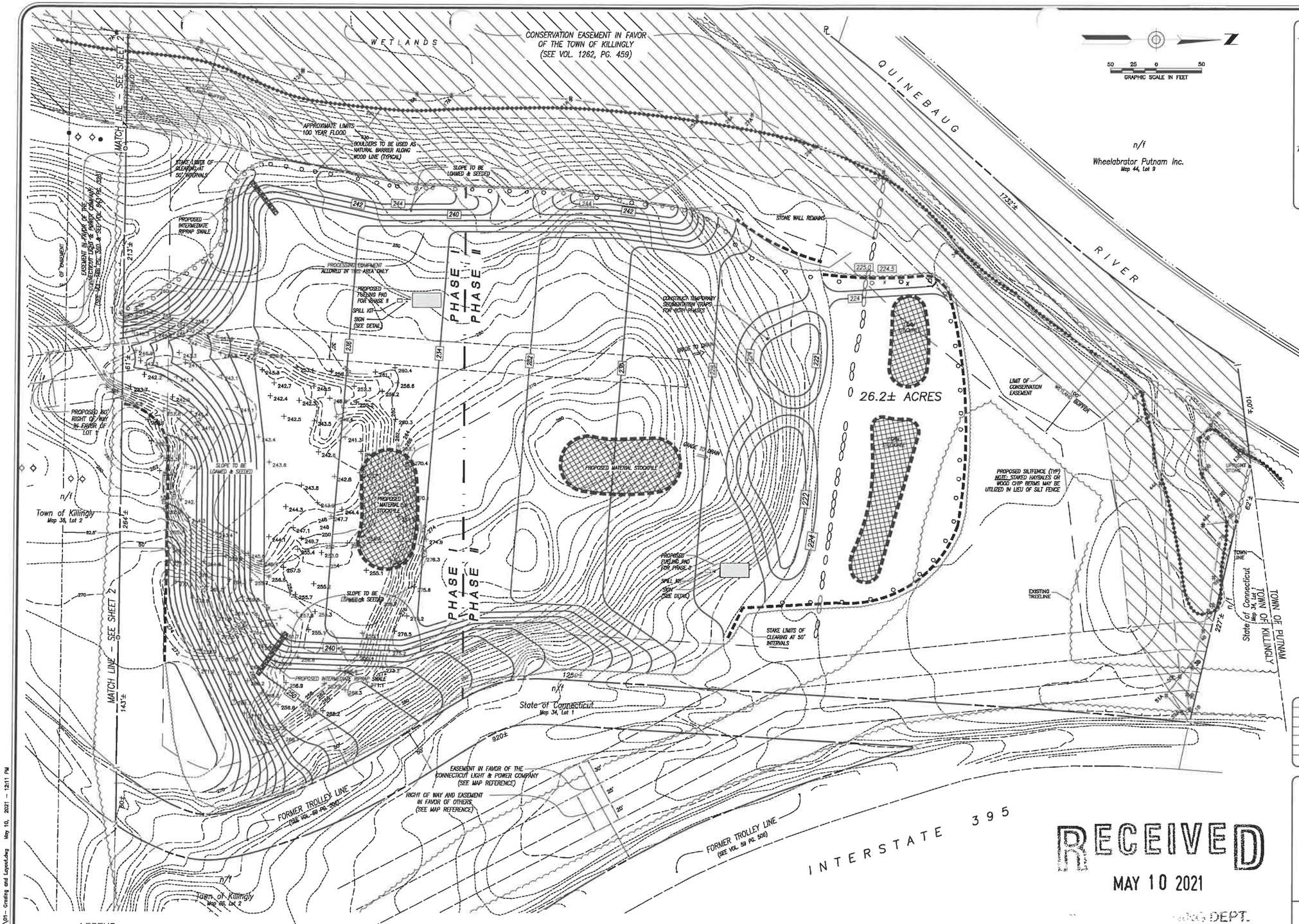

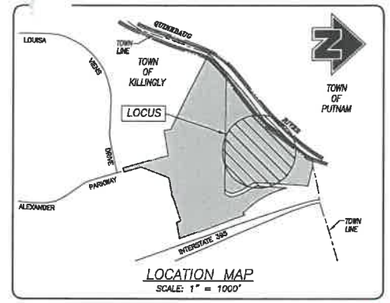

! ATTENTION !
AQUIFER ZONE
IN THE EVENT OF A SPILL, SHUT THE VALVE IMMEDIATELY.
CALL 911
! SPILL KIT INSIDE !

SIGN DETAIL
NOT TO SCALE

21-1263

NOTES:

1. This survey has been prepared pursuant to the Regulations of Connecticut State Agencies Sections 20-300b-1 through 20-300b-20 and the "Standards for Surveys and Maps in the State of Connecticut" as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26, 1996;
   - This survey conforms to a Class "C" horizontal accuracy.
   - Topographic features conform to a Class "T-2", "V-2" vertical accuracy.
   - Survey Type: Topographic Survey.

   This map was prepared from record research, other maps, limited field measurements and other sources, it is not to be construed as a Property/Boundary or Limited Property/Boundary Survey and is subject to such facts as said surveys may disclose.
2. Parcel is shown as Lot #1 on Assessors Map #36.
3. Zone = Industrial.
4. Owner of record: 145 Alexander Parkway LLC
   145 Country Club Road
   Killingly, CT 06241
5. Elevations shown are based on approximate National Geodetic Vertical Datum of 1929 (NGVD 29). Contours shown are taken from map reference and supplemented with actual field survey. Contour interval = 2'.
6. Wetlands shown were taken from map refereche.
7. Before any construction is to commence contact "CALL BEFORE YOU DIG" at 1-800-922-4455 or 811.

MAP REFERENCE:

"Subdivision Plan – Prepared for – Town of Killingly Industrial Park Expansion – Louisa Viens Drive & Alexander Park Way – Killingly, connecticut – Scale: 1" = 100' – Date: 10/9/2012 – Sheet 1 of 1 – Prepared by: KWP Associates." On file as Map #6633 in the Town of Killingly Land Records.

DATE	DESCRIPTION

REVISIONS

SITE PLAN
SHOWING PROPOSED SITE GRADING
PREPARED FOR

DESMARAIS & SONS, INC.

LOUISA VIENS DRIVE & ALEXANDER PARKWAY
KILLINGLY, CONNECTICUT

Killingly Engineering Associates
Civil Engineering & Surveying
114 Westcott Road
P.O. Box 421
Killingly, Connecticut 06241
(860) 779-7299
www.killinglyengineering.com

DATE: 4/02/2021	DRAWN: AMR
SCALE: 1" = 50'	DESIGN: NET
SHEET: 1 OF 3	CHK BY: ---
DWG. No: CLIENT FILE	JOB No: 17088

LEGEND

- IRON PIN
- EXISTING CONTOURS
- PROPOSED CONTOURS
- INLAND WETLANDS FLAG
- STONE WALL
- STONE WALL REMAINS
- SILT FENCE

APPROVED BY THE TOWN OF KILLINGLY PLANNING AND ZONING COMMISSION

Special Permit No: 18-1197
Applicant:
Date Approved:
Chairman:
Date:

NORMAND E. THIBEAULT, JR., P.E. DATE
LIC #PEN 0022834

RECEIVED
MAY 10 2021
[illegible] DEPT.
[illegible] OF KILLINGLY

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON,

GREG A. GLAUDE, L.S. LIC. NO. 70191 DATE

NO CERTIFICATION IS EXPRESSED OR IMPLIED UNLESS THIS MAP BEARS THE ORIGINAL SEAL AND SIGNATURE OF THE LAND SURVEYOR.

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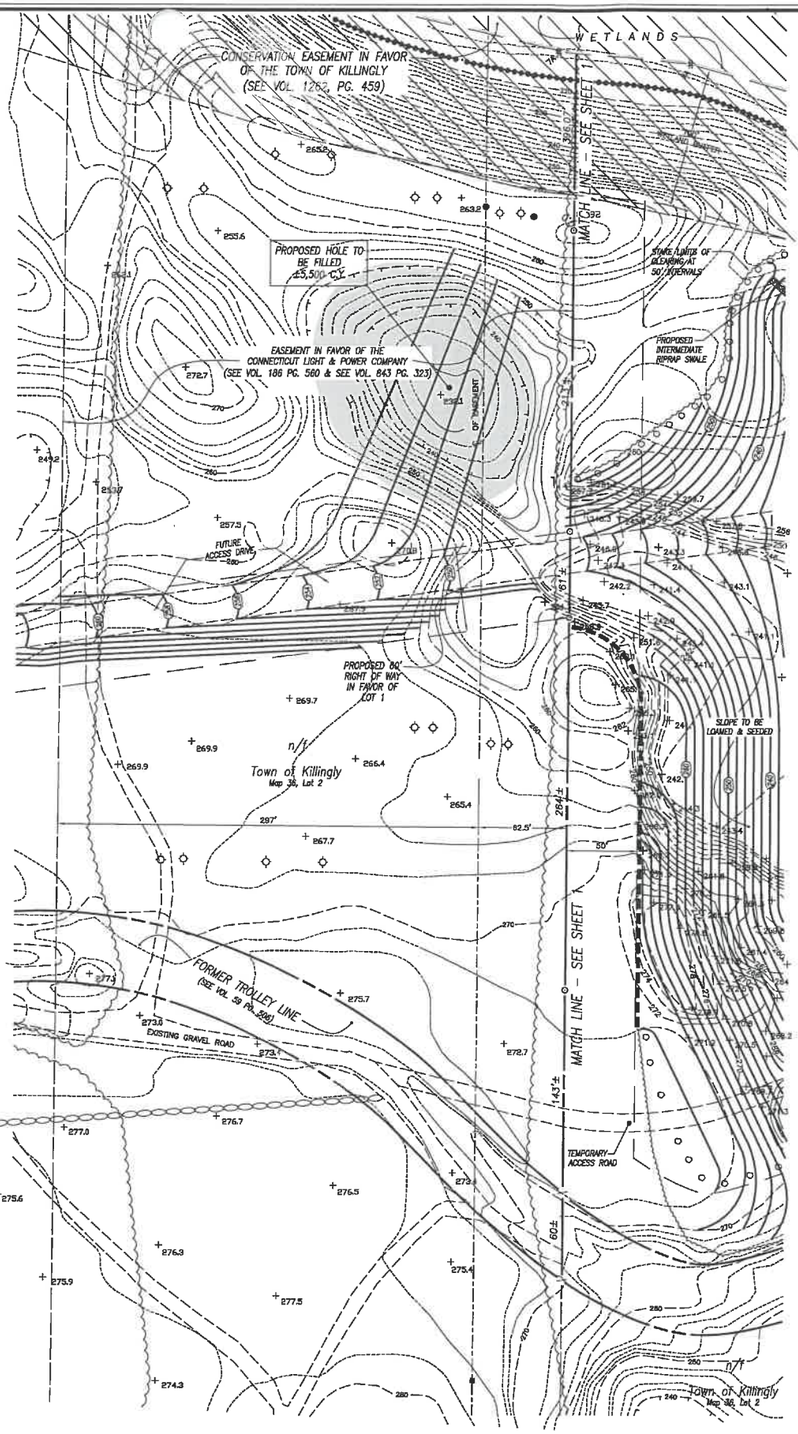
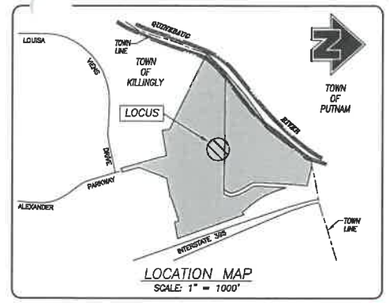


n/f
145 Alexander parkway LLC
Map 36, Lot 1

50 25 0 50
GRAPHIC SCALE IN FEET



LOCATION MAP
SCALE: 1" = 1000'

! ATTENTION !
AQUIFER ZONE
IN THE EVENT OF A SPILL, SHUT THE VALVE IMMEDIATELY
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SIGN DETAIL
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21-1263

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DATE	DESCRIPTION
	REVISIONS

TOPOGRAPHIC SURVEY
SHOWING PROPOSED PROCESSING AREA
PREPARED FOR

DESMARAIS & SONS, INC.

LOUISA VIENS DRIVE & ALEXANDER PARKWAY
KILLINGLY, CONNECTICUT

Killingly Engineering Associates
Civil Engineering & Surveying
114 Westcott Road
P.O. Box 421
Killingly, Connecticut 06241
(860) 779-7299
www.killinglyengineering.com

DATE: 4/02/2021	DRAWN: AMR
SCALE: 1" = 50'	DESIGN: ---
SHEET: 2 OF 3	CHK BY: GG
DWG. No: CLIENT FILE	JOB No: 1708B

LEGEND

⊙	IRON PIN
---100---	EXISTING CONTOURS
100	PROPOSED CONTOURS
	INLAND WETLANDS FLAG
	STONE WALL
	STONE WALL REMAINS
	SILT FENCE

APPROVED BY THE TOWN OF KILLINGLY PLANNING AND ZONING COMMISSION
Special Permit No: 18-1197
Applicant: _____
Date Approved: _____
Chairman: _____
Date: _____

NORMAND E. THIBEAULT, JR., P.E. DATE
LIC #PEN 0022534

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON,

GREG A. GLAUDE, L.S. LIC. NO. 70191 DATE

NO CERTIFICATION IS EXPRESSED OR IMPLIED UNLESS THIS MAP BEARS THE ORIGINAL SEAL AND SIGNATURE OF THE LAND SURVEYOR.

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EROSION AND SEDIMENT CONTROL PLAN:

REFERENCE IS MADE TO:

1. USDA–NRCS Web Soil Survey
2. Soil Survey of New London County Connecticut, U.S.D.A. Soil Conservation Service 1983.

SOILS:

The proposed site is comprised mainly of three soil types;
Hinckley "38C", Merrimac "34A" and Ninigret Tisbury "21A"

DEVELOPMENT SCHEDULE:

1. Install and maintain erosion and sedimentation control devices as shown on these plans. All erosion control devices shall be inspected by an agent of the Town. Any additional erosion control devices required by the Town's Agent shall be installed and inspected prior to any construction on site. (See silt fence installation notes.)
2. Install anti tracking surface.
3. Install and maintain erosion and sedimentation controls throughout operations.
4. Dust control will be accomplished by spraying with water and if necessary, the application of calcium chloride.

SPILL PREVENTION:

The Owner shall prevent oily and other hazardous substances from spilling on the ground, leaching into the soil or migrating into wetlands or water bodies.

1. All fueling shall take place within the designated fueling area as shown on the plans, adjacent to the site entrance and within the construction staging area. All fueling and minor maintenance shall be confined to this area. Major equipment repairs shall be conducted off site.
2. If required, temporary fuel tanks shall be located at the designated fueling area. Manufactured double walled storage tanks shall be installed, operated and maintained per the manufacturer's written recommendations. Single walled temporary tanks shall only be utilized if 100% spillage containment is provided. In the event of fuel spillage, the operator shall immediately remove the tank, contain the spillage and contact the CTDEP 24–hour Emergency Spill Response line at 1–866–337–7745.
3. Fuel trucks entering the site shall shall proceed directly to the designated fueling area prior to dispersing any fuel products.
4. An emergency spill kit shall be located at the designated fueling area and shall consist of absorbents, sand bags or earth material for use in controlling spills or leaks. Spilled materials and/or contaminated soils shall be excavated, stored in leak–proof containers and from the site for disposal in accordance with all applicable local, state and federal hazardous waste regulations.

DEVELOPMENT CONTROL PLAN:

1. Development of the site will be performed by the applicant, who will be responsible for the installation and maintenance of erosion and sediment control measures required throughout operations.
2. Final stabilization of the site is to follow the procedures outlined in "Permanent Vegetative Cover". If necessary a temporary vegetative cover is to be provided until a permanent cover can be applied.

SILT FENCE INSTALLATION AND MAINTENANCE:

1. Dig a 6" deep trench on the uphill side of the barrier location.
2. Position the posts on the downhill side of the barrier and drive the posts 1.5 feet into the ground.
3. Lay the bottom 6" of the fabric in the trench to prevent undermining and backfill.
4. Inspect and repair barrier after heavy rainfall.
5. Inspections will be made at least once per week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater to determine maintenance needs.
6. Sediment deposits are to be removed when they reach a height of 1 foot behind the barrier or half the height of the barrier and are to be deposited in an area which is not regulated by the inland wetlands commission.
7. Replace or repair the fence within 24 hours of observed failure. Failure of the fence has occurred when sediment fails to be retained by the fence because:
– the fence has been overtopped, undercut or bypassed by runoff water,
– the fence has been moved out of position (knocked over), or
– the geotextile has decomposed or been damaged.

HAY BALE INSTALLATION AND MAINTENANCE:

1. Bales shall be placed as shown on the plans with the ends of the bales tightly abutting each other.
2. Each bale shall be securely anchored with at least 2 stakes and gaps between bales shall be wedged with straw to prevent water from passing between the bales.
3. Inspect bales at least once per week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inches or greater to determine maintenance needs.
4. Remove sediment behind the bales when it reaches half the height of the bale and deposit in an area which is not regulated by the Inland Wetlands Commission.
5. Replace or repair the barrier within 24 hours of observed failure. Failure of the barrier has occurred when sediment fails to be retained by the barrier because:
– the barrier has been overtopped, undercut or bypassed by runoff water,
– the barrier has been moved out of position, or
– the hay bales have deteriorated or been damaged.

TEMPORARY VEGETATIVE COVER:

SEED SELECTION

Grass species shall be appropriate for the season and site conditions. Appropriate species are outlined in Figure TS–2 in the 2002 Guidelines.

TIMING CONSIDERATIONS

Seed with a temporary seed mixture within 7 days after the suspension of grading work in disturbed areas where the suspension of work is expected to be more than 30 days but less than 1 year.

RECOMMENDED SEED MIXTURES:

No.	Seed Mixture (Variety)	Lbs/acre	Lbs/Sq. Ft
*26	Switchgrass (Blackwell, Shelter, Cave–in–rock)	4.0	0.10
	Big Bluestem (Niagra, Kaw)	4.0	0.10
	Little Bluestem (Blaze, Aldous, Camper)	2.0	0.05
	Sand Lovegrass (NE–27, Bend)	1.5	0.03
	Bird's–foot Trefoil (Empire, Viking)	2.0	0.05
**27	Flatpea (Lathco)	10	0.20
	Perennial Pea (Lancer)	2.0	0.05
	Crown Vetch (Chemung, Penngift)	10	0.20
	Tall Fescue (Kentucky 31)	2.0	0.05
**28	Orchardgrass (Pennlatte, Kay, Potomac)	5.0	0.10
	Tall Fescue (Kentucky 31)	10	0.20
	Redtop (Streaker, Common)	2.0	0.05
	Bird's–foot Trefoil (Empire, Viking)	5.0	0.10

* Considered to be a cool season mix
** Considered to be a warm season mix

APPROVED BY THE TOWN OF
KILLINGLY PLANNING AND ZONING COMMISSION

Special Permit No: 18–1197
Applicant: DESMARAIS & SONS, INC.
Date Approved: JULY 16, 2018
Chairman:
Date:

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SEEDBED PREPARATION

Loosen the soil to a depth of 3–4 inches with a slightly roughened surface. If the area has been recently loosened or disturbed, no further roughening is required. Soil preparation can be accomplished by tracking with a bulldozer, discing, harrowing, raking or dragging with a section of chain link fence. Avoid excessive compaction of the surface by equipment traveling back and forth over the surface. If the slope is tracked, the cleat marks shall be perpendicular to the anticipated direction of the flow of surface water.

If soil testing is not practical or feasible on small or variable sites, or where timing is critical, fertilizer may be applied at the rate of 300 pounds per acre or 7.5 pounds per 1,000 square feet of 10–10–10 or equivalent. Additionally, lime may be applied using rates given in Figure TS–1 in the 2002 Guidelines.

SEEDING

Apply seed uniformly by hand cyclone seeder, drill, cultipacker type seeder or hydroseeder at a minimum rate for the selected species. Increase seeding rates by 10% when hydroseeding.

MULCHING

Temporary seedings made during optimum seeding dates shall be mulched according to the recommendations in the 2002 Guidelines. When seeding outside of the recommended dates, increase the application of mulch to provide 95%–100% coverage.

MAINTENANCE

Inspect seeded area at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater for seed and mulch movement and rill erosion.

Where seed has moved or where soil erosion has occurred, determine the cause of the failure. Repair eroded areas and install additional controls if required to prevent reoccurrence of erosion.

Continue inspections until the grasses are firmly established. Grasses shall not be considered established until a ground cover is achieved which is mature enough to control soil erosion and to survive severe weather conditions (approximately 80% vegetative cover).

PERMANENT VEGETATIVE COVER:

Seed mix for slope restoration shall be seed mixtures #26, #27 or #28 as described in the 2002 Guidelines for Soil Erosion and Sediment Control and as described on this sheet, applied at the recommended rates. In general, the following sequence of operations shall apply:

RESTORATION:

1. No topsoil or subsoil shall be removed from the site. All topsoil and subsoil shall be stockpiled and stabilized in accordance with measures outlined in "Temporary Vegetative Cover".
2. A minimum of 6" of subsoil and 4" of topsoil shall be spread and compacted on final slopes. Once the topsoil has been spread, all stones 3" or larger in any dimension will be removed as well as debris.
3. Apply agricultural ground limestone at a rate of 2 tons per acre or 100 lbs. per 1000 s.f. Apply 10–10–10 fertilizer or equivalent at a rate of 300 lbs. per acre or 7.5 lbs. per 1000 s.f. Work lime and fertilizer into the soil to a minimum soil depth of 4".
4. Inspect seedbed before seeding. If traffic has compacted the soil, retill compacted areas.
5. Apply the recommended grass seed mix. The recommended seeding dates are: April 1 to June 15 & August 15 – October 1.
6. Following seeding, firm seedbed. Seeded slopes shall be stabilized with turf reinforcement matting, tacked in place per recommendations of the manufacturer and as shown on the detail, this sheet.
7. If a permanent vegetative stand cannot be established by September 30, apply a temporary cover on the topsoil such as netting or organic mulch.
8. Slopes shall be inspected weekly and after all rain events of 0.5" or greater. Disturbed or damaged slopes shall be repaired immediately.

EROSION AND SEDIMENT CONTROL NARRATIVE:

PRINCIPLES OF EROSION AND SEDIMENT CONTROL

The primary function of erosion and sediment controls is to absorb erosional energies and reduce runoff velocities that force the detachment and transport of soil and/or encourage the deposition of eroded soil particles before they reach any sensitive area.

KEEP LAND DISTURBANCE TO A MINIMUM

The more land that is in vegetative cover, the more surface water will infiltrate into the soil, thus minimizing stormwater runoff and potential erosion. Keeping land disturbance to a minimum not only involves minimizing the extent of exposure at any one time, but also the duration of exposure. Phasing, sequencing and construction scheduling are interrelated. Phasing divides a large project into distinct sections where construction work over a specific area occurs over distinct periods of time and each phase is not dependent upon a subsequent phase in order to be functional. A sequence is the order in which construction activities are to occur during any particular phase. A sequence should be developed on the premise of "first things first" and "last things last" with proper attention given to the inclusion of adequate erosion and sediment control measures. A construction schedule is a sequence with time lines applied to it and should address the potential overlap of actions in a sequence which may be in conflict with each other.

– Limit areas of clearing and grading. Protect natural vegetation from construction equipment with fencing, tree armoring, and retaining walls or tree wells.
– Route traffic patterns within the site to avoid existing or newly planted vegetation.
– Phase construction so that areas which are actively being developed at any one time are minimized and only that area under construction is exposed. Clear only those areas essential for construction.
– Sequence the construction of storm drainage systems so that they are operational as soon as possible during construction. Ensure all outlets are stable before outletting storm drainage flow into them.
– Schedule construction so that final grading and stabilization is completed as soon as possible.

SLOW THE FLOW

Detachment and transport of eroded soil must be kept to a minimum by absorbing and reducing the erosive energy of water. The erosive energy of water increases as the volume and velocity of runoff increases. The volume and velocity of runoff increases during development as a result of reduced infiltration rates caused by the removal of existing vegetation, removal of topsoil, compaction of soil and the construction of impervious surfaces.

– Use diversions, stone dikes, silt fences and similar measures to break flow lines and dissipate storm water energy.
– Avoid diverting one drainage system into another without calculating the potential for downstream flooding or erosion.

KEEP CLEAN RUNOFF SEPARATED

Clean runoff should be kept separated from sediment laden water and should not be directed over disturbed areas without additional controls. Additionally, prevent the mixing of clean off–site generated runoff with sediment laden runoff generated on–site until after adequate filtration of on–site waters has occurred.

– Segregate construction waters from clean water.
– Divert site runoff to keep it isolated from wetlands, watercourses and drainage ways that flow through or near the development until the sediment in that runoff is trapped or detained.

REDUCE ON SITE POTENTIAL INTERNALLY AND INSTALL PERIMETER CONTROLS

While it may seem less complicated to collect all waters to one point of discharge for treatment and just install a perimeter control, it can be more effective to apply internal controls to many small sub–drainage basins within the site. By reducing sediment loading from within the site, the chance of perimeter control failure and the potential off–site damage that it can cause is reduced. It is generally more expensive to correct off–site damage than it is to install proper internal controls.

– Control erosion and sedimentation in the smallest drainage area possible. It is easier to control erosion than to contend with sediment after it has been carried downstream and deposited in unwanted areas.
– Direct runoff from small disturbed areas to adjoining undisturbed vegetated areas to reduce the potential for concentrated flows and increase settlement and filtering of sediments.
– Concentrated runoff from development should be safely conveyed to stable outlets using rip rapped channels, waterways, diversions, storm drains or similar measures.

EXCAVATION/PROCESSING NOTES:

HOURS OF OPERATION: 7:00 am – 6:00 pm Monday – Friday
7:00 am – 12:00 pm Saturday

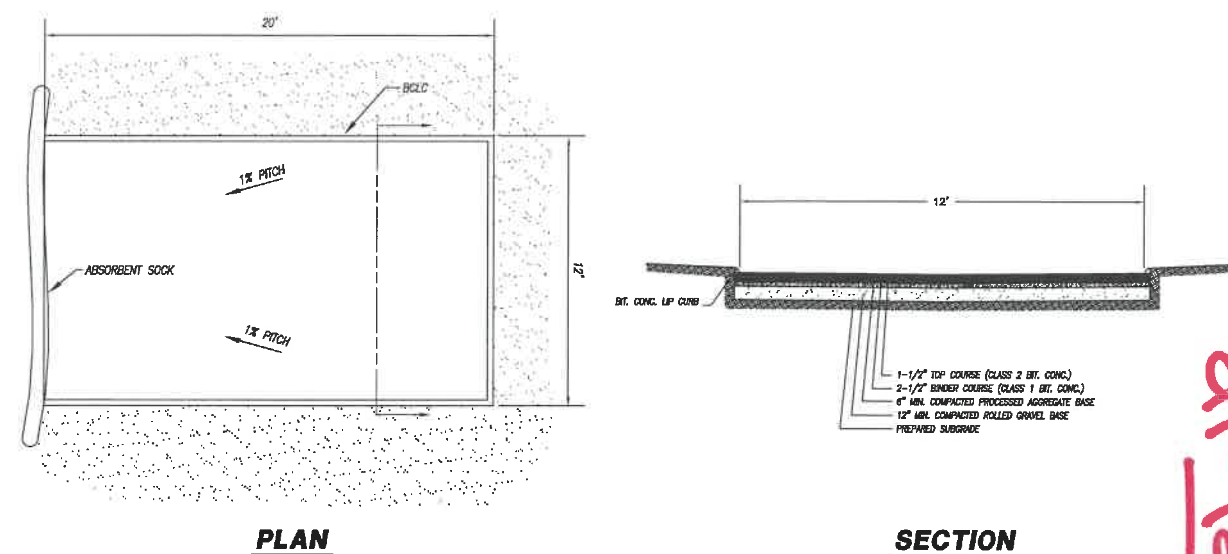
DUST CONTROL: Dust control shall be accomplished with periodic watering. Other measures, if desired should be reviewed and approved by the Town of Killingly.

GENERAL NOTES:

1. There shall be no storage of fuel on site nor shall there be vehicle or machinery washing or major repairs done on site.
2. Excavation shall generally be completed utilizing a downcutting method to maintain a self–contained active excavation area and prevent the migration of stormwater and sediment from the active excavation area.
3. The maximum disturbed area (not yet stabilized with topsoil, seed and mulch) at any time shall be limited to 5 acres.
4. The access drive to the point of excavation shall be maintained in a stable condition. Additional clean gravel, pavement millings or stone aggregate shall be installed as necessary.
5. The maximum permitted finish grade slope of excavated areas shall be 2.5H:1V Jute or straw erosion control netting shall be used to stabilize these slopes – North American Green SC–150 or engineer approved equal.
6. Prior to any excavation, contact CALL BEFORE YOU DIG at 1–800–922–4455 to determine the location of any underground utilities.

SEQUENCE OF OPERATIONS:

1. Prior to any activity on site, the contractor shall flag the limit of Phase 1 clearing and schedule a pre–construction meeting with the Town of Killingly Zoning Official.
2. Cut trees within phase limit and remove wood from the site. Install perimeter erosion and sedimentation controls; branches/brush may be chipped and utilized as berms for E&S.
3. Excavate all stumps located in the phase area and remove to a disposal site or stockpile to be chipped for use on site. The state of Connecticut does not allow for burying of stumps on site.
4. Grade access drive as shown on the plans.
5. Excavate/grade areas of proposed sedimentation basins.
6. Strip and stockpile topsoil and subsoil. Excess subsoil may be utilized in existing over–excavated area to assist in achieving compliant side slopes. Note: sufficient subsoil and topsoil shall be reserved to provide a minimum of 6" of subsoil and 4" of topsoil to establish vegetation for finished grades.
7. Begin excavation to remove soil materials; complete regrading of over excavated area.
8. Inspect perimeter erosion and sedimentation controls weekly and after rain events greater than 1/2". Repair erosion controls as required after inspections. Additional erosion and sedimentation controls such as diversions may be installed per direction of the Owner's engineer if site conditions require.
9. When Phase 1 excavation and grading have been completed, apply subsoil, topsoil and seed to re–vegetate slopes. Complete perimeter landscape plantings.
10. When site has been stabilized, remove all perimeter erosion and sedimentation controls. Wood chip berms may be left in place permanently if desired.
11. Repeat sequence for phase 2 operations.
12. Processing shall be for be for materials excavated on site and for materials brought to the site by the Owner from other Owner operated projects. No materials shall be brought to the site for processing from contractors other than the Owner.



PAVED REFUELING PAD
NOT TO SCALE

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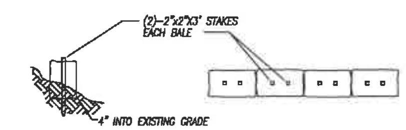

HAYBALE BARRIER
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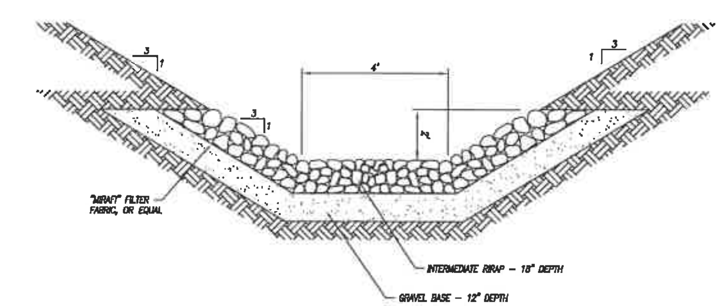

SECTION THRU MODIFIED RIPRAP SWALE
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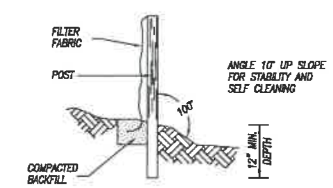
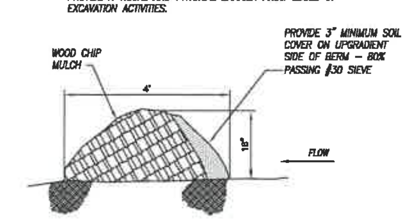
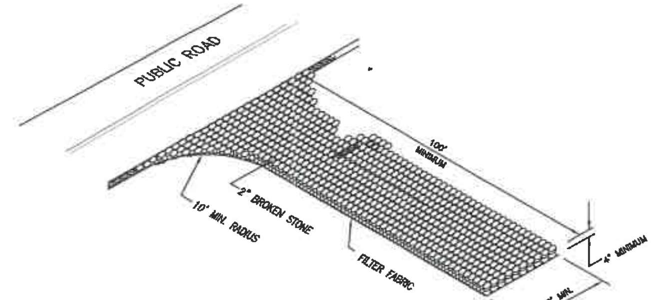


SILT FENCE
NOT TO SCALE

NOTE: ALTERNATIVE FENCING MAY BE INSTALLED AT THE DISCRETION OF THE DEVELOPER AND APPROVAL OF TOWN STAFF. FENCING SHALL PROVIDE A VISUAL AND PHYSICAL BARRIER FROM EDGES OF EXCAVATION ACTIVITIES.



WOOD CHIP FILTER BERM
NOT TO SCALE
NOTE: MAY BE UTILIZED IN LIEU OF SILT FENCE ON LESSER SLOPES



CONSTRUCTION ENTRANCE
NOT TO SCALE

NORMAND E. THIBEAULT, JR., P.E. DATE

DATE	DESCRIPTION

REVISIONS

DETAIL SHEET
PROPOSED EARTH MATERIALS PROCESSING
PREPARED FOR

DESMARAIS & SONS, INC.

LOUISA VIENS DRIVE & ALEXANDER PARKWAY
KILLINGLY, CONNECTICUT

Killingly Engineering Associates
Civil Engineering & Surveying
98 Westcott Road
P.O. Box 421
Dayville, Connecticut 06241
(860) 779-7299 - FAX: (860) 774-3703

DATE: 04/02/2021	DRAWN: AMR
SCALE: NOT TO SCALE	DESIGN: NET
SHEET: 3 OF 3	CHK BY: ---
DWG. No: CLIENT FILE	JOB No: 17088

PROJECT KNIGHT

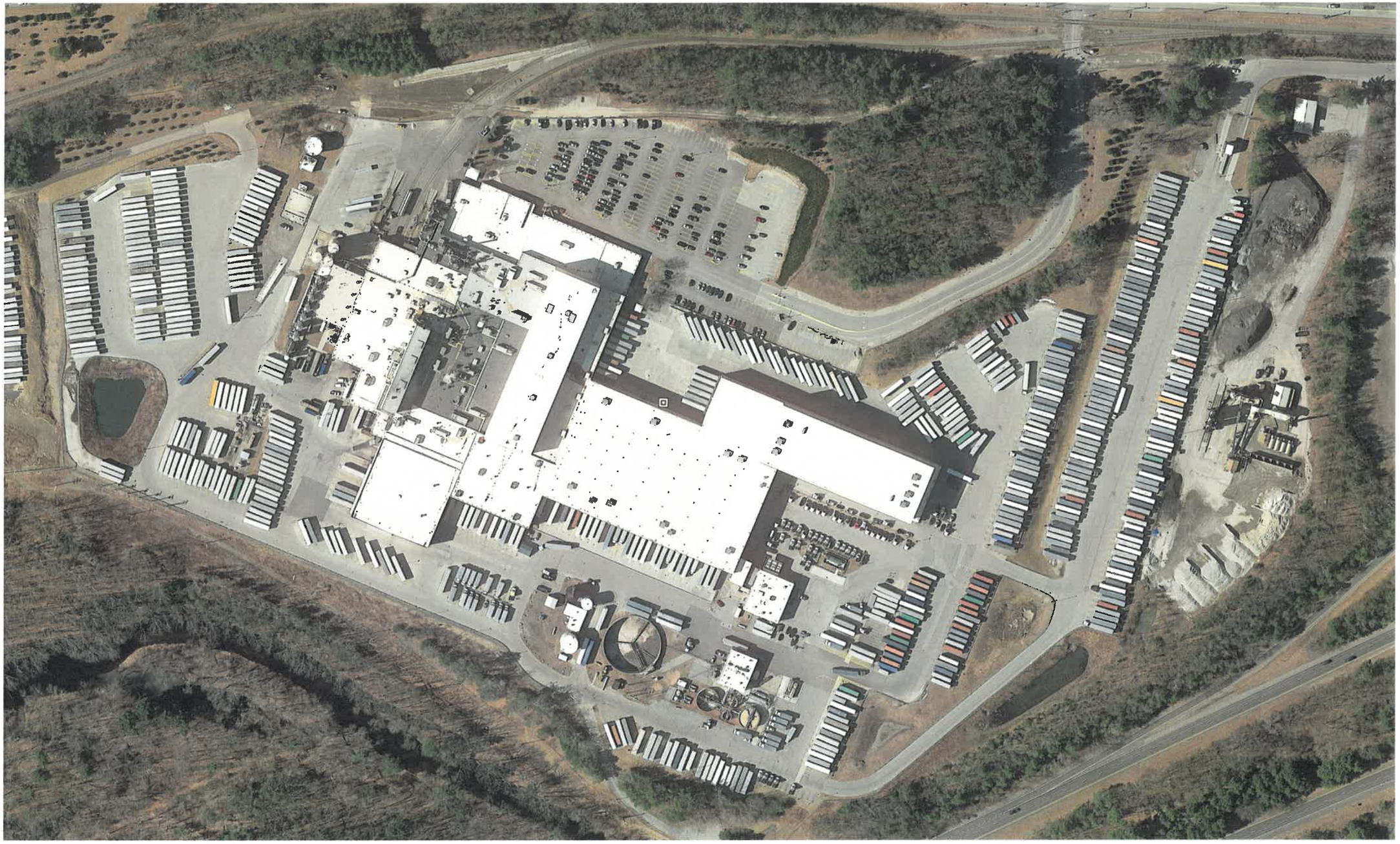
KILLINGLY, CONNECTICUT

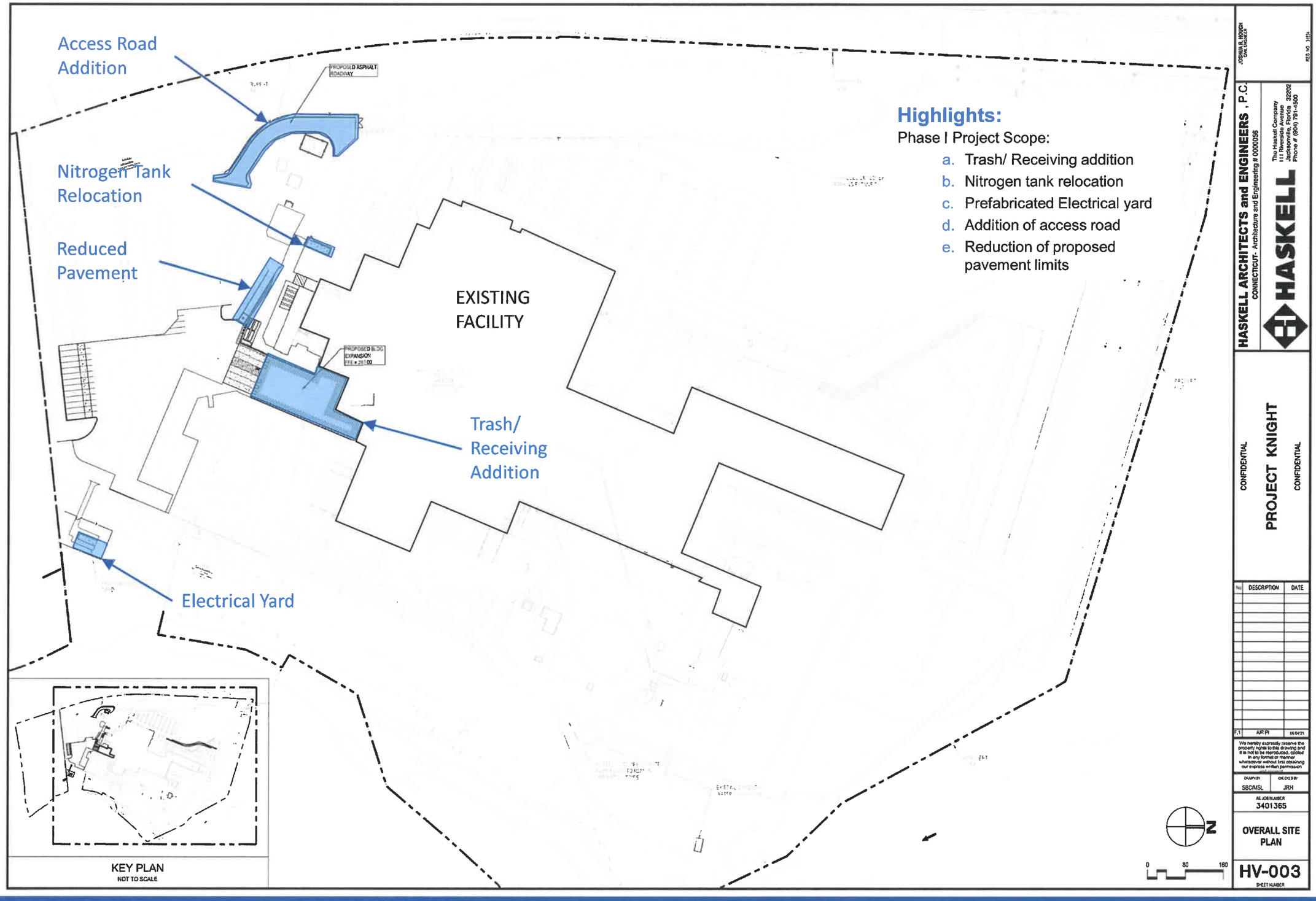
PHASE 1 – TRASH AND RECEIVING DOCK EXPANSION

SLIDE INDEX:

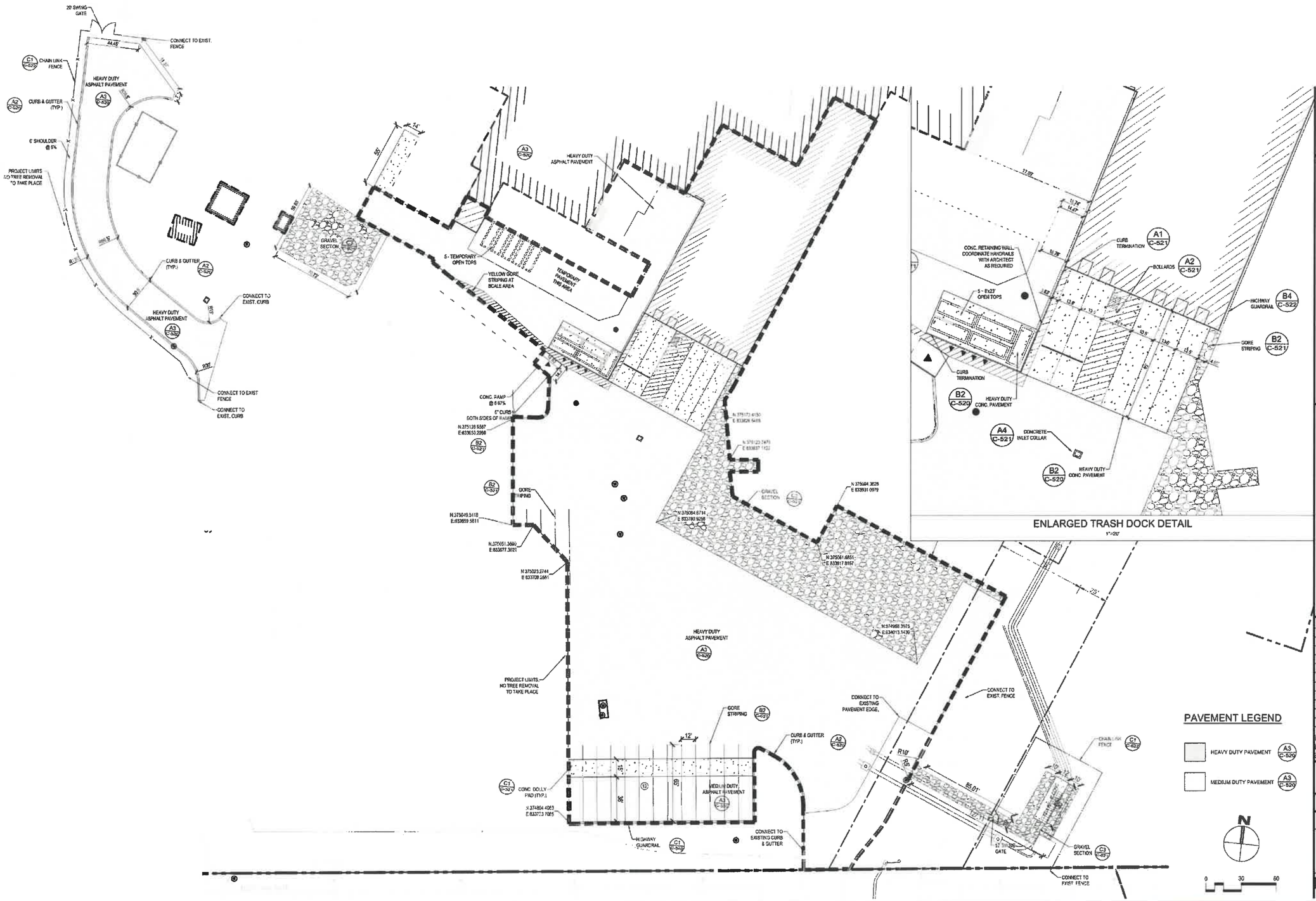
#21-12

#21-18




Access Road Addition
Nitrogen Tank Relocation
Reduced Pavement
Trash/ Receiving Addition
Electrical Yard
EXISTING FACILITY
PROPOSED ASPHALT ROADWAY
PROPOSED BLDG EXPANSION
Highlights:
Phase I Project Scope:
a. Trash/ Receiving addition
b. Nitrogen tank relocation
c. Prefabricated Electrical yard
d. Addition of access road
e. Reduction of proposed pavement limits
KEY PLAN
NOT TO SCALE
0 80 160
HASKELL ARCHITECTS and ENGINEERS, P.C.
CONNECTICUT- Architecture and Engineering # 0000058
HASKELL
The Haskell Company
111 Riverside Avenue
Jacksonville, Florida 32202
Phone # (904) 791-4500
CONFIDENTIAL
PROJECT KNIGHT
CONFIDENTIAL
No DESCRIPTION DATE
P.1 AIR PI 06/04/21
We hereby expressly reserve the property rights to this drawing and it is not to be reproduced, copied in any format or manner whatsoever without first obtaining our express written permission
DRAWN BY SBC/MSL
CHECKED BY JRH
AE JOB NUMBER 3401365
OVERALL SITE PLAN
HV-003
SHEET NUMBER

#21-138



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HASKELL

PROJECT KNIGHT
PHASE 1 RECEIVING
DOCK EXPANSION
KILLINGLY, CONNECTICUT

No	DESCRIPTION	DATE
E.1	REV PRI-2	05/17/21
D.1	REV PRI-2	04/26/21
C.1	REV PRI	04/15/21

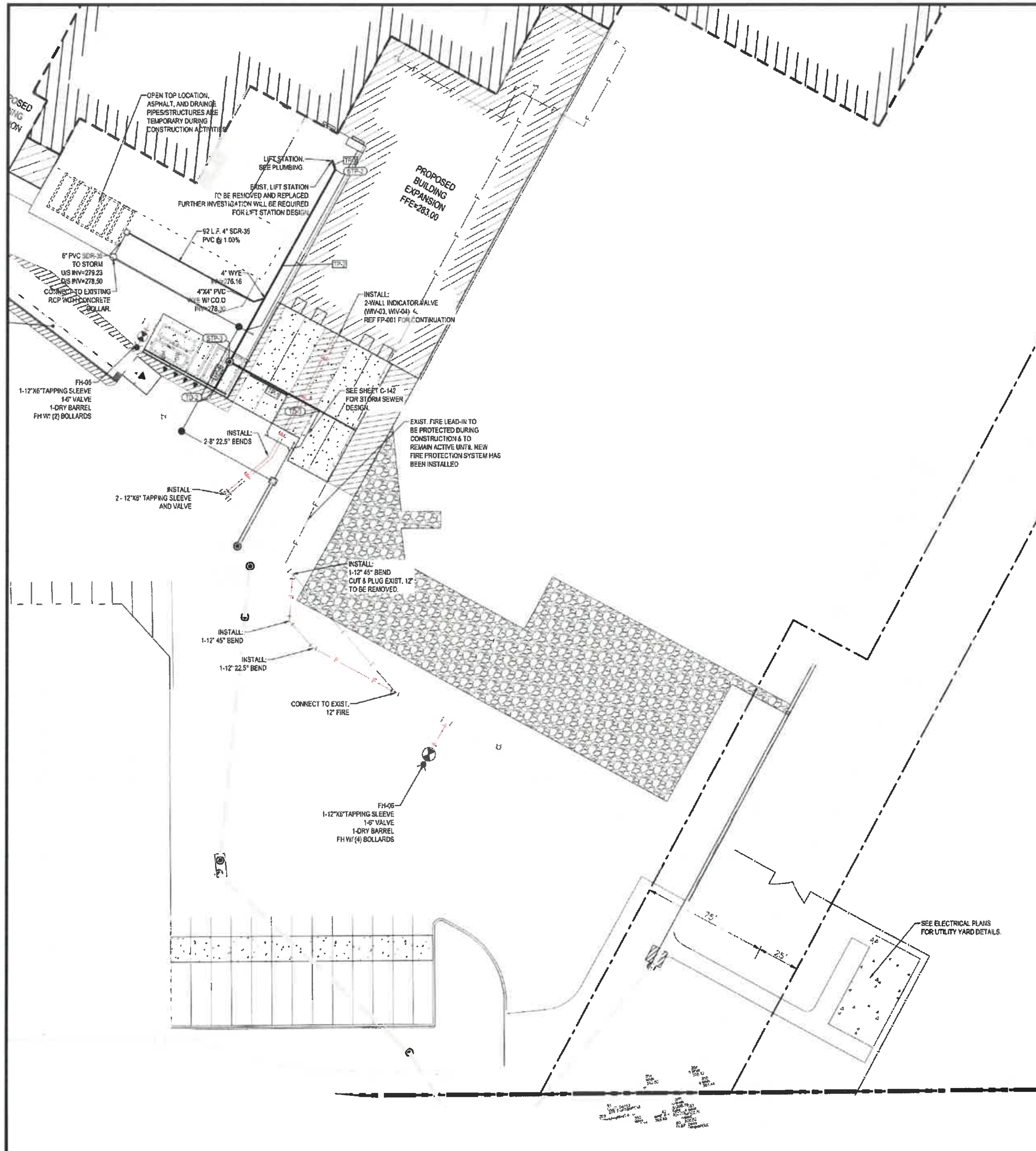
DRAWN BY: SBC/MSL
CHECKED BY: JRH

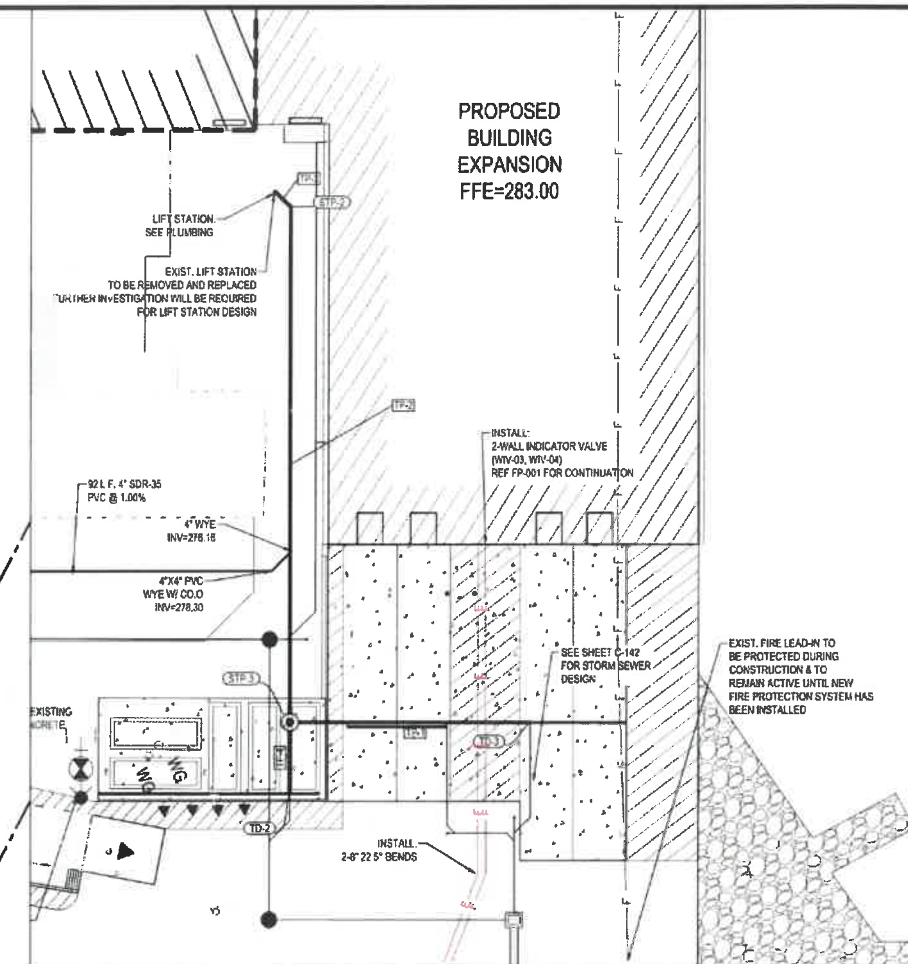
AE JOB NUMBER
3401365

GEOMETRY PLANS

PH1.C-121
SHEET NUMBER

#3a-18





ENLARGED UTILITY CONNECTION DETAIL
1"=20'

PROCESS SEWER PIPE TABLE								
PIPE ID	UP/STREAM STRUCTURE	DOWN/STREAM STRUCTURE	LENGTH (FT)	PIPE SIZE (IN)	PIPE MATERIAL	SLOPE (%)	UP/STREAM INVERT (FT)	DOWN/STREAM INVERT (FT)
TP-1	TD-3	STP-3	58.87	4"	PVC SDR-35	0.51%	277.15	276.65
TP-2	STP-3	STP-2	130.29	4"	PVC SDR 35	[illegible]	276.65	276.20
TP-3	STP-2	29	5.68	6"	PVC SDR-35	0.53%	276.20	276.17
TP-4	TD-2	STP-3	18.00	4"	PVC SDR-35	5.56%	278.00	277.00

PROCESS SEWER STRUCTURE TABLE				
STRUCTURE NAME	TOP ELEV.	PIPES IN	PIPES OUT	DESCRIPTION
TD-3	278.90		277.15 (NW)	TRENCH DRAIN 4" SEWER INV: 277.15 6" STORM INV: 277.22
STP-3	280.93	276.65 (SE) 277.00 (SW)	276.65 (NE)	48" CONC. MH
TD-2	281.09		278.00 (NE)	TRENCH DRAIN 2" SANITARY INV: 278.00 6" STORM INV: 278.08
STP-2	282.67	276.20 (SW)	276.20 (NW)	4"X4" WYE W/ C.O
29	282.73	276.17 (SE)		EXIST. LIFT STATION NO INFORMATION AVAILABLE ON PUMP SIZE/PIPE SIZE

N
0 30 60

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Phone # (904) 791-4500

PROJECT KNIGHT
PHASE 1 RECEIVING DOCK EXPANSION
KILLINGLY, CONNECTICUT

No.	DESCRIPTION	DATE
	REV PRI-2	
	REV PRI-2	
	REV PRI	

DRAWN BY: SBC/NSL
CHECKED BY: JRH
AE JOB NUMBER: 3401365

UTILITY PLANS

PH1.C-131
SHEET NUMBER

#21-1263

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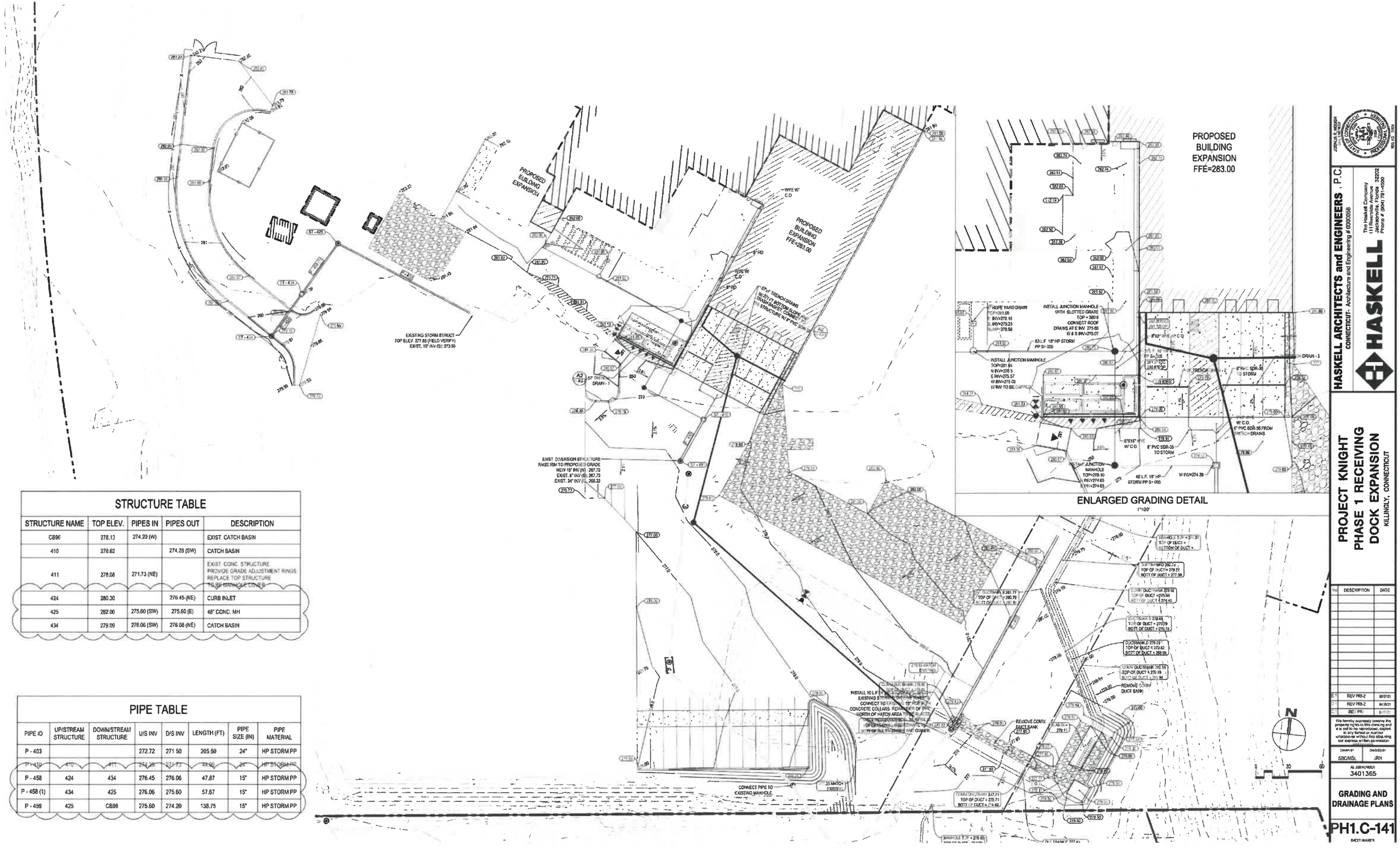
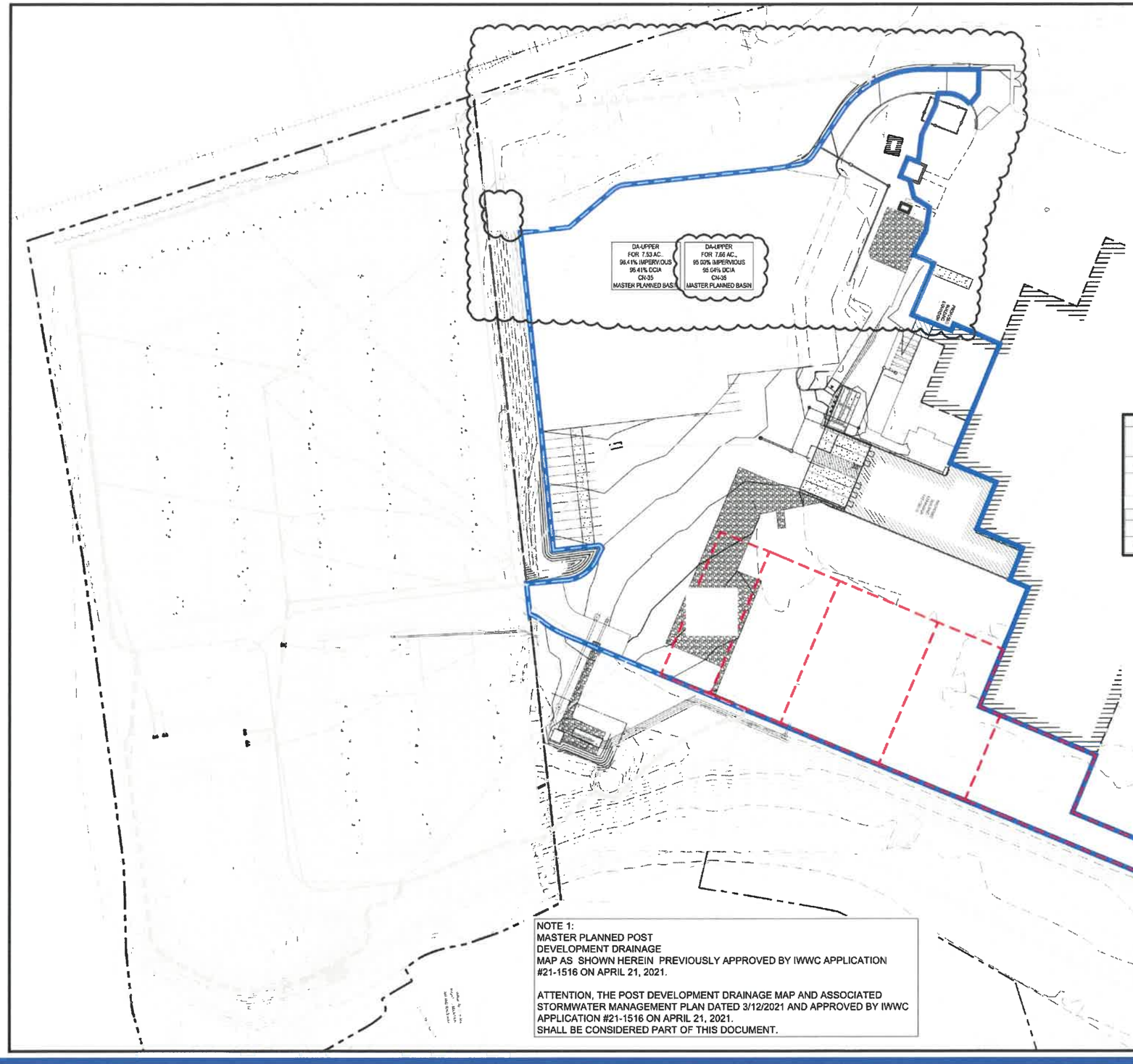
PROJECT KNIGHT – PHASE 1 – P&Z PRESENTATION
CIVIL - UTILITY PLAN
21 JUNE 2021



STRUCTURE TABLE				
STRUCTURE NAME	TOP ELEV.	PIPES IN	PIPES OUT	DESCRIPTION
CB96	278.13	274.20 (W)		EXIST. CATCH BASIN
410	276.62		274.28 (SW)	CATCH BASIN
411	278.08	271.73 (NE)		EXIST. CONC. STRUCTURE PROVIDE GRADE ADJUSTMENT RINGS REPLACE TOP STRUCTURE TO BE MANHOLE COVER
424	280.30		276.45 (NE)	CURB INLET
425	282.00	275.60 (SW)	275.60 (E)	48" CONC. MH
434	279.09	276.06 (SW)	276.06 (NE)	CATCH BASIN

PIPE TABLE							
PIPE ID	UP/STREAM STRUCTURE	DOWN/STREAM STRUCTURE	U/S INV	D/S INV	LENGTH (FT)	PIPE SIZE (IN)	PIPE MATERIAL
P - 403			272.72	271.50	205.50	24"	HP STORM PP
P - 410	410	411	274.28	271.73	41.50	24"	HP STORM PP
P - 458	424	434	276.45	276.06	47.87	15"	HP STORM PP
P - 458 (1)	434	425	276.06	275.60	57.67	15"	HP STORM PP
P - 459	425	CB96	275.60	274.20	138.75	15"	HP STORM PP



PRE-DEVELOPMENT PEAK DISCHARGE (SOUTH BASIN), CFS

2YR-24HR	10YR-24HR	25YR-24HR	100YR-24HR
4.69	14.41	19.40	30.18

POST-DEVELOPMENT PEAK DISCHARGE (SOUTH BASIN), CFS

2YR-24HR	10YR-24HR	25YR-24HR	100YR-24HR
0	0	0	0

POST-DEVELOPED CONDITIONS

Catchment Area Name	Peaking Factor	Total Area (ac)	Impervious (ac)	Impervious % DCIA	CN[1]	Tc (min)
DA-401A	484	0.52	0.5	100.00	-	5.00
DA-401	484	0.51	0.51	100.00	-	5.00
DA-402	484	0.65	0.65	100.00	-	5.00
DA-403	484	0.46	0.46	100.00	-	5.00
DA-404	484	0.32	0.32	100.00	-	5.00
DA-407	484	0.93	0.63	67.74	38	10.00
DA-430	484	2.30	0.78	-	56	5.00
DA-431	484	1.50	1.50	100.00	-	-
DA-432	484	0.35	0.35	100.00	-	5.00
DA-433	484	0.46	0.41	89.35	35.00	5.00
DA-440	484	0.94	0.34	28.76	42.34	15.00
DA-441	484	1.82	1.49	80.89	38.16	10.00
DA-450	484	1.80	1.80	100.00	-	5.00
DA-451	484	1.47	1.47	100.00	-	5.00
DA-452	484	1.29	1.29	100.00	-	5.00
DA-453	484	0.21	0.21	100.00	-	5.00
DA-UPPER	484	7.66	7.28	95.04	35.00	10.00
DA-POND	484	2.18	-	-	35.00	5.00
TOTAL		25.37	20.01			

NOTE 1. COMPOSITE CN VALUES SHOWN ARE ONLY APPLIED TO THE AREAS NOT CONSIDERED DIRECTLY CONNECTED IMPERVIOUS AREA. ALL DCIA'S ARE ASSIGNED A CN VALUE OF 98.

POND DRAWDOWN ANALYSIS

		2 YR-24HR (HOURS, DAYS)	10YR-24HR (HOURS, DAYS)	25YR-24HR (HOURS, DAYS	100YR-24HR (HOURS, DAYS)	WQv (HOURS, DAYS)	
NODE	PROPOSED POND	47.33, 1.97	58.50, 2.85	78.17,3.25	98, 4.08	40, 1.67	
	REQUIRED DRAWDOWN (DAYS)	3.5	3.5	3.5	3.5	3	

POND PEAK STAGE, BASED ON TOP OF POND 258 WITH OVERFLOW 258 (FEET)

		2 YR-24HR (ft)	10YR-24HR (ft)	25YR-24HR (ft)	100YR-24HR (ft)	WQv (ft)	
NODE	PROPOSED POND	252.56	254.90	255.58	256.99	251.90	

LEGEND

DA-#
A=0.00
DCIA = 00%
Tc = 00

DRAINAGE AREA ID
DRAINAGE BASIN AREA (AC)
DRAINAGE BASIN CURVE AREA
DRAINAGE BASIN TIME OF CONCENTRATION

FLOW ARROW

MAJOR DRAINAGE BASIN BOUNDARY

MINOR DRAINAGE BASIN BOUNDARY

JOSHUA R. HOUGH
REG. NO. 31594
STATE OF CONNECTICUT
PROFESSIONAL ENGINEER

HASKELL ARCHITECTS and ENGINEERS, P.C.
CONNECTICUT- Architecture and Engineering # 0000356

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Phone # (904) 791-4500

HASKELL

PROJECT KNIGHT
PHASE 1 RECEIVING DOCK EXPANSION
KILLINGLY, CONNECTICUT

No	DESCRIPTION	DATE
2.1	REV PRI-2	05/07/21
1.1	REV PRI-2	04/16/21

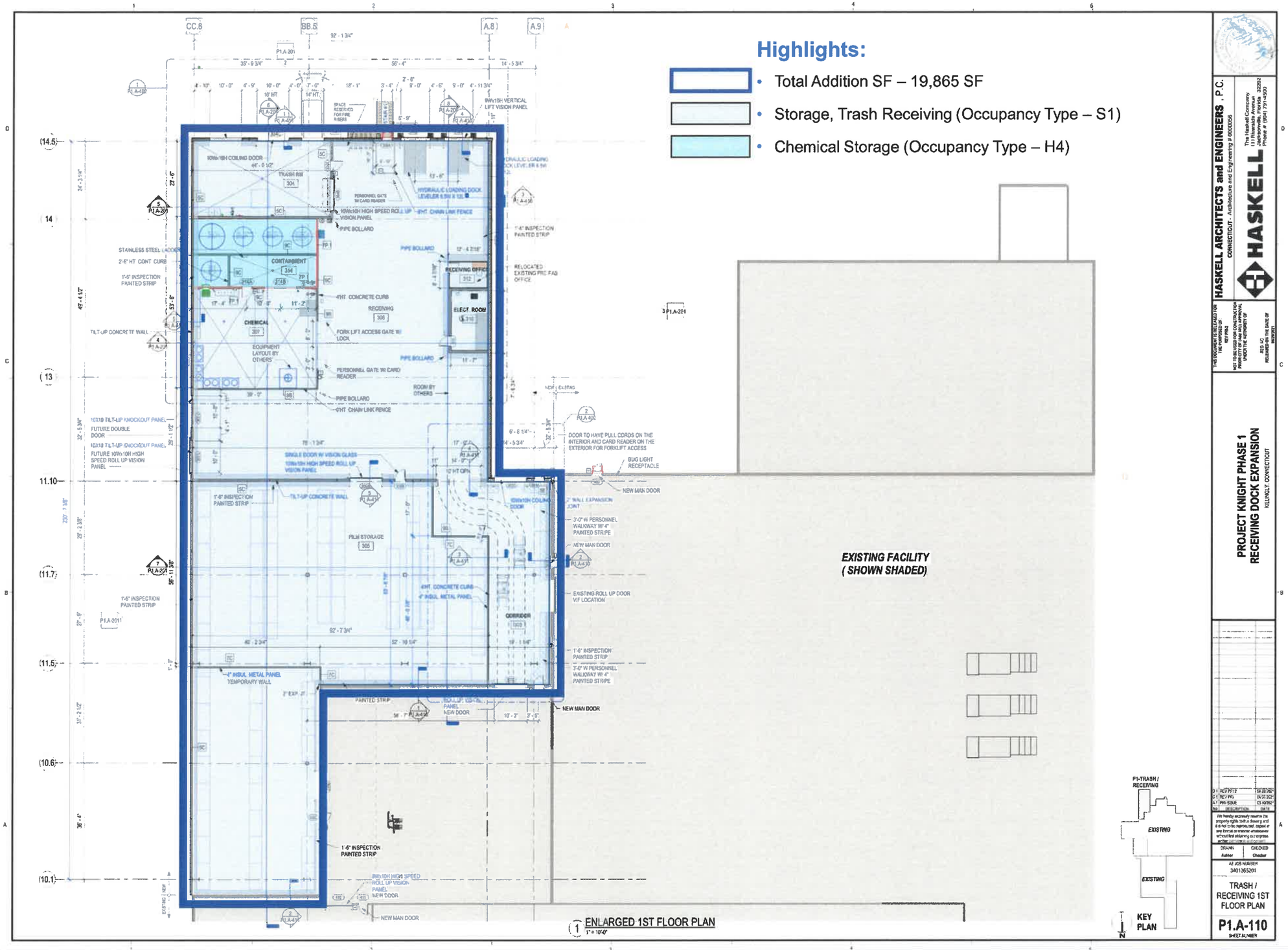
DRAWN BY: SBC/MSL
CHECKED BY: JRH

AE JOB NUMBER
3401365

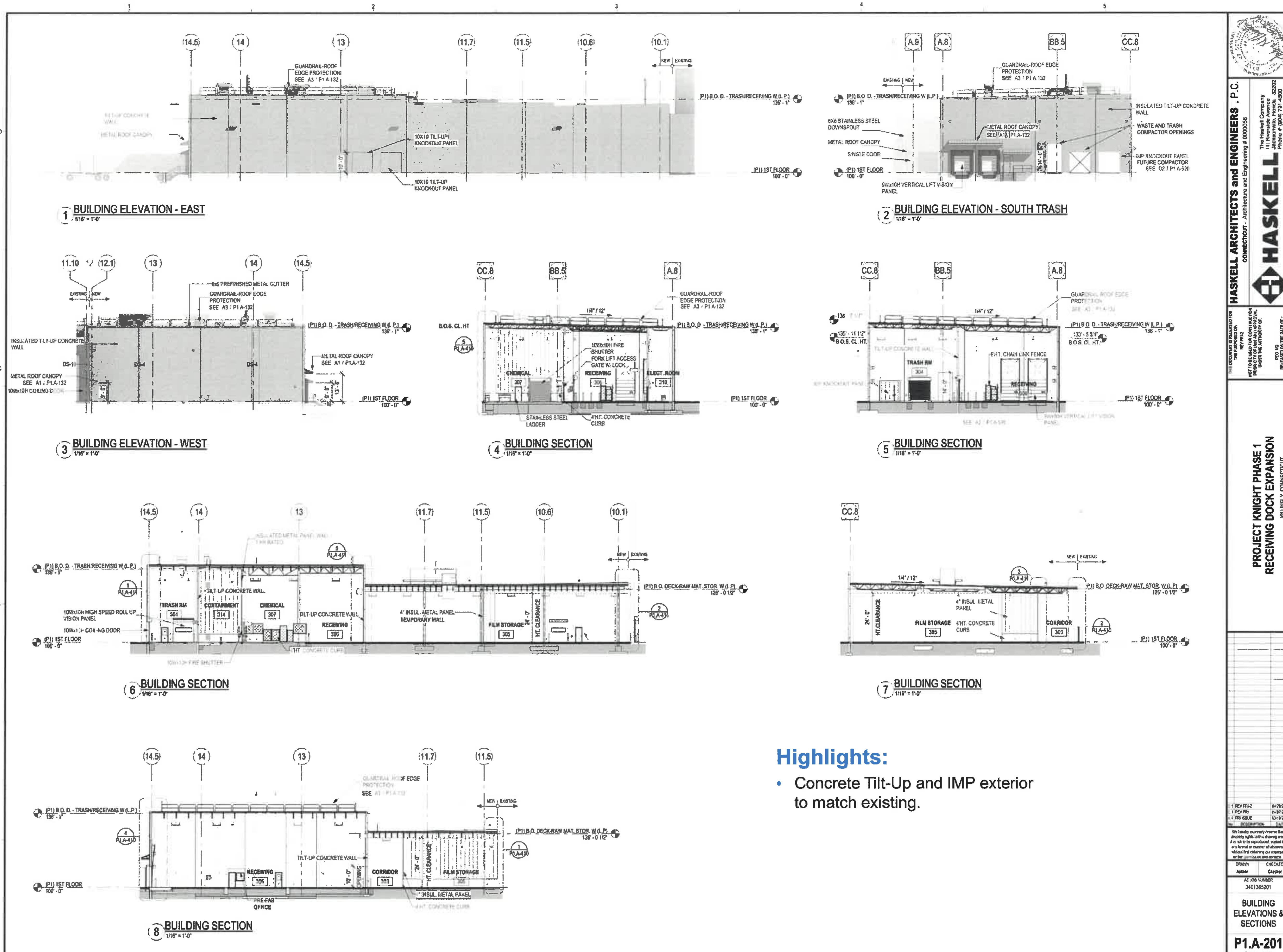
POST DEVELOPMENT DRAINAGE MAP

PH1.C-172
SHEET NUMBER

EQ21-12 #


Highlights:
• Total Addition SF – 19,865 SF
• Storage, Trash Receiving (Occupancy Type – S1)
• Chemical Storage (Occupancy Type – H4)
EXISTING FACILITY
(SHOWN SHADED)
1 ENLARGED 1ST FLOOR PLAN
1" = 10'-0"
KEY PLAN
P1-TRASH / RECEIVING
EXISTING
EXISTING
HASKELL ARCHITECTS and ENGINEERS, P.C.
CONNECTICUT - Architecture and Engineering # 0600056
The Haskell Company
111 Riverside Avenue
Jacksonville, Florida 32202
Phone # (904) 791-4500
HASKELL
PROJECT KNIGHT PHASE 1
RECEIVING DOCK EXPANSION
KILLINGLY, CONNECTICUT
TRASH / RECEIVING 1ST FLOOR PLAN
P1.A-110
SHEET NUMBER

8-12-22 #2



Highlights:

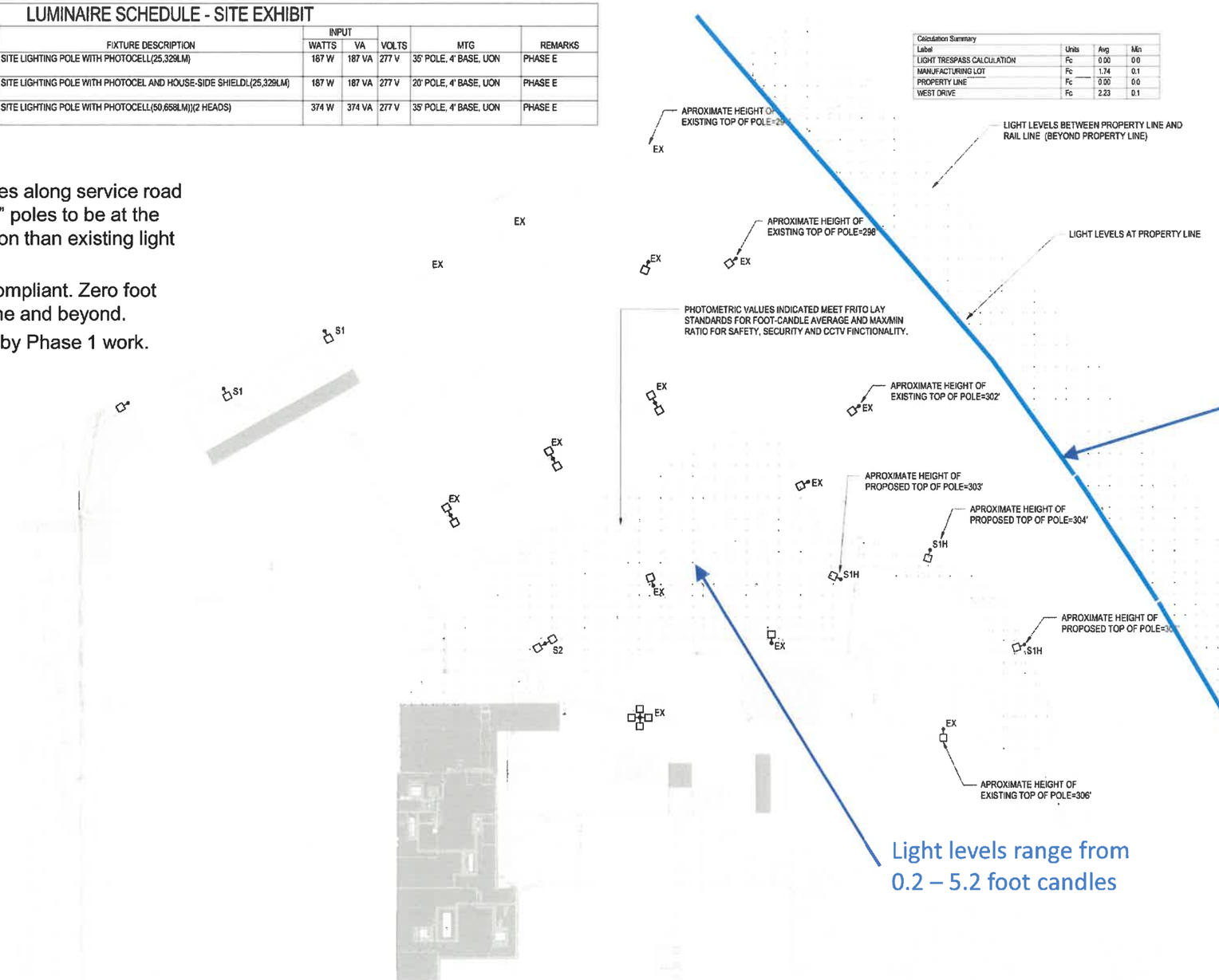
- Concrete Tilt-Up and IMP exterior to match existing.

21-1262

LUMINAIRE SCHEDULE - SITE EXHIBIT								
				INPUT				
TYPE	MFG	CATALOG NUMBER	FIXTURE DESCRIPTION	WATTS	VA	VOLTS	MTG	REMARKS
S1	LITHONIA	RSX2-LED-P2-50k-R4-MVOLT-RPA-DLL127F 1.5 JU	SITE LIGHTING POLE WITH PHOTOCELL(25,329LM)	187 W	187 VA	277 V	35' POLE, 4' BASE, UON	PHASE E
S1H	LITHONIA	RSX2-LED-P2-50k-R4-MVOLT-RPA-HS-EGS-DLL127F 1.5 JU	SITE LIGHTING POLE WITH PHOTOCEL AND HOUSE-SIDE SHIELDI.(25,329LM)	187 W	187 VA	277 V	20' POLE, 4' BASE, UON	PHASE E
S2	LITHONIA	RSX2-LED-P2-50k-R4-MVOLT-RPA-DLL127F 1.5 JU	SITE LIGHTING POLE WITH PHOTOCELL(50,658LM))(2 HEADS)	374 W	374 VA	277 V	35' POLE, 4' BASE, UON	PHASE E

Highlights:

- New S1H Light Fixtures along service road are mounted on 20'-0" poles to be at the same or lower elevation than existing light fixtures.
- Lighting is dark sky compliant. Zero foot candles at property line and beyond.
- No trees are affected by Phase 1 work.



Calculation Summary			
Label	Units	Avg	Min
LIGHT TRESPASS CALCULATION	Fc	0.00	0.0
MANUFACTURING LOT	Fc	1.74	0.1
PROPERTY LINE	Fc	0.00	0.0
WEST DRIVE	Fc	2.23	0.1

GENERAL NOTES:

1. FRITO-LAY CORPORATE CCTV COVERAGE BASED ON 39' ABOVE GRADE FOR POLE LAYOUT IN TRAILER PARKING AREAS AND 24' ABOVE GRADE FOR POLE LAYOUT.
2. VEGETATION NOT INCLUDED IN PHOTOMETRIC CALCULATIONS.
3. NOT TOP OF POLE (LIMINAIRE) ELEVATIONS RELATIVE TO ABOVE SEA LEVEL.
4. PHOTOMETRIC CALCULATIONS PROVIDED USING AGI32 LIGHTING SIMULATION SOFTWARE USING POLE HEIGHTS SHOWN.

DEMOLITION NOTES:

EX, XR = EXISTING SHALL REMAIN

XD = EXISTING SHALL BE REMOVED

XS = EXISTING SHALL BE REPLACED WITH NEW DEVICE IN SAME LOCATION

XN = EXISTING SHALL BE REPLACED WITH NEW DEVICE IN NEW LOCATION

XM= EXISTING SHALL BE MOVED TO NEW LOCATION

XP = EXISTING IN RELOCATED LOCATION

NOTE 1: UNLESS LOCATED WITHIN DEMO AREA, EXISTING ITEMS NOT SHOWN SHALL REMAIN AS INDICATED

NOTE 2: THE REMOVAL, REPLACEMENT, OR RELOCATION OF EQUIPMENT SHALL BE THE RESPONSABILITY OF THE ELECTRICAL CONTRACTOR, UON.

#21-1262