	BR CHANDLER	08	12	20

ISS	NO	LOC	REVISIONS (INDICATED BY △)	BY	DATE	APP
A			ISSUED FOR PERMIT / BIDS	FJR	10/2/20	BRC

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Greenville, SC 29607
P.O. 10280 Greenville, SC 29603
Tel: 864.298.2000 - Fax: 864.298.2200
www.onealinc.com

Drawn By: FJ RAMSEUR
Project Manager: BR CHANDLER
Checked By: RF WILL
O'Neal Job Number: 202000153

Seal

ROBERT FREDERICK WILL, III
LICENSED PROFESSIONAL ENGINEER
30498
STATE OF MISSISSIPPI

MNEMONIC -
SHEET NO. -

TITLE
CIVIL
ROAD PROFILES

Kimberly-Clark Corporation

DWG. NO. C348-CV-00045

SIZE E ISSUE A

APPENDICES

APPENDIX A

IMPLEMENTATION GUIDELINES FOR
STORM WATER AND EROSION CONTROLS

IMPLEMENTATION GUIDELINES FOR STORM WATER AND EROSION CONTROLS

Storm water and erosion controls will be installed according to construction plans and based on need as construction progresses. The following sequence of installation is planned and is typical for a project of this nature. Controls will be installed prior to construction activities and are shown in the Site Diagrams provided in Figure 4 – Erosion and Sediment Control Plan. Decisions to make changes in individual controls will be made on-site by the site contact and will be indicated on the Change Form (Appendix B) and on the attached figure(s), as necessary. However, any decisions for major or significant control changes or to change the sequence of installation of controls may require a change to this plan.

Sequence of Construction

Phase I: Approximately 6 acres

1. The contractor shall maintain one (1) copy of the stamped plans and coverage letter on-site at all times. These documents shall be stored in the contractor's job trailer or within a weather-tight job box, mounted at a convenient and accessible location.
2. The contractor shall stage materials and equipment in the temporary contractor lay down and staging area shown on the plans. The contractor may utilize a different location as desired, at the approval of the owner and engineer. Equipment and refueling stations shall be located by the contractor and red-lined on the plans. All refueling stations shall be in accordance with all applicable local, state, and federal regulations.
3. The contractor shall determine and mark the limits of disturbance.
4. The contractor shall install perimeter silt fence, sediment tube, and construction entrance best management practices (BMPs) as indicated on the drawings, performing clearing and grubbing only as necessary for installation. The contractor is solely responsible for the prevention of sediment transport from the site during construction activities. If at any point during construction, sediment is transported from the site or impacts downstream properties, the contractor shall be responsible for the restoration of conditions due to the impacts. If the contractor identifies areas of the site where additional BMPs may be necessary due to incremental grading activities, the engineer shall be notified for review and approval.
5. The contractor shall inspect and maintain all BMPs throughout construction, until notified in writing by the engineer that a BMP can be removed. Inspections shall be at least weekly for a minimum of 4 inspections per month and as often as necessary to ensure that appropriate erosion and sediment controls have been constructed and maintained to determine if additional or alternative control measures are required.
6. Begin installation of the sediment basins and rock filter dam BMPs. Refer to details for further information. Clear and grub/ remove topsoil only in the area necessary for installation. The basin slopes shall be immediately stabilized by receiving a minimum thickness of 4" of topsoil and shall then be seeded for the establishment of permanent vegetation and lined with NA Green SC250.
7. Begin rough grading activities. The contractor shall stage grading in a manner which will maintain positive drainage to the installed BMPs throughout construction activities.
8. The contractor is responsible throughout construction activities for the maintenance and establishment of all permanent and temporary vegetation.
9. All topsoil shall be stored on-site for reuse in the designated topsoil stockpile area. The contractor may designate other topsoil stockpile areas at their discretion, however, reinforced double row silt fence must be provided and maintained around the perimeter of all stockpiles. These stockpiles must be red-lined on the stamped approved drawings, and approved by the engineer.

10. The contractor shall verify all BMPs referenced in Phase I have been installed and are performing as expected prior to proceeding with Phase II.

Phase II: Approximately 14 acres

11. Inspect and maintain all BMPs installed in Phase I, remove sediment deposits as necessary prior to proceeding with Phase II activities. Inspections shall be at least weekly for a minimum of 4 inspections per month and as often as necessary to ensure that appropriate erosion and sediment controls have been constructed and maintained and to determine if additional or alternative control measures are required.
12. Continue rough grading activities. The contractor shall stage grading in a manner which will maintain positive drainage to the installed BMPs throughout construction activities.
13. Any areas where grading activities cease for a period of 14 days or longer shall be seeded for the establishment of temporary vegetation.
14. The contractor shall grade within the limits of the site contained by diversion swales. The diversion swales shall be maintained in a clear, flowable condition at all times throughout the grading activities.
15. The contractor shall be responsible for the protection and maintenance of all slopes throughout construction activities, which may require multiple BMPs (tracking, stair step grading, slope grooving, temporary grassing, pipe slope drains, etc.) until final grades have been achieved. Surface runoff shall be directed away from the face of all slopes to the greatest extent possible. Utilize BMPs mentioned above to protect slope faces. Cut and fill slope faces shall receive a minimum thickness of 4" of topsoil and shall then be seeded for the establishment of permanent vegetation and lined with NA Green SC250 as soon as desired grades are achieved.
16. Install concrete wash out facilities as necessary throughout the site. The contractor shall red-line the approved plans to indicate the wash out locations, as approved by the engineer. All wash outs shall be inspected daily by the contractor and maintained/replaced as necessary. All wash out materials shall be disposed of in accordance with all applicable local, state, and federal regulations.
17. Begin installation of the storm drainage system as grades allow. Depending on the contractor's desired installation sequence, it may be necessary to core temporary drainage holes through the sides of storm drain structures in areas where the structures extend above adjacent grades. If such conditions are necessary, the contractor shall provide inlet protection around the cored holes until grades are raised to allow surface drainage through the top of the structure. All cored holes shall be filled with non-shrink grout upon completion. The contractor shall immediately install inlet protection BMPs to each structure receiving surface flow.
18. The contractor shall continue grading activities, maintaining positive drainage to storm drainage structures protected by inlet protection, and also away from slope faces.
19. Begin fine grading activities within the building plateau area for building and equipment pads and along access roads and driveways.
20. Begin placement of pavement aggregate stone base course.
21. Begin placement of asphalt and/or concrete pavement where indicated on the layout and paving plans. The contractor shall be responsible for replacement of any sections or subgrades damaged by construction traffic.
22. The contractor shall remove all deposited sediment from the sediment basins and spread within the topsoil stockpile area. If necessary, the contractor shall clear remaining topsoil from a portion of the area to allow placement of the sediment and respread topsoil over the moisture conditioned sediment.
23. Begin closure of the topsoil stockpile area by verifying a minimum thickness of 4" of topsoil and seeding for permanent vegetation to all remaining areas achieving final grades. Any remaining topsoil not utilized can be left in place or distributed and spread across landscape areas.
24. Once all sediment has been removed from the sediment basins, the faircloth skimmers shall be removed and the basin will remain to serve as a permanent storm water management pond.

25. Once all disturbed areas have achieved a minimum uniform permanent vegetative density of at least 70% in all locations of the site not covered with pavement, the contractor shall contact the engineer. The engineer shall prepare and submit the notice of termination (NOT) and certification letter.
26. Upon approval, the NPDES permit coverage shall cease and no further land disturbance or site work shall be permitted.

APPENDIX B

STORM WATER AND EROSION CONTROLS CHANGE FORM

STORM WATER AND EROSION CONTROLS CHANGE FORM

Control Type	Change Made	Date & Initials Of Inspector	Reason for Change

APPENDIX C

SITE INSPECTION AND CERTIFICATION FORM

Keep a Copy Available at the Permitted Facility or Locally Available
Submit the Inspection Reports Only if Requested by the Mississippi Department of Environmental Quality (MDEQ)

LARGE CONSTRUCTION GENERAL PERMIT
SITE INSPECTION AND CERTIFICATION FORM
COVERAGE NUMBER (MSR10 __ __ __ __)

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

INSTRUCTIONS

Results of construction storm water inspections required by ACT6 of this permit shall be recorded on this report form and kept with the Storm Water Pollution Prevention Plan (SWPPP) in accordance with the inspection documentation provisions of ACT9 of the this permit. Inspections shall be performed at least weekly for a minimum of four inspections per month. The coverage number must be listed at the top of all Inspection and Certification Forms.

COVERAGE RECIPIENT INFORMATION

OWNER/PRIME CONTRATOR NAME: _____

PROJECT NAME: _____

PROJECT STREET ADDRESS: _____

PROJECT CITY: _____ **PROJECT COUNTY:** _____

OWNER/PRIME CONTRACTOR MAILING ADDRESS: _____

MAILING CITY: _____ **STATE:** _____ **ZIP:** _____

CONTACT PERSON: _____ **CONTACT PHONE NUMBER:** (_____)_____

EMAIL ADDRESS: _____

INSPECTION DOCUMENTATION

DATE (mo/day/yr)	TIME (hr:min AM/PM)	ANY DEFICIENCIES? (CHECK IF YES)	INSPECTOR(S)
		☐	
		☐	
		☐	
		☐	
		☐	
		☐	

Deficiencies Noted During any Inspection (give date(s); attach additional sheets if necessary): _____

Corrective Action Taken or Planned (give date(s); attach additional sheets if necessary): _____

Based upon this inspection, which I or personnel under my direct supervision conducted, I certify that all erosion and sediment controls have been implemented and maintained, except for those deficiencies noted above, in accordance with the Storm Water Pollution Prevention Plan (SWPPP) and sound engineering practices as required by the above referenced permit. I further certify that the LCNOI and SWPPP information is up to date.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

_____ _____
Authorized Signature Date

_____ _____
Printed Name Title

Revised: 12/10/16

APPENDIX D

LARGE CONSTRUCTION STORM WATER GENERAL PERMIT