

SITE PLAN AND FINAL CONSTRUCTION PLANS

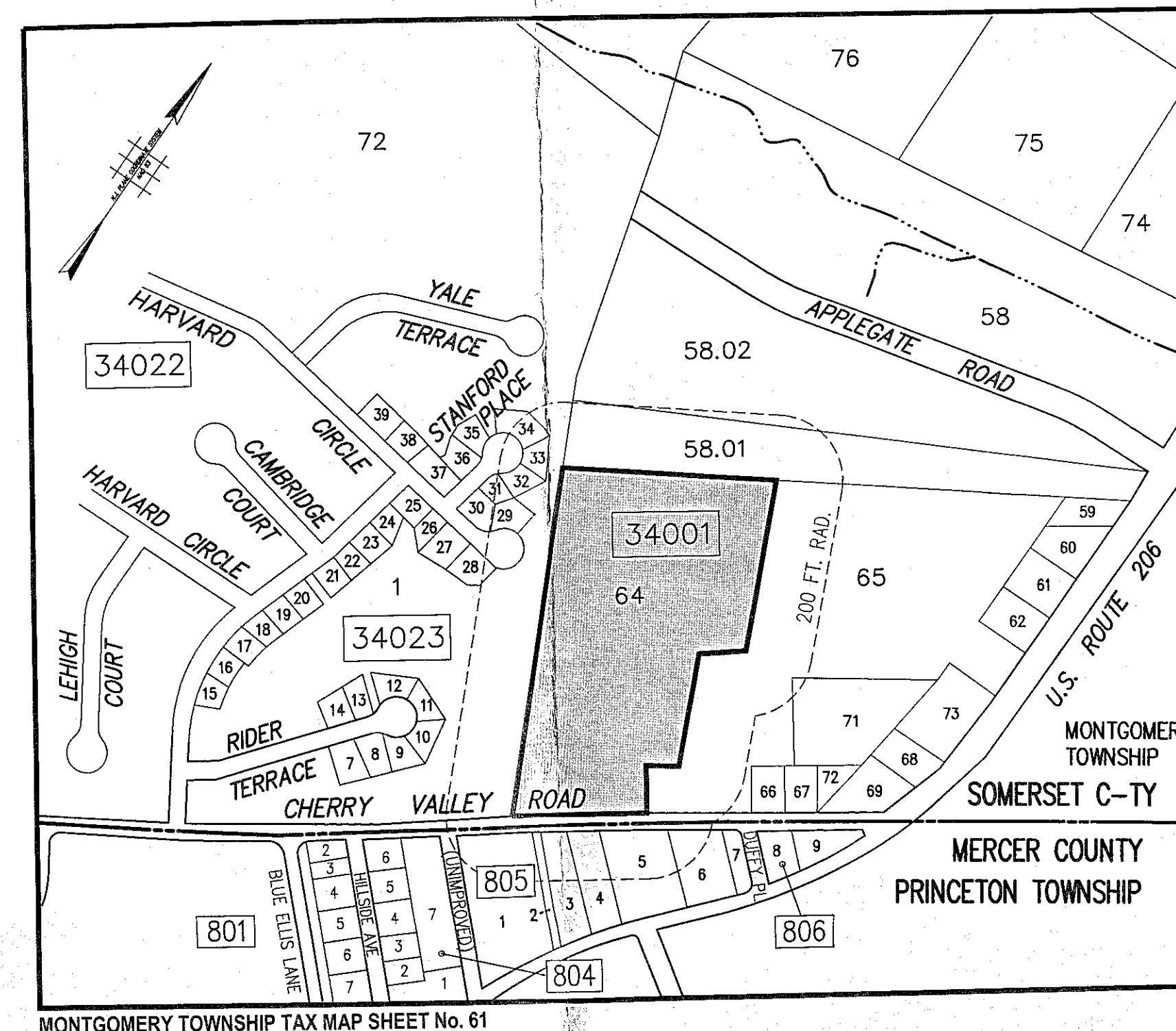
PREPARED FOR

PRINCETON AUDI SERVICE CENTER LOT 64 IN BLOCK 34001

SITUATED IN

MONTGOMERY TOWNSHIP,
SOMERSET COUNTY, NEW JERSEY

200' PROPERTY OWNERS LIST	
MONTGOMERY TOWNSHIP	
BLOCK 34023	
LOT 1	WOODSEDGE HOMEOWNERS ASSN INC
LOT 28	GALLANT, WILLIAM H & CAROL CHIBBARO
LOT 29	PARAYNO, VICENTE M & EPIFANIA C
LOT 30	DOLAN, SUSAN A
LOT 31	BREYER, SCOTT J & CONSTANCE
LOT 32	ORVOS, JOHN P
LOT 33	FREUNDLICH, JOEL S. & KAREN M.
LOT 34	LIPOVETSKIY, Y. & LIPOVETSKAYA, L. ETAL
BLOCK 34001	
LOT 58.01	ROSEN FAMILY PARTNERSHIP
LOT 58.02	
LOT 65	PSE&G CO TAXDEPT T-6B
LOT 66	GORMAN, MARK & HOPE
LOT 71	PSE&G CO TAXDEPT T-6B
PRINCETON TOWNSHIP	
BLOCK 805	
LOT 1	ORTEK OF NEW JERSEY
LOT 2	PETROLENE INC C/O WHALECO FUEL
LOT 3	THE BOO OF WOODBRIDGE, INC
LOT 4	PRINCETON HARDWARE INC., LUTHER
LOT 5	M&S INVESTMENTS C/O WEISS PROP
LOT 6	DRIMMER MARC A & LINDA



KEY MAP
SCALE: 1"=400'

PREPARED BY
VAN CLEEF ENGINEERING ASSOCIATES
P.O. BOX 5877
32 BROWER LANE,
HILLSBOROUGH, NEW JERSEY 08844

INDEX OF SHEETS

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13. CUT & FILL ANALYSIS PLAN

OWNER

NORTH PRINCETON PROFESSIONAL CENTER, LLC
353 NASSAU STREET
PRINCETON, N.J. 08540
(609) 924-2884

APPLICANT

EMPIRE HOLDINGS CHERRY VALLEY 39, LLC
959 ROUTE 206
PRINCETON, N.J. 08540
(609) 988-3100

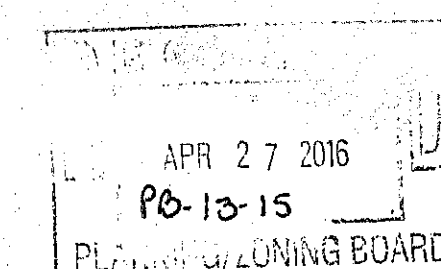
MONTGOMERY TOWNSHIP APPROVALS

APPLICATION NO. _____
APPROVED BY: _____

CHAIRPERSON - PLANNING BOARD _____ DATE _____

SECRETARY - PLANNING BOARD _____ DATE _____

TOWNSHIP ENGINEER _____ DATE _____



		DATE: NOVEMBER 10, 2015
		SCALE: ---
		DESIGNED BY: R.B.H.
		DRAWN BY: A.B.
PER TOWNSHIP	R.B.H.	4/19/16
PER TOWNSHIP	C.R.A.	3/4/16
	CHECKED BY: R.B.H.	
REVISIONS	AUTH.	DATE
		JOB No. 0142M-A

BY: *Robert B. Heibel*
Robert B. Heibel

New Jersey Professional Engineer
And Land Surveyor No. 20792

Van Cleef
ENGINEERING ASSOCIATES

OFFICES THROUGHOUT
NJ, EASTERN PA AND DE

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Consulting Civil Engineering
Environmental Engineering
Municipal Engineering
Land Surveying
Professional Planning
Landscape Architecture

NJ LLC CERT. No. 245A2813200

COVER SHEET

FOR
PRINCETON AUDI SERVICE CENTER
LOT 64 IN BLOCK 34001
MONTGOMERY TOWNSHIP,
SOMERSET COUNTY, NEW JERSEY

1



NOTES:

1. THIS SURVEY HAS BEEN PREPARED IN ACCORDANCE WITH TITLE COMMITMENT NO. CAP2491(0), ISSUED BY CAPITAL TITLE AGENCY INC. DATED JULY 23, 2002 AND IS SUBJECT TO THE FINDINGS OF SAME.
2. TOPOGRAPHY AND PHYSICAL FEATURES SHOWN AS TAKEN FROM TOPOGRAPHIC MAPPING BY ATLANTIS AERIAL SURVEY CO. INC. FROM AERIAL PHOTOGRAPHY FLOWN FEBRUARY-10, 1999 WITH GROUND CONTROL IN HAND BE AND MAD BLS.
3. NO FIELD EDITING OF TOPOGRAPHY OR PHYSICAL FEATURES HAVE BEEN MADE BY VAN CLEEF ENGINEERING ASSOCIATES.
4. SURVEYED PREMISES SUBJECT TO THE RIGHT OF THE PUBLIC IN CHERRY VALLEY ROAD.
5. PER P.O. DEED LOT 64 EASTERLY LINE IS 80'± ALONG SEVERAL COURSES NO BEARING AND DISTANCES GIVEN. THIS SURVEY IS HOLDING ADJOINING LOT 70, BLOCK 34001 DEED LINES AS RECORDED IN DEED BOOK 1776, PAGE 817.

- LEGEND:**
- WETLAND LIMIT LINE
 - WETLAND BUFFER LINE
 - 100 YEAR FLOOD LINE +/-
 - SOIL LIMIT LINE
 - SOIL TYPE
 - LOT LINE
 - EASEMENT LINE
 - CONTOUR LINE
 - TREE LINE
 - STORM SEWER
 - SANITARY SEWER
 - CURB LINE
 - EDGE OF PAVEMENT
 - WATER MAIN
 - FIRE HYDRANT
 - WATER VALVE
 - GAS VALVE
 - UTILITY POLE
 - SPOT GRADE
 - WETLAND AREAS

ReB
REACTIVE SILT LOAM
FLOOD PLAIN SOILS ~ NO NATURAL FLOODING
SEASONAL HIGHWATER ~ 2' - 3'
STEEP SLOPES ~ 2% - 6%
DEPTH OF BEDROCK ~ 1 1/2' - 3 1/2'
HYDROLOGIC SOILS ~ C
GROUNDWATER GEOLOGY ~ BRUNSWICK SHALE
SEPTIC SUITABILITY ~ SEVERE

LhB
LEHIGH SILT LOAM
SEASONAL HIGHWATER ~ 1 1/2' - 4'
STEEP SLOPES ~ 2% - 6%
DEPTH OF BEDROCK ~ 3 1/2' - 5'
HYDROLOGIC SOILS ~ C
GROUNDWATER GEOLOGY ~ BRUNSWICK SHALE

Existing Tree Data			EXISTING TREE DATA		
Existing Tree Number	Caliper (Inches)	Species	Existing Tree Number	Caliper (Inches)	Species
601	8+	Ash	722	10	Ash
602	8+	White Pine	723	8	Red Maple
603	8+	White Pine	724	8	Red Maple
604	8+	White Pine	725	8	Red Maple
605	8+	Ash	726	8	Red Maple
606	8+	Ash	727	9	Red Maple
607	8+	White Pine	728	9	Red Maple
608	8+	White Pine	729	8	Cherry
609	8+	Ash	730	10	Red Maple
610	8+	Norway Maple	731	9	Pin Oak
611	8+	White Pine	732	8	Ash
612	8+	Red Maple	733	8	Red Maple
613	8+	White Pine	734	9	Pin Oak
616	8+	Black Alder	735	9	Red Maple
617	8+	Crab Apple	736	8	Red Maple
618	8+	Cherry	737	12	Red Maple
619	8+	Pear	738	17	Red Maple
620	8+	Ash	739	8	Red Maple
621	8+	Cherry	740	9	Red Maple
622	8+	Cherry	741	8	Red Maple
623	8+	Mulberry	742	8	Red Maple
624	8+	Crab Apple	743	8	Red Maple
625	8+	Cherry	744	9	Red Maple
626	8+	Sassafras	745	8	Red Maple
627	8+	Cherry	746	10	Red Maple
628	8+	Crabapple	747	10	Black Alder
629	8+	Mulberry	748	9	Cherry
630	8+	Crabapple	749	9	Cherry
631	8+	Box Elder	750	10	Cherry
632	8+	Red Maple	751	8	Cherry
633	8+	Crabapple	752	8	Red Maple
634	8+	Cherry	753	9	Ash
635	8+	Red Maple	754	9	Red Maple
636	8+	Red Maple	755	8	Black Alder
637	8+	Black Alder	756	8	Red Maple
638	8+	Ash	757	12	Red Cedar
639	8+	Ash	758	8	Ash
640	8+	Red Maple	759	9	Red Maple
641	8+	Red Cedar	760	9	Red Maple
642	8+	Red Maple	761	11	Red Maple
643	8+	Red Cedar	762	12	Red Maple
644	8+	Red Cedar	763	8	Red Maple
645	8+	Box Elder	764	8	Red Maple
646	8+	Box Elder	765	9	Red Maple
647	8+	Box Elder	766	8	Ash
649	8+	Ash	767	11	Red Maple
650	8+	Cherry	768	8	Ash
651	8+	Red Cedar	769	8	Red Maple
652	8+	Red Maple	770	8	Red Maple
653	8+	Black Alder	771	8	Ash
654	8+	Red Maple	772	9	Red Cedar
655	8+	Red Maple	773	8	Ash
656	8+	Red Maple	774	8	Red Maple
657	8+	Red Maple	775	10	Red Maple
658	8+	Red Maple	776	10	Red Maple
659	8+	Red Maple	777	13	Red Maple
660	8+	Black Alder	778	8	Red Maple
661	8+	Red Cedar	779	8	Ash
662	8+	Norway Maple	780	8	Ash
663	8+	Ash	781	8+	Sassafras
665	8+	Red Maple	782	8	Cherry
666	8+	Ash	783	12	Sassafras
667	8+	Cherry	784	11	Sassafras
669	8+	Ash	785	11	Sassafras
670	8+	Cherry	786	12	Cherry
671	8+	Ash	787	8	Cherry
672	8+	Cherry	788	10	Sassafras
673	8	Ash	789	24	Ash
674	12	Cherry	790	12	Red Maple
675	8	Ash	791	10	Ash
676	8	Red Maple	792	8	Red Maple
677	8	Ash	793	9	Red Maple
678	9	Ash	794	11	Ash
679	10	Red Maple	795	8	Ash
680	8	Ash	796	9	Ash
681	9	Ash	797	10	Ash
682	8	Red Cedar	798	13	Cherry
683	10	Red Cedar	799	8	Ash
684	8	Red Maple	800	11	Ash
685	8	Red Maple	801	13	Pin Oak
686	8	Ash	802	10	Red Maple
687	8	Red Maple	803	8	Red Maple
688	12	Pin Oak	804	8	Pin Oak
689	12	Red Maple	805	10	Red Maple
690	9	Red Maple	806	10	Pin Oak
691	11	Ash	807	10	Ash
692	10	Red Maple	808	8	Ash
693	11	Black Alder	809	8	Red Maple
694	11	Ash	810	10	Ash
695	8	Red Maple	811	10	Red Maple
696	9	Red Maple	812	8	Red Maple
697	8	Cherry	813	8	Red Maple
698	10	Red Maple	814	8	Red Maple
699	8	Red Maple	815	9	Ash
700	8	Red Maple	816	10	Ash
701	9	Black Alder	817	8	Ash
702	8	Black Alder	818	8	Red Maple
703	21	Ash	819	8	Red Maple
704	12	Cherry	820	8	Cherry
706	10	Red Maple	821	8	Cherry
707	11	Red Cedar	822	12	Ash
708	11	Red Cedar	823	11	Pin Oak
709	8	Red Maple	824	8	Red Maple
710	8	Red Maple	825	8	Red Maple
711	8	Pin Oak	826	8	Red Maple
712	8	Red Maple	827	11	Red Maple
713	8	Red Maple	828	12	Red Maple
714	11	Ash	829	9	Red Maple
715	9	Ash	830	9	Red Maple
716	11	Ash	831	14	Ash
717	8	Red Maple	832	12	Red Cedar
718	8	Red Maple	833	8	Red Maple
719	8	Red Maple	834	8	Red Maple
720	8	Ash	835	8	Pin Oak
			836	13	Red Maple
			837	11	Red Maple
			838	11	Pin Oak
			839	8	Red Maple

NOTE: EXISTING TREE SPECIES DETERMINED BY CATHERS & ASSOCIATES, INC.

DATE: NOVEMBER 10, 2015

SCALE: 1" = 60'

DESIGNED BY: R.B.H.

DRAWN BY: A.B.

CHECKED BY: R.B.H.

JOB No. 0142M-A

PER TOWNSHIP

REVISIONS

AUTH. DATE

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EXISTING FEATURES PLAN AND EXISTING TREE SURVEY

FOR

PRINCETON AUDI SERVICE CENTER

LOT 64 IN BLOCK 34001

MONTGOMERY TOWNSHIP,

SOMERSET COUNTY, NEW JERSEY

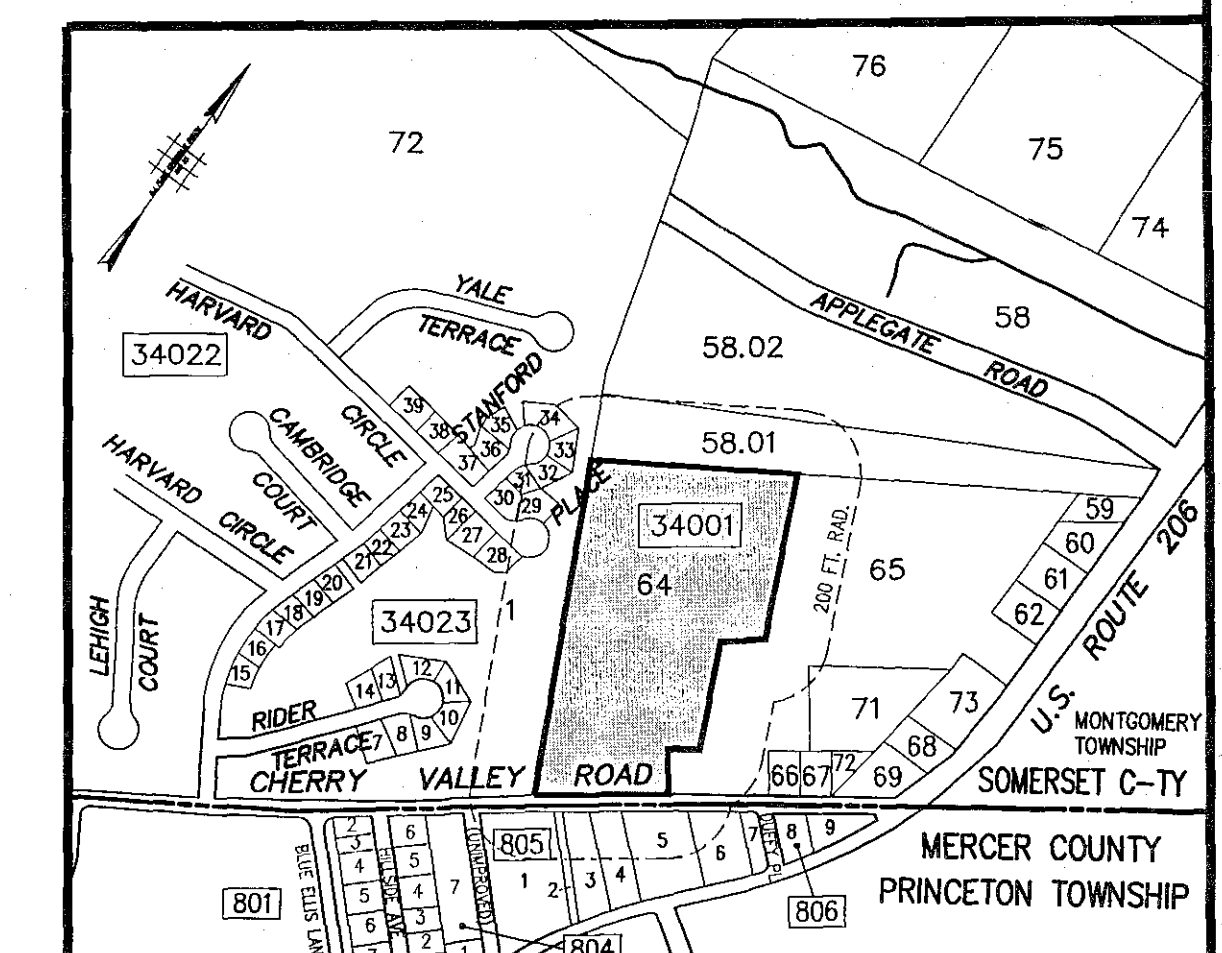
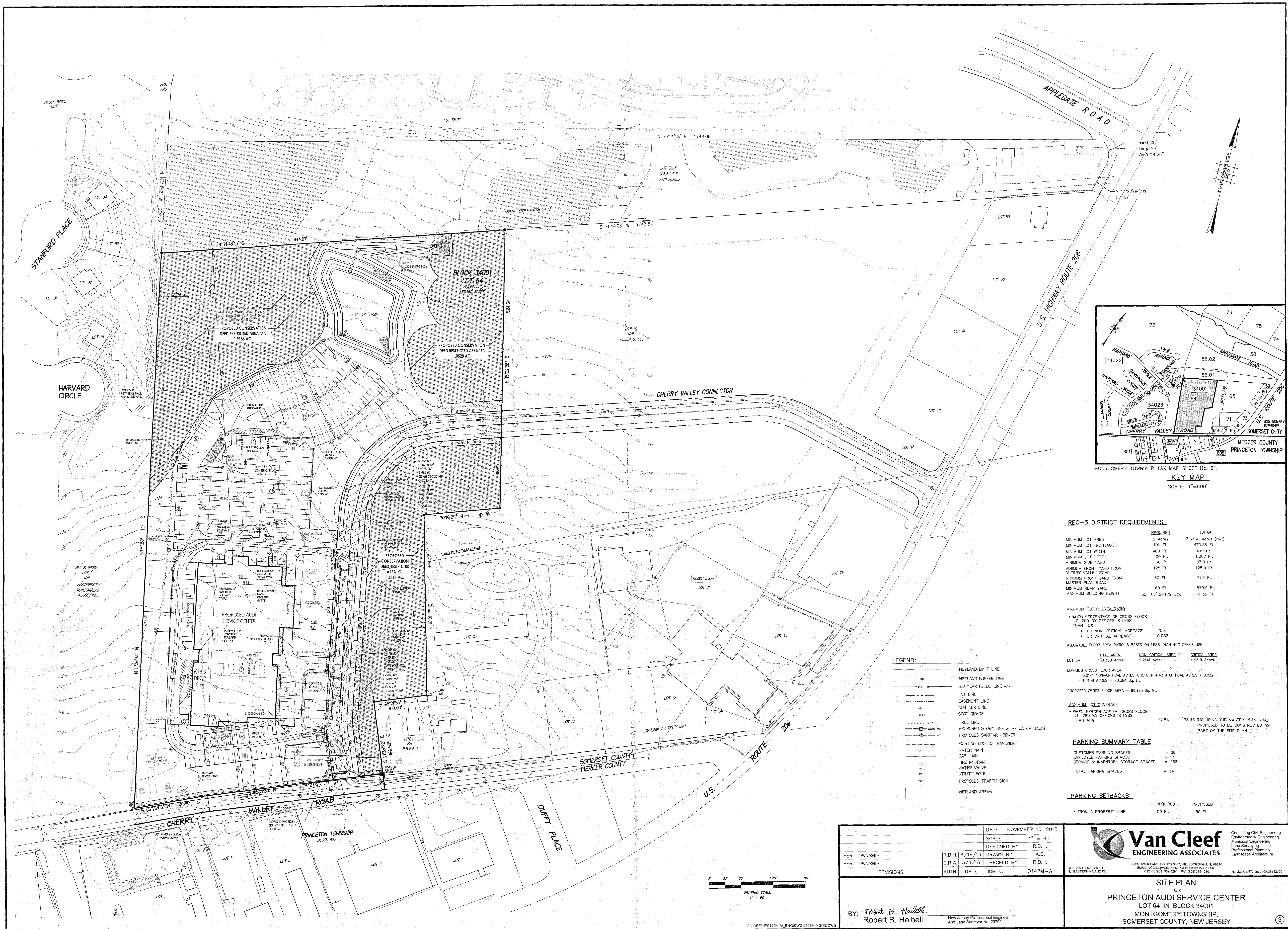
BY: Robert B. Heibel

Robert B. Heibel

New Jersey Professional Engineer
And Land Surveyor No. 20792

FILE NO. 0142M-A

FILE NO. 0142M-A



REO-3 DISTRICT REQUIREMENTS

	REQUIRED	LOT 64
MINIMUM LOT AREA	5 Acres	13,636 Acres (Met)
MINIMUM LOT FRONTAGE	400 FT.	470.56 FT.
MINIMUM LOT WIDTH	400 FT.	449 FT.
MINIMUM LOT DEPTH	400 FT.	1,007 FT.
MINIMUM SIDE YARD	60 FT.	97.0 FT.
MINIMUM FRONT YARD FROM CHERRY VALLEY ROAD	125 FT.	125.9 FT.
MINIMUM FRONT YARD FROM MASTER PLAN ROAD	60 FT.	71.6 FT.
MINIMUM REAR YARD	60 FT.	579.9 FT.
MAXIMUM BUILDING HEIGHT	35 Ft. / 2-1/2 Sts.	< 35 Ft.

MAXIMUM FLOOR AREA RATIO

- WHEN PERCENTAGE OF GROSS FLOOR UTILIZED BY OFFICES IS LESS THAN 40%
 - FOR NON-CRITICAL ACREAGE 0.16
 - FOR CRITICAL ACREAGE 0.032

ALLOWABLE FLOOR AREA RATIO IS BASED ON LESS THAN 40% OFFICE USE

	TOTAL AREA	NON-CRITICAL AREA	CRITICAL AREA
LOT 64	13,636 Acres	9,214 Acres	4,421 Acres

MAXIMUM GROSS FLOOR AREA = 9,214 NON-CRITICAL ACRES X 0.16 + 4,421 CRITICAL ACRES X 0.032 = 1,615.8 ACRES = 70,384 Sq. Ft.

PROPOSED GROSS FLOOR AREA = 66,175 Sq. Ft.

MAXIMUM LOT COVERAGE

- WHEN PERCENTAGE OF GROSS FLOOR UTILIZED BY OFFICES IS LESS THAN 40%
 - 37.5% 35.4% INCLUDING THE MASTER PLAN ROAD PROPOSED TO BE CONSTRUCTED AS PART OF THE SITE PLAN

PARKING SUMMARY TABLE

CUSTOMER PARKING SPACES	= 36
EMPLOYEE PARKING SPACES	= 17
SERVICE & INVENTORY STORAGE SPACES	= 288
TOTAL PARKING SPACES	= 341

PARKING SETBACKS

	REQUIRED	PROPOSED
• FROM A PROPERTY LINE	50 FT.	50 FT.

DATE: NOVEMBER 10, 2015	SCALE: 1" = 60'
DESIGNED BY: R.B.H.	DRAWN BY: A.B.
CHECKED BY: R.B.H.	JOB No. 0142M-A
PER TOWNSHIP	R.B.H. 4/19/16
PER TOWNSHIP	C.R.A. 3/4/16
REVISIONS	AUTH. DATE

BY: Robert B. Heibell
Robert B. Heibell
New Jersey Professional Engineer
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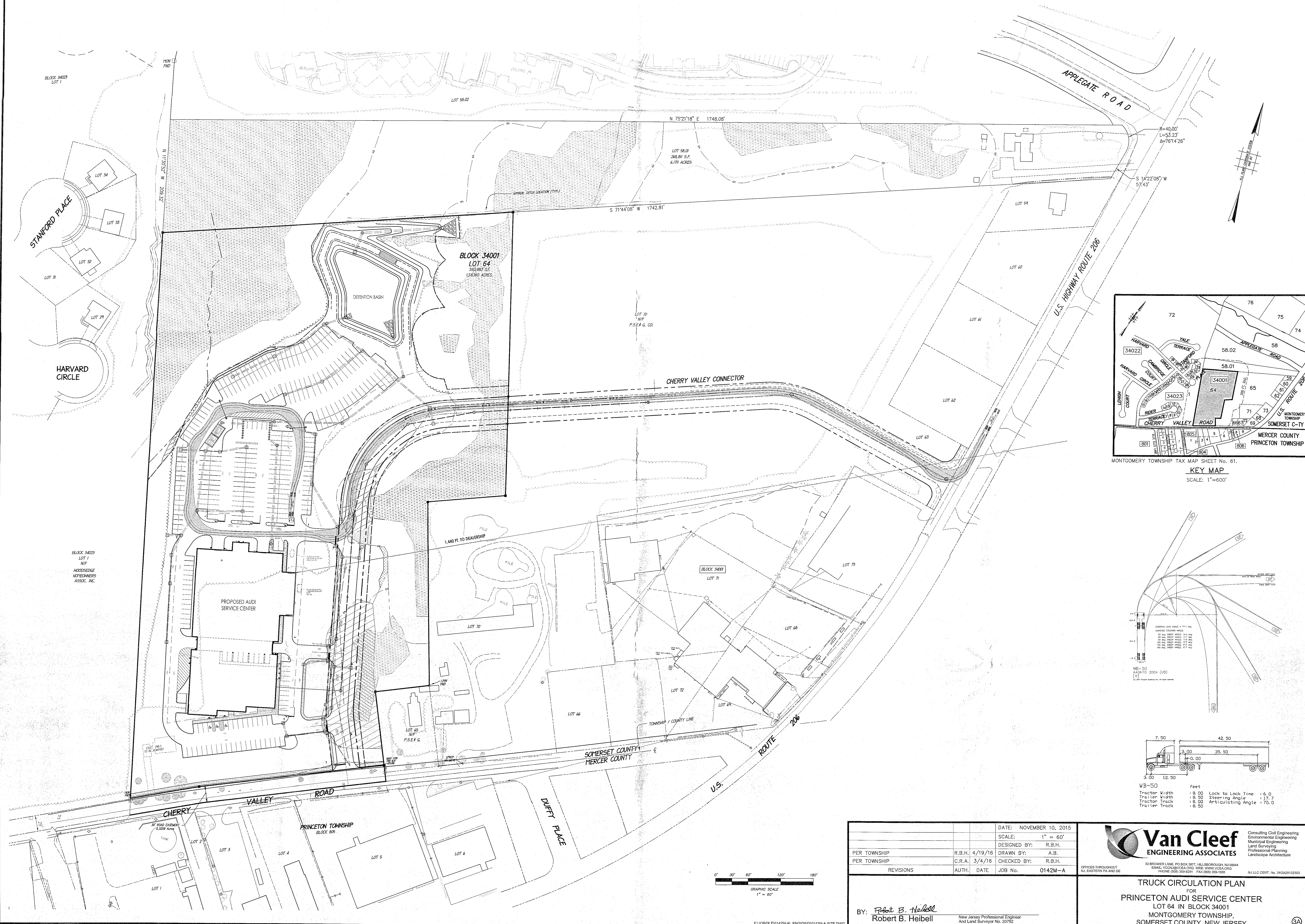
Van Cleef
ENGINEERING ASSOCIATES

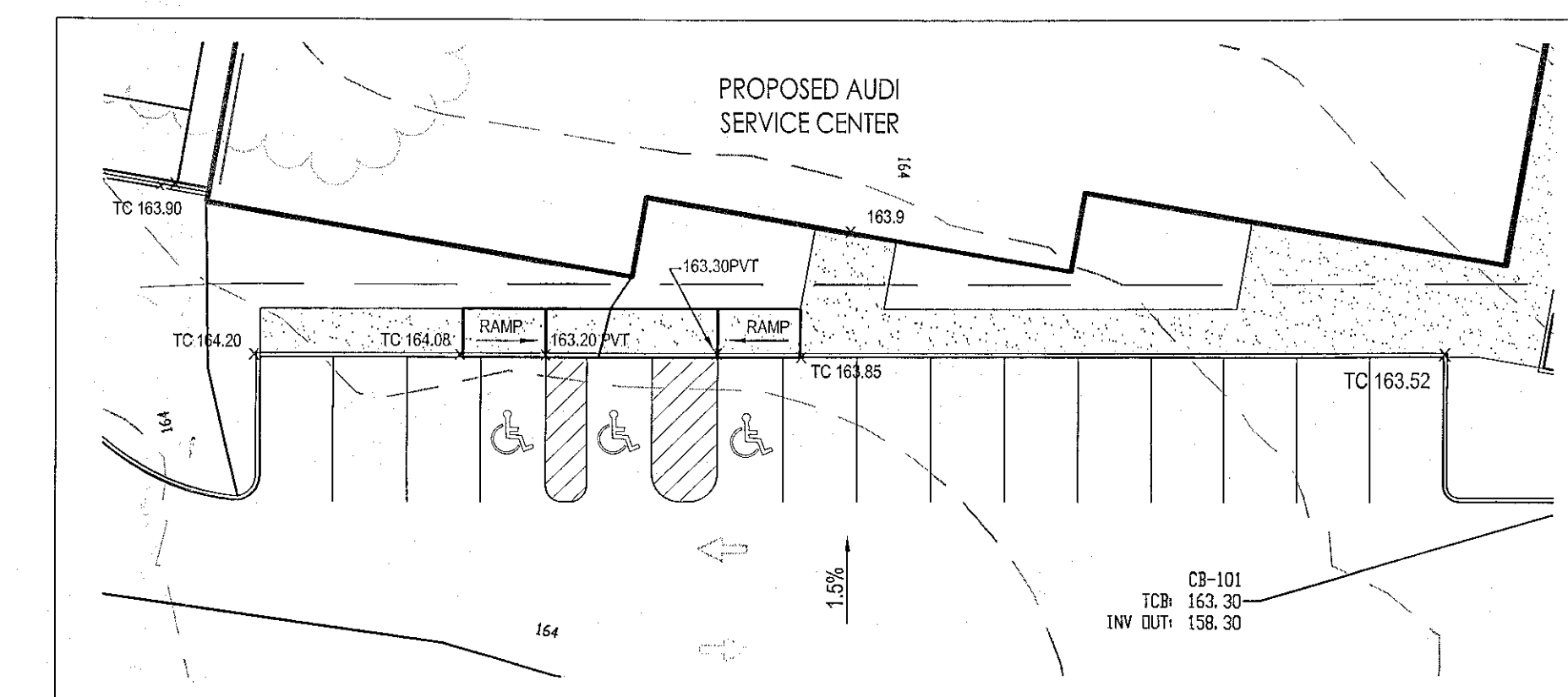
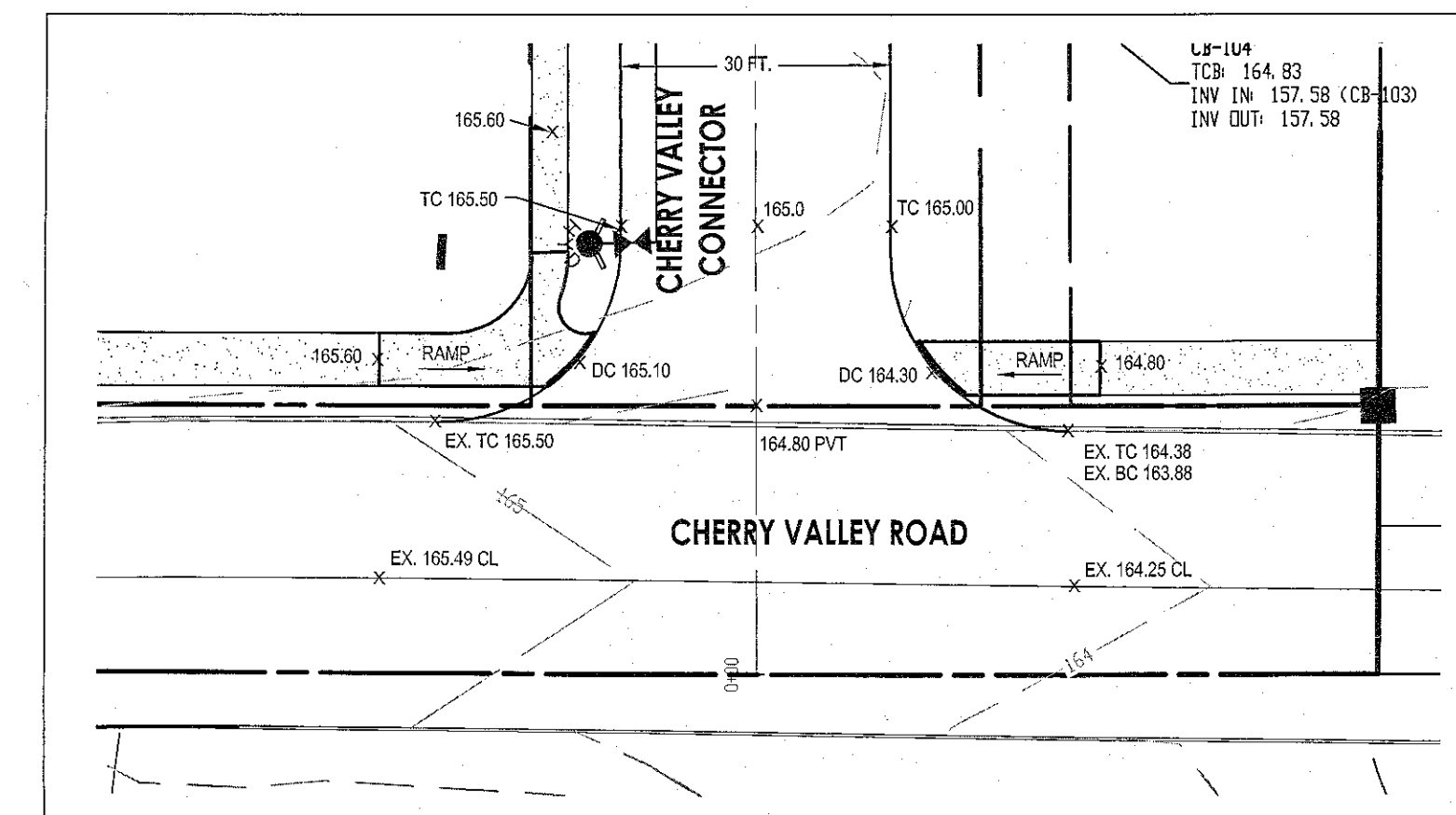
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OFFICES THROUGHOUT NJ, EASTERN PA AND DE

SITE PLAN
FOR
PRINCETON AUDI SERVICE CENTER
LOT 64 IN BLOCK 34001
MONTGOMERY TOWNSHIP,
SOMERSET COUNTY, NEW JERSEY

FILE NO. 0025-X



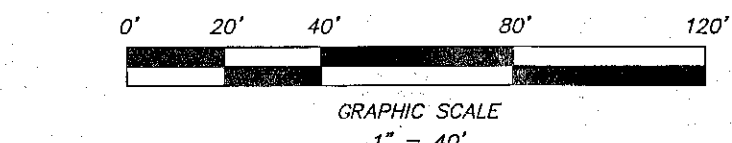


NOTES

1. TOTAL LAND AREA TO BE DISTURBED = 8.4 ACRES.
2. AREA OF PROPOSED IMPERVIOUS SURFACES: 4.83 ACRES = 35.4% OF GROSS LOT AREA.
3. ALL LAWN AREAS SHALL BE GRADED AT MINIMUM 2 PERCENT SLOPE.
4. ALL PAVED AREAS ON THE PROPOSED PARKING LOT SHALL BE PAVED WITH A MINIMUM SLOPE OF 1 PERCENT.
5. ROOF LEADERS SHALL TIE INTO THE STORM SEWER SYSTEM.
6. A FOUNDATION LOCATION PLAN SHALL BE SUBMITTED TO MONTGOMERY TOWNSHIP PRIOR TO THE CONSTRUCTION OF THE SUPERSTRUCTURE.
7. ALL HANDICAP RAMPS SHALL MEET THE REQUIREMENTS OF ADA STANDARDS FOR HANDICAPPED ACCESS.
8. MAXIMUM PROPOSED GRADING SLOPE ON THE SITE IS 3 HORIZONTAL TO 1 VERTICAL.
9. ALL EXISTING STRUCTURES SHALL BE REMOVED AND DISPOSED OF PROPERLY AND BACKFILLED WITH MATERIAL TO PROVIDE A 95% COMPACTION RATING.
10. STANDARD HEIGHT OF PROPOSED CURB IS 6 INCHES.
11. ALL PROPOSED LAWN AREAS TO BE GRADED WITH LIGHT WEIGHT CONSTRUCTION EQUIPMENT, BOMBAY, SKIDSTEER, T-SERIES OR EQUIVALENT.
12. AN AS BUILT PLAN CERTIFIED BY A PROFESSIONAL LAND SURVEYOR SHALL BE SUPPLIED AT THE COMPLETION OF CONSTRUCTION.
13. A NEW JERSEY PROFESSIONAL ENGINEER SHALL CERTIFY THE CONSTRUCTED IMPROVEMENTS ARE BUILT IN ACCORDANCE WITH THE APPROVED PLANS.

LEGEND:

- WETLAND LIMIT LINE
- WETLAND BUFFER LINE
- 100 YEAR FLOOD LINE +/-
- LOT LINE
- EASEMENT LINE
- CONTOUR LINE
- SPOT GRADE
- TREE LINE
- PROPOSED STORM SEWER W/ CATCH BASIN
- INLET PROTECTION
- PROPOSED SANITARY SEWER
- EXISTING EDGE OF PAVEMENT
- WATER MAIN
- GAS MAIN
- FIRE HYDRANT
- WATER VALVE
- UTILITY POLE
- PROPOSED TRAFFIC SIGN
- WETLAND AREAS
- TEMP. TOPSOIL STOCK PILE
- TEMP. STABILIZED ENTRANCE



PER TOWNSHIP	R.B.H. 4/19/16	DATE: NOVEMBER 10, 2015
PER TOWNSHIP	C.R.A. 3/4/16	SCALE: 1" = 40'
REVISED PER SUSCD COMMENTS	C.R.A. 1/19/16	DESIGNED BY: C.R.A.
REVISED PER SUSCD COMMENTS	C.R.A. 12/8/15	DRAWN BY: A.B.
REVISIONS	AUTH.	DATE
		JOB No. 0142M-A

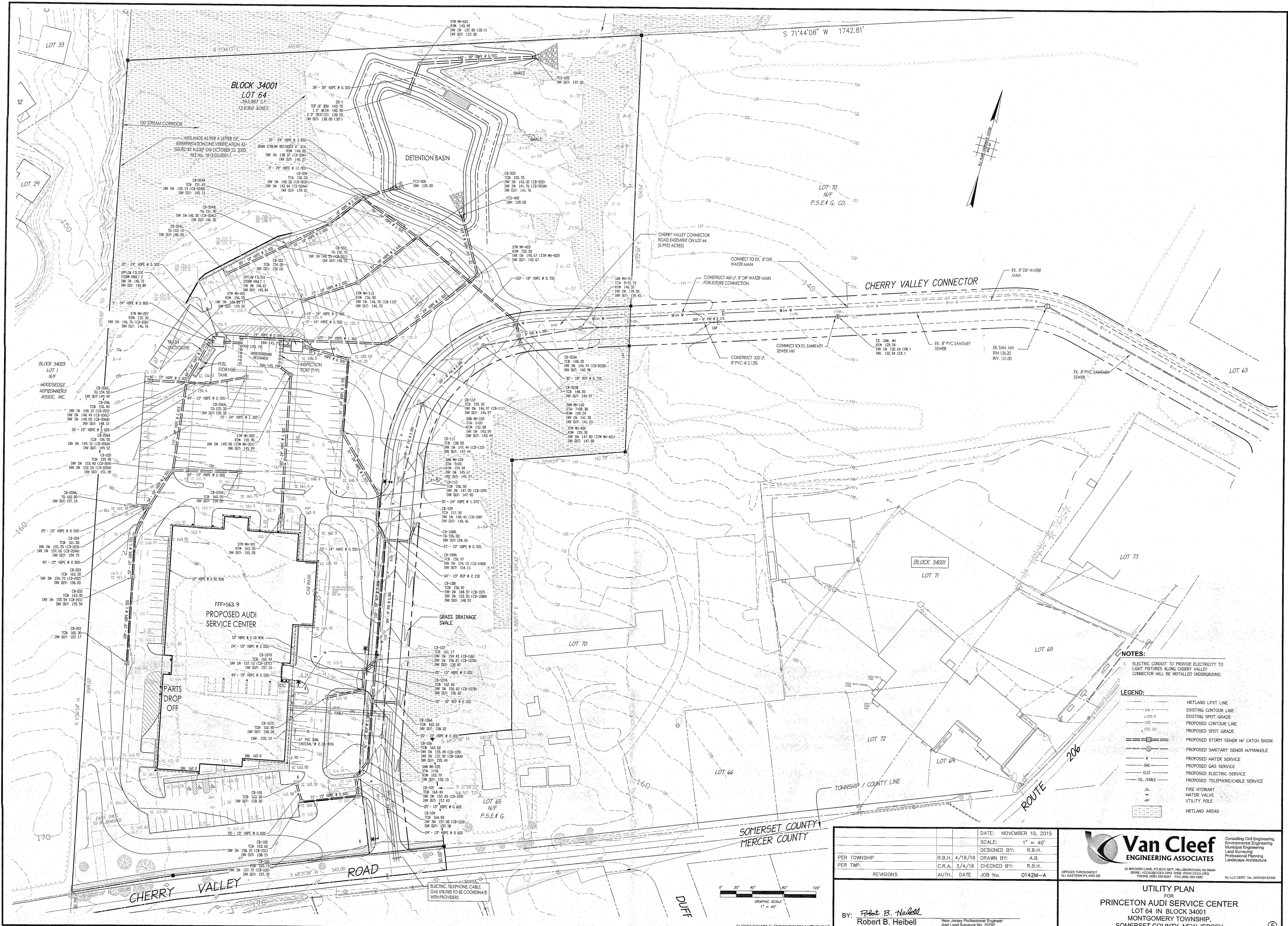
BY: **Robert B. Heibell**
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New Jersey Professional Engineer
And Land Surveyor No. 20792

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GRADING, DRAINAGE AND SOIL EROSION
& SEDIMENT CONTROL PLAN
FOR
PRINCETON AUDI SERVICE CENTER
LOT 64 IN BLOCK 34001
MONTGOMERY TOWNSHIP, SOMERSET COUNTY, NEW JERSEY



NOTES:
1. ELECTRIC CONDUIT TO PROVIDE ELECTRICITY TO LIGHT FIXTURES ALONG CHERRY VALLEY CONNECTOR WILL BE INSTALLED UNDERGROUND.

- LEGEND:
- WETLAND LIMIT LINE
 - EXISTING CONTOUR LINE
 - EXISTING SPOT GRADE
 - PROPOSED CONTOUR LINE
 - PROPOSED SPOT GRADE
 - PROPOSED STORM SEWER W/ CATCH BASIN
 - PROPOSED SANITARY SEWER W/ MANHOLE
 - PROPOSED WATER SERVICE
 - PROPOSED GAS SERVICE
 - PROPOSED ELECTRIC SERVICE
 - PROPOSED TELEPHONE/CABLE SERVICE
 - FIRE HYDRANT
 - WATER VALVE
 - UTILITY POLE
 - WETLAND AREAS

DATE:	NOVEMBER 10, 2015
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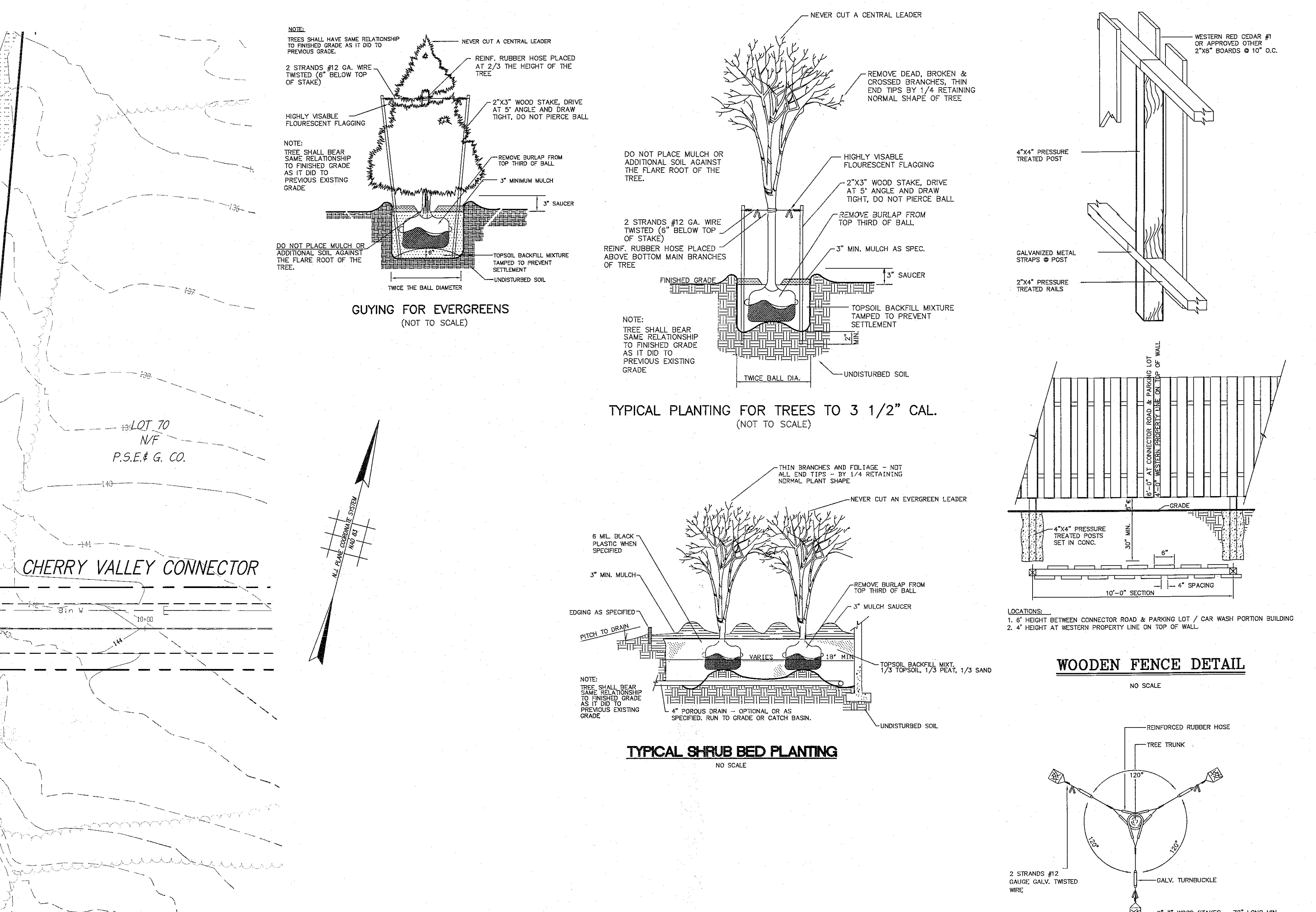
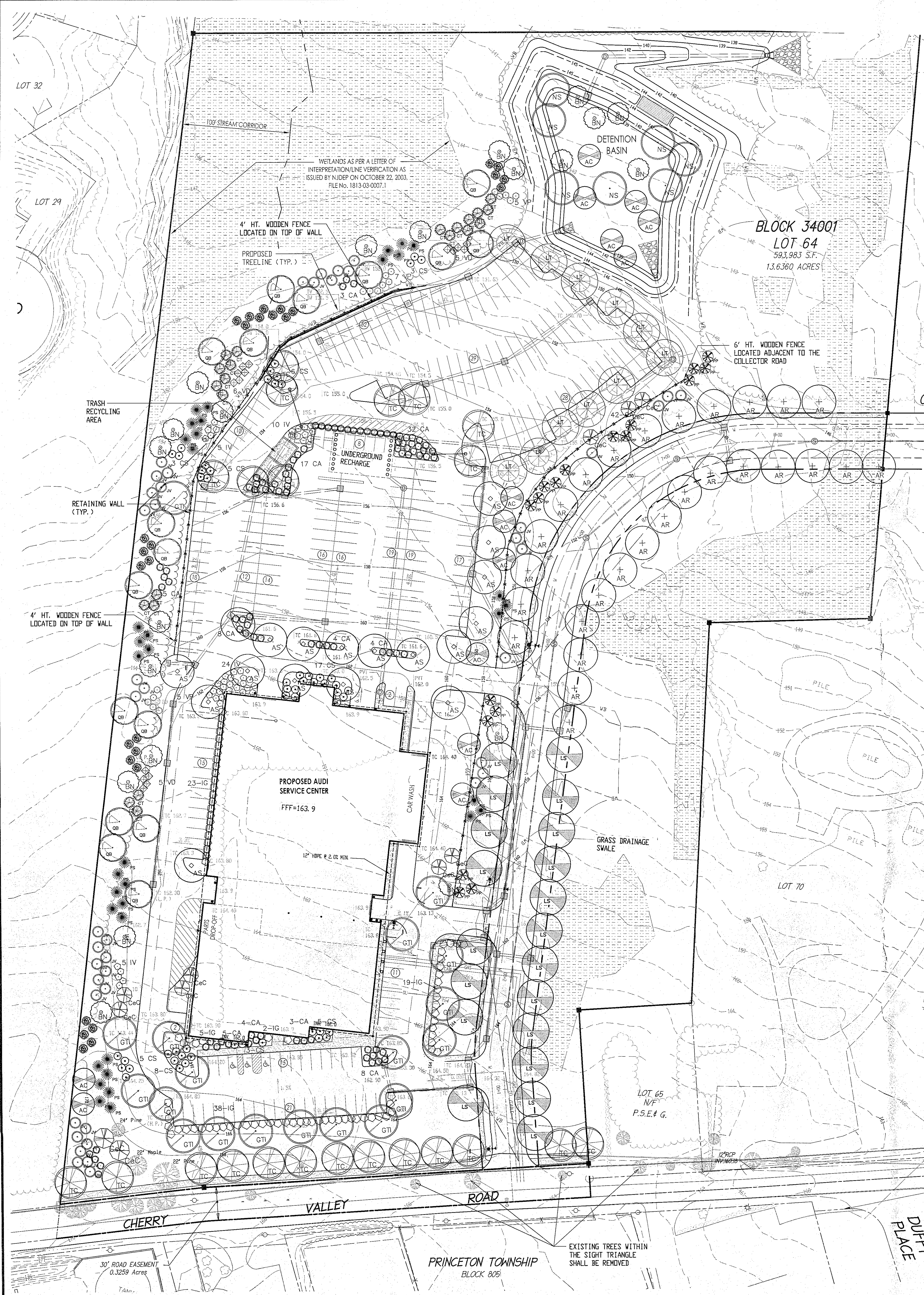
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OFFICES THROUGHOUT
NJ, EASTERN PA AND DE

NJ LLC CERT. No. 24G0213200

UTILITY PLAN
FOR
PRINCETON AUDI SERVICE CENTER
LOT 64 IN BLOCK 34001
MONTGOMERY TOWNSHIP,
SOMERSET COUNTY, NEW JERSEY



LANDSCAPING NOTES:

- STREET TREES AND OTHER REQUIRED PLANT MATERIAL SHALL NOT BE PLANTED UNTIL THE FINISHED GRADING OF THE SITE HAS BEEN COMPLETED. SIX (6") INCHES OF TOPSOIL SHALL BE ADDED THROUGHOUT DISTURBED AREAS TO BRING ELEVATIONS TO FINISHED GRADE. THE MATERIAL MUST MEET THE REQUIREMENTS OF THE NEW JERSEY DEPARTMENT OF TRANSPORTATION, AS AMENDED.
- STREET TREES SHALL BE PROVIDED, AT RIGHT-OF-WAY LINE, 50' O.C. SPACING OF STREET TREES TO BE ADJUSTED WHERE DRIVEWAYS, EASEMENTS, AND/OR LIGHT FIXTURES ARE ENCOUNTERED AT TYPICAL 50' O.C. LOCATION.
- STREET TREES SHALL NOT BE PLANTED OPPOSITE EACH OTHER BUT SHALL ALTERNATE.
- AT INTERSECTIONS, TREES SHALL BE LOCATED NO CLOSER THAN THIRTY (30) FEET FROM THE INTERSECTION OF THE STREET RIGHT-OF-WAY LINES.
- PLANT MATERIAL (TREES) SHALL BE TWICE TRANSPLANTED, NURSERY-GROWN OF SPECIMEN QUALITY. THEY SHALL BE OF SYMMETRICAL GROWTH OR TYPICAL OF THE VARIETY AND SUPPLIED FROM SOURCES IN THE SAME HARDINESS ZONE AS THE DEVELOPMENT IS LOCATED, AND FREE OF INSECT AND DISEASE PROBLEMS. THEY SHALL MEET STANDARDS AS PRESCRIBED BY THE AMERICAN NURSERY ASSOCIATION.
- THE DEVELOPER SHALL BE RESPONSIBLE FOR PLANT MATERIAL FOR A PERIOD OF TWO (2) YEARS FROM THE DATE OF PLANTING. ANY SUCH TREE THAT DIES WITHIN THAT TIME PERIOD SHALL BE REMOVED, INCLUDING THE STUMP, AND BE REPLACED BY A TREE OF SIMILAR SIZE AND SPECIES AT THE EXPENSE OF THE DEVELOPER WITHIN ONE YEAR.
- TREES PLANTED NEAR STREETS, PARKING LOTS AND SIDEWALKS SHALL BE CLEAR OF BRANCHES TO 7' ABOVE GRADE SO AS NOT TO INTERFERE WITH PEDESTRIAN AND VEHICULAR TRAFFIC.
- THE LANDSCAPE PLAN SHALL TAKE PRECEDENCE OVER THE LANDSCAPE SCHEDULE IF ANY DISCREPANCIES ARE EVIDENT BETWEEN THE TWO.
- PLANT MATERIAL SHALL NOT INTERFERE WITH UNDERGROUND UTILITIES OR STORMWATER MANAGEMENT FACILITIES.
- DETENTION BASIN GROUND COVER IS TO BE AS PROVIDED BELOW.
- HYDROSEEDING IS RECOMMENDED FOR ALL GRASS MIXTURES.
- ALL DISTURBED AREAS THAT ARE NOT TO BE PLANTED WITH LANDSCAPE MATERIAL SHALL BE SEED WITH THE FOLLOWING SEED MIXTURE:

SEED MIXTURE	SEEDING RATES	
	LBS./ACRE	LBS./1000 S.F.
SPREADING FESCUE	15	0.3
CHEWING'S RED FESCUE	15	0.3
KENTUCKY BLUEGRASS	25	0.5
PERENNIAL RYEGRASS	10	0.2
- OPTIMUM PLANTING & SEEDING DATES ARE BETWEEN FEBRUARY 15 AND MAY 1 OR BETWEEN AUGUST 15 AND OCTOBER 15.

WAIVERS REQUESTED:

- SECTION 16-5.6.d.3. TO ALLOW THE NUMBER OF SITE TREES REQUIRED TO BE BASED ON THE GROSS TRACT AREA MINUS THE AMOUNT OF THE PROPERTY TO BE PLACED IN DEED CONSERVATION EASEMENTS.
- SECTION 16-5.8.g.3. TO ALLOW LESS THAN THE REQUIRED LANDSCAPED ISLANDS IN THE INTERIOR OF THE PARKING LOT. 334 / 30 SPACES = 11 LANDSCAPED ISLANDS. 16 ISLANDS PROVIDED. THIS IS A HOLDING AREA FOR CARS TO BE SOLD, NOT A PARKING LOT FOR CUSTOMERS.
- SECTION 16-5.4.d.2. FOR STREET LIGHTING ALONG CHERRY VALLEY ROAD. WE PROVIDE A LIGHT AT THE INTERSECTION WITH THE CONNECTOR ROAD, BUT NOT ALONG THE LENGTH OF CHERRY VALLEY ROAD.

STREET TREES REQUIRED:

900' CHERRY VALLEY CONNECTOR X 2 = 1800'
470' CHERRY VALLEY ROAD
STREET TREE REQUIREMENTS: 1 TREE AT 30' MIN. / 50' MAX. INTERVAL ALONG STREETS
2270 L.F. OF PLANTABLE AREA / 50' = 45 TREES REQUIRED
59 STREET TREES PROPOSED

SITE TREES REQUIRED:

13,636 ACRES - 4,586 ACRES IN CONSERVATION DEED RESTRICTED AREAS = 9,050 ACRES X 14 TREES PER ACRE = 127 TREES REQUIRED
144 SITE TREES PROVIDED (189 CANOPY TREES - 45 STREET TREES = 144 SITE TREES PROVIDED)
BUFFER REQUIREMENTS FOR WESTERN PROPERTY LINE: EVERGREEN TREES REQUIRED 10' O.C. FOR THE LENGTH OF THE BUFFER
1,050 L.F. / 10 = 105 EVERGREEN TREES REQ. - 116 EVERGREEN TREES PROVIDED (31 PROVIDED BETWEEN CONNECTOR ROAD & PARKING LOT)

LANDSCAPE SCHEDULE: STREET TREES

SYMBOL	QUANTITY	BOTANICAL NAME	COMMON NAME	MINIMUM SIZE	REMARKS
LARGE TREES					
AS	18	ACER SACCHARUM	SUGAR MAPLE	2 1/2" - 3" CAL., 14'-18' HT.	B&B
AR	27	ACER RUBRUM	RED MAPLE	2 1/2" - 3" CAL., 14'-18' HT.	B&B
GT	19	GLEDITSIA TRIACANTHOS INERMIS	THORNLESS HONEY LOCUST	2 1/2" - 3" CAL., 14'-18' HT.	B&B
LT	10	LIRODENDRON TULIPIFERA	TULIP POPLAR	2 1/2" - 3" CAL., 14'-18' HT.	B&B
LS	20	LIQUIDAMBAR STYRACIFLUA ROTUNDFOLIA	SWEET GUM	2 1/2" - 3" CAL., 14'-18' HT.	B&B
NS	7	NYSSA SYLVATICA	BLACKGUM	2 1/2" - 3" CAL., 14'-18' HT.	B&B
TC	26	TILIA AMERICANA	AMERICAN BASSWOOD	2 1/2" - 3" CAL., 14'-18' HT.	B&B
QB	17	QUERCUS BICOLOR	SWAMP WHITE OAK	2 1/2" - 3" CAL., 14'-18' HT.	B&B
SMALL TREES					
AC	14	AMELANCHIER CANADENSIS	SERVICEBERRY	6"-8" HT.	B&B
BN	20	BETULA NIGRA "DURA HEAT"	DURA HEAT RIVER BIRCH	6"-8" HT.	B&B
CeC	11	CERCIS CANADENSIS	REDBUD	6"-8" HT.	B&B
EVERGREEN TREES					
CT	25	CHAMAECYPARIS THYOIDES	ATLANTIC WHITE CEDAR	6"-8" HT.	B&B
JV	42	JUNIPERUS VIRGINIANA	RED CEDAR	6"-8" HT.	B&B
PP	18	PICEA PUNGENS	COLORADO SPRUCE	6"-8" HT.	B&B
IO	29	ILEX OPACA	AMERICAN HOLLY	6"-8" HT.	B&B
PS	37	PINUS STROBUS	WHITE PINE	6"-8" HT.	B&B
SHRUBS					
CA	98	Cornus amomum	Silky Dogwood	18"-24" HT.	CONTAINER
CS	55	Cornus sericea	Redosier Dogwood	18"-24" HT.	CONTAINER
IG	64	Ilex glabra 'Shamrock'	Shamrock Inkberry	18"-24" HT.	CONTAINER
IV	44	Ilex verticillata	Winterberry Holly	18"-24" HT.	CONTAINER
VD	17	Viburnum dentatum	Arrowwood Viburnum	24"-36" HT.	CONTAINER
VP	16	Viburnum prunifolium	Blackhaw Viburnum	24"-36" HT.	CONTAINER

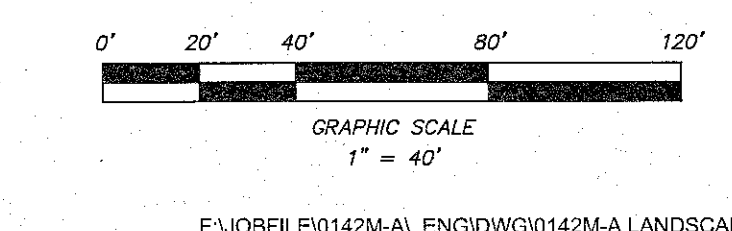
PER TOWNSHIP	R.B.H. 4/19/16	DESIGNED BY:	KAK
REV. PER TWP. LANDSC. ARCH. LETTER 3-21-16	KAK 3/22/16	DRAWN BY:	KAK
REV. PER TWP. PLANNER & LANDSC. ARCH.	KAK 3/4/16	CHECKED BY:	R.B.H.
REVISIONS	AUTH. DATE	JOB No.	0142M-A
BY: Kevin Kester	New Jersey Certified Landscape Architect No. AS-000540	DATE: NOVEMBER 10, 2015	SCALE: 1" = 40'
BY: Robert B. Heibell	New Jersey Professional Engineer And Land Surveyor No. 20732		

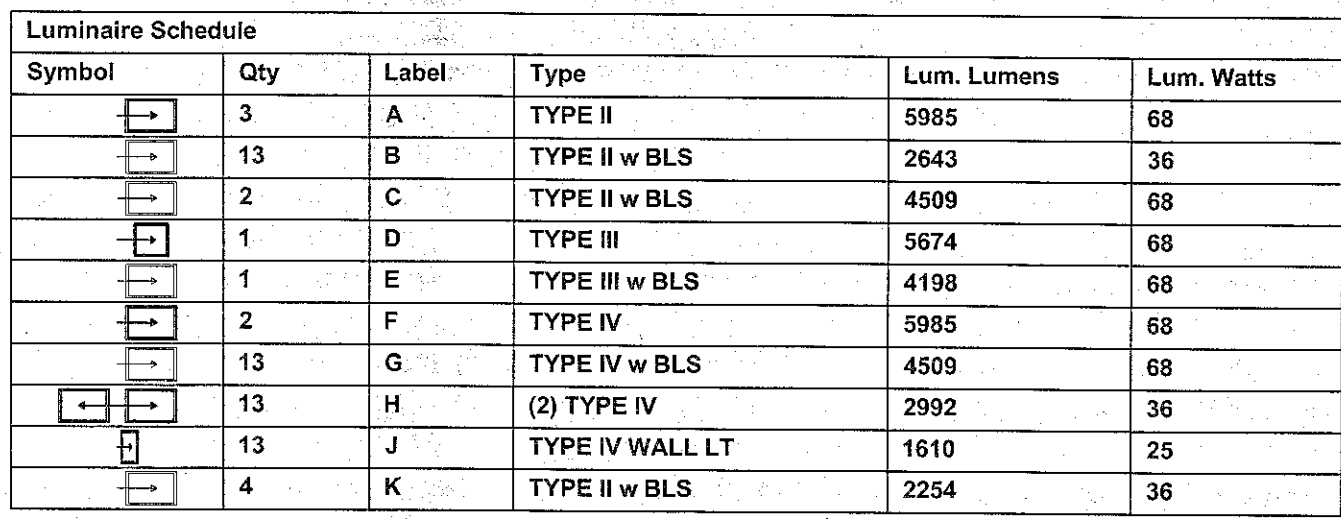
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OFFICES THROUGHOUT NJ, EASTERN PA AND DE NJ LLC CERT. No. 24628132300

LANDSCAPE PLAN
FOR
PRINCETON AUDI SERVICE CENTER
LOT 64 IN BLOCK 34001
MONTGOMERY TOWNSHIP, SOMERSET COUNTY, NEW JERSEY





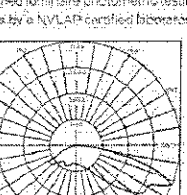
Photometry

Photometry

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CREE

Photometry
A specialized turntable goniometer system performed to ISO 14745-1:2004
with 0.1° resolution and 0.1°/min (optional) speed.



ISO 14745-1:2004
ASTM D1535-05
IEC 60598-1:2004
IEC 60598-2:2004
IEC 60598-3:2004
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1998 (continued)					All States: Personal Income Tax as % of GDP 1998
State	20th	10th	5th	Average	
AL	1.0	1.0	1.0	1.0	80%
AK	1.0	1.0	1.0	1.0	
AR	1.0	1.0	1.0	1.0	
CA	1.0	1.0	1.0	1.0	
CO	1.0	1.0	1.0	1.0	
CT	1.0	1.0	1.0	1.0	
DE	1.0	1.0	1.0	1.0	
FL	1.0	1.0	1.0	1.0	
GA	1.0	1.0	1.0	1.0	
HI	1.0	1.0	1.0	1.0	
IA	1.0	1.0	1.0	1.0	60%
ID	1.0	1.0	1.0	1.0	
IL	1.0	1.0	1.0	1.0	
IN	1.0	1.0	1.0	1.0	
KS	1.0	1.0	1.0	1.0	
KY	1.0	1.0	1.0	1.0	
LA	1.0	1.0	1.0	1.0	
MA	1.0	1.0	1.0	1.0	
MD	1.0	1.0	1.0	1.0	
ME	1.0	1.0	1.0	1.0	
MI	1.0	1.0	1.0	1.0	40%
MN	1.0	1.0	1.0	1.0	
MO	1.0	1.0	1.0	1.0	
MS	1.0	1.0	1.0	1.0	
MT	1.0	1.0	1.0	1.0	
NE	1.0	1.0	1.0	1.0	
NH	1.0	1.0	1.0	1.0	
NJ	1.0	1.0	1.0	1.0	
NM	1.0	1.0	1.0	1.0	
NY	1.0	1.0	1.0	1.0	
NC	1.0	1.0	1.0	1.0	20%
ND	1.0	1.0	1.0	1.0	
OH	1.0	1.0	1.0	1.0	
OK	1.0	1.0	1.0	1.0	
OR	1.0	1.0	1.0	1.0	
PA	1.0	1.0	1.0	1.0	
RI	1.0	1.0	1.0	1.0	
SC	1.0	1.0	1.0	1.0	
SD	1.0	1.0	1.0	1.0	
TN	1.0	1.0	1.0	1.0	
TX	1.0	1.0	1.0	1.0	0%
UT	1.0	1.0	1.0	1.0	
VA	1.0	1.0	1.0	1.0	
VT	1.0	1.0	1.0	1.0	
WA	1.0	1.0	1.0	1.0	
WI	1.0	1.0	1.0	1.0	
WY	1.0	1.0	1.0	1.0	
DC	1.0	1.0	1.0	1.0	
PR	1.0	1.0	1.0	1.0	
GU	1.0	1.0	1.0	1.0	

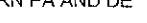
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GA, ORG
180

NJ LLC CERT. No. 24GA28132300

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Van Cleeef
ENGINEERING ASSOCIATES

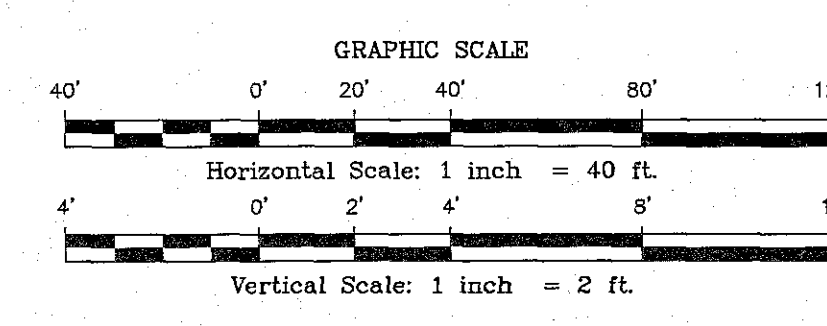
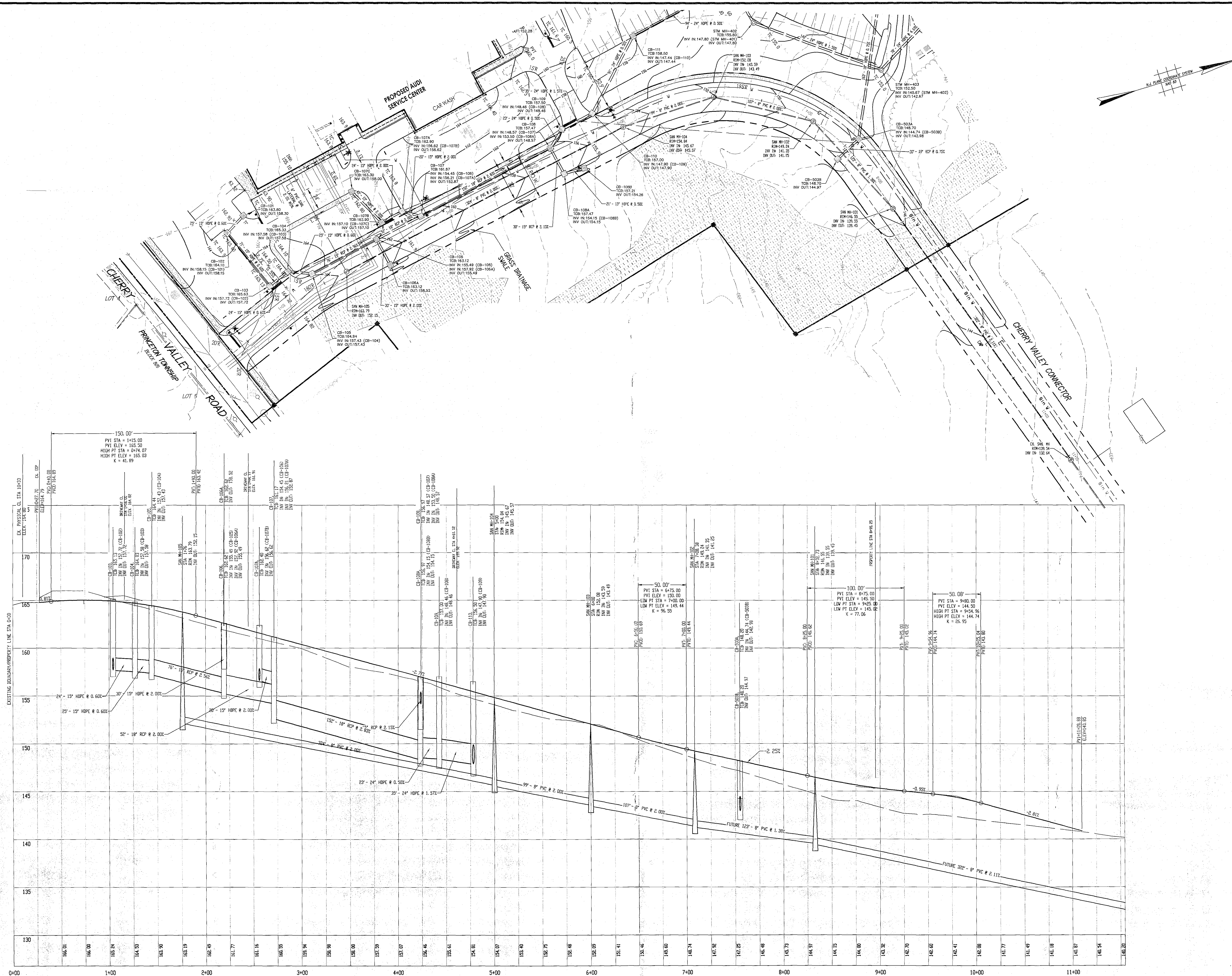
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NJ L.C. CERT. NO. 240426113200

LIGHTING PLAN
 FOR
 PRINCETON AUDI SERVICE CENTER
 LOT 64 IN BLOCK 34001
 MONTGOMERY TOWNSHIP



DATE: NOVEMBER 10, 2015		SCALE: AS SHOWN	
DESIGNED BY: R.B.H.		DRAWN BY: A.B.	
CHECKED BY: R.B.H.		JOB No. 0142M-A	
PER TOWNSHIP	C.R.A. 3/4/16	AUTH.	DATE
REVISIONS			

BY: *Robert B. Heibel*

Robert B. Heibel

New Jersey Professional Engineer
And Land Surveyor No. 20792

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MASTER ROAD PLAN & PROFILE

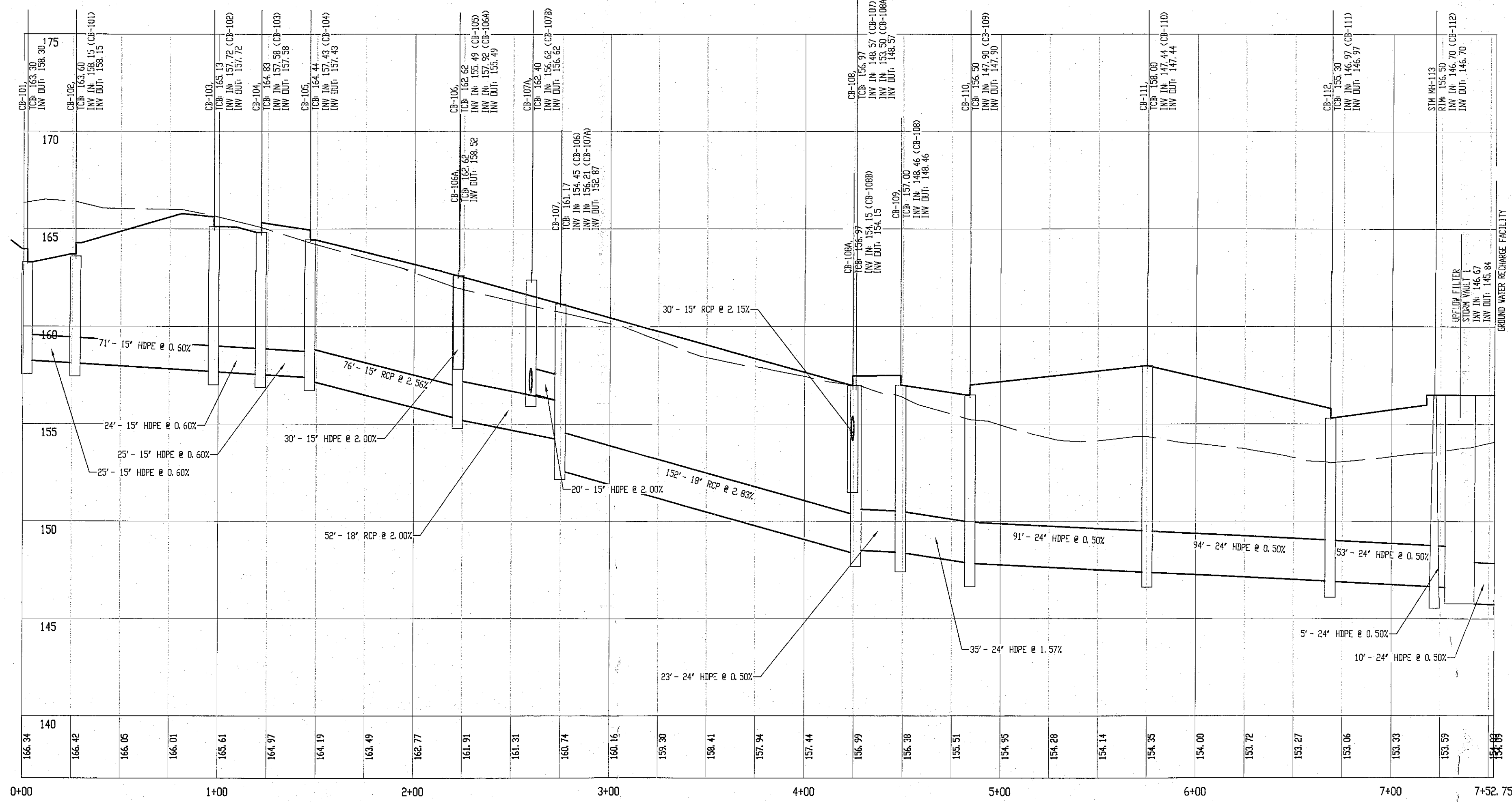
FOR

PRINCETON AUDI SERVICE CENTER

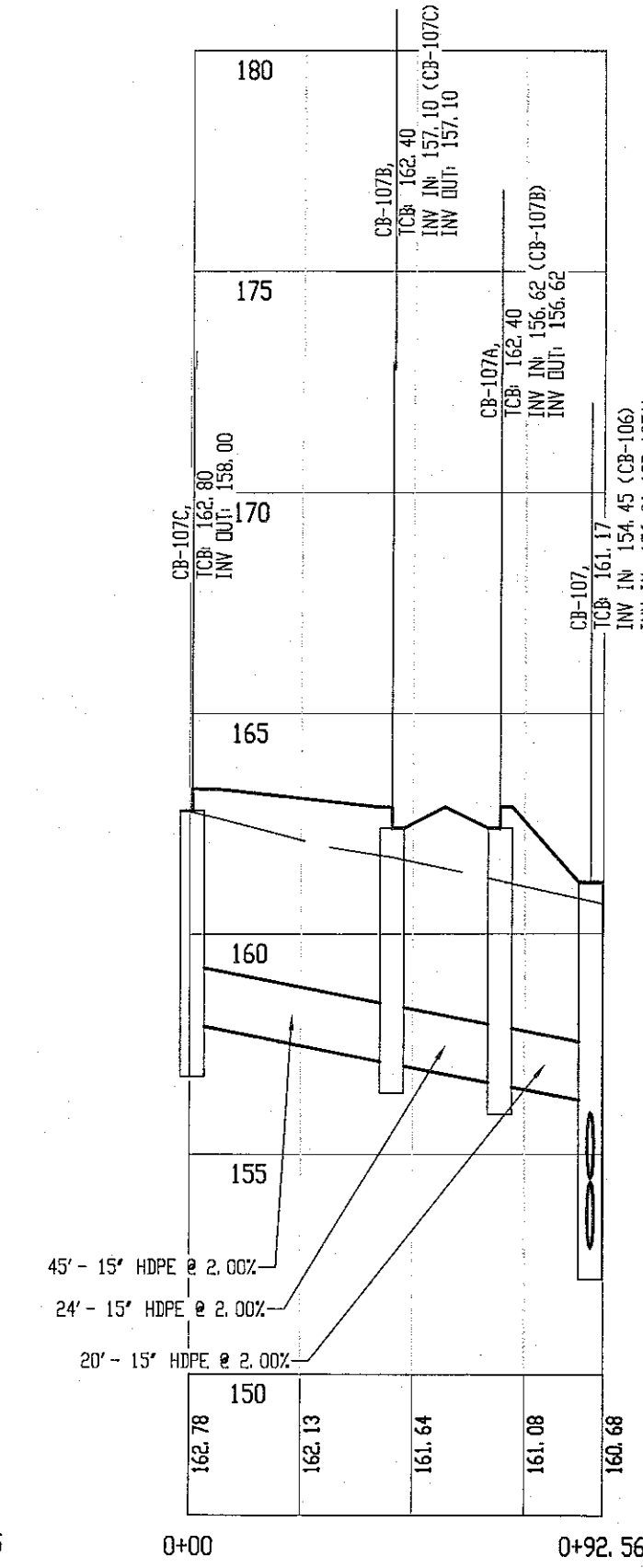
LOT 64 IN BLOCK 34001

MONTGOMERY TOWNSHIP,

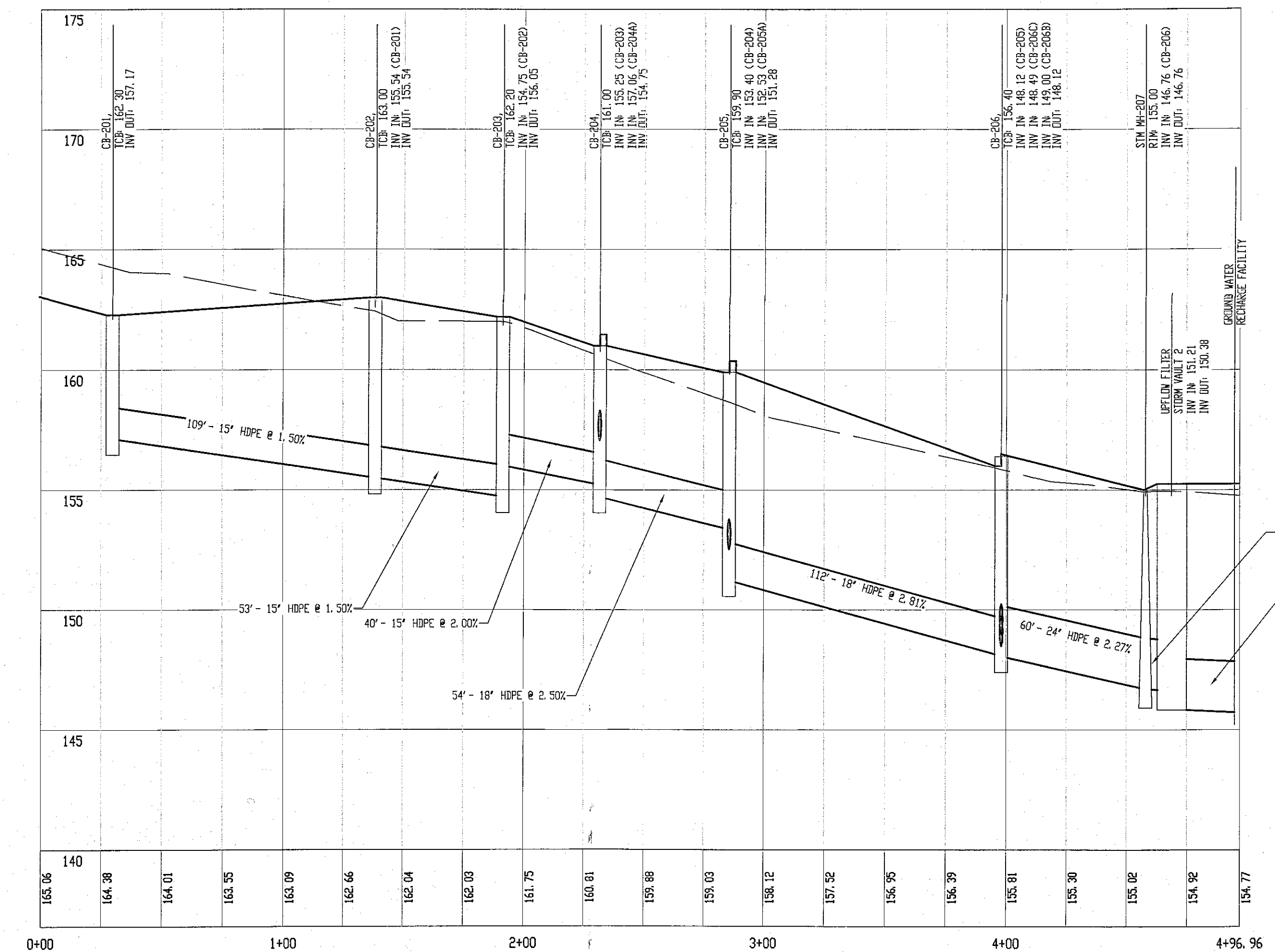
SOMERSET COUNTY, NEW JERSEY



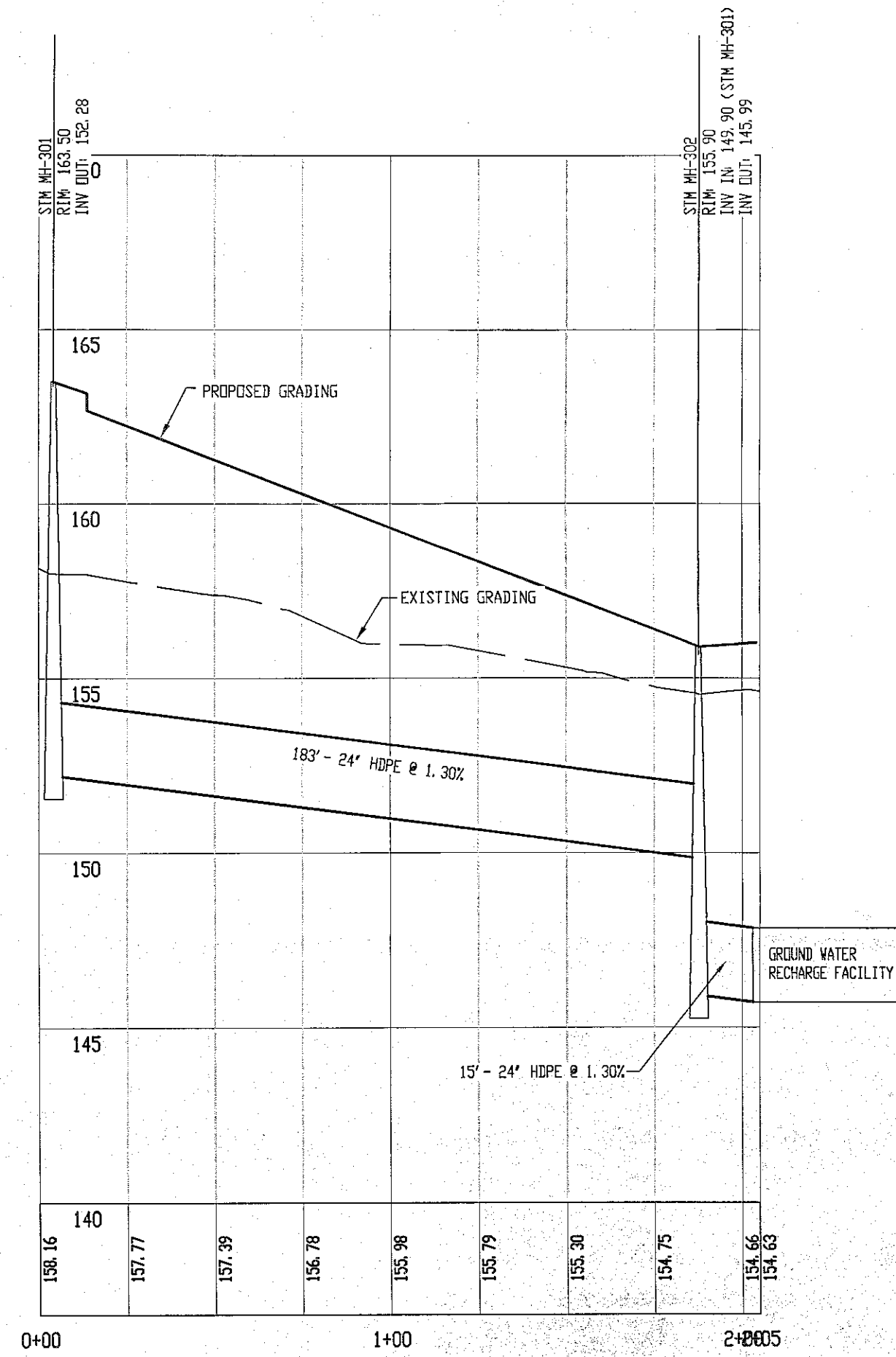
PROPOSED STORM DRAINAGE SEWER 100-SERIES (A)
HORIZONTAL SCALE: 1"=40' VERTICAL SCALE: 1"=4'



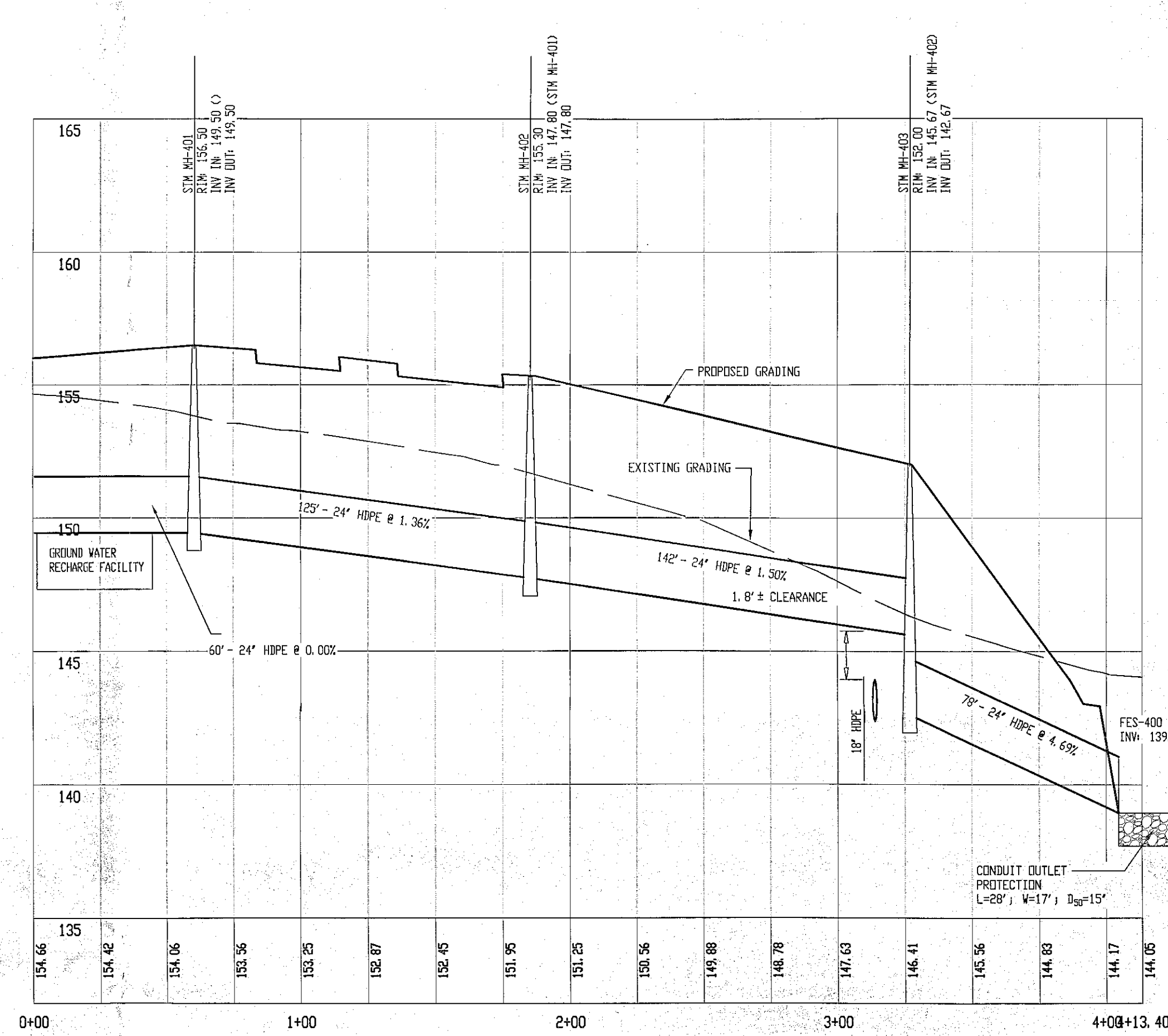
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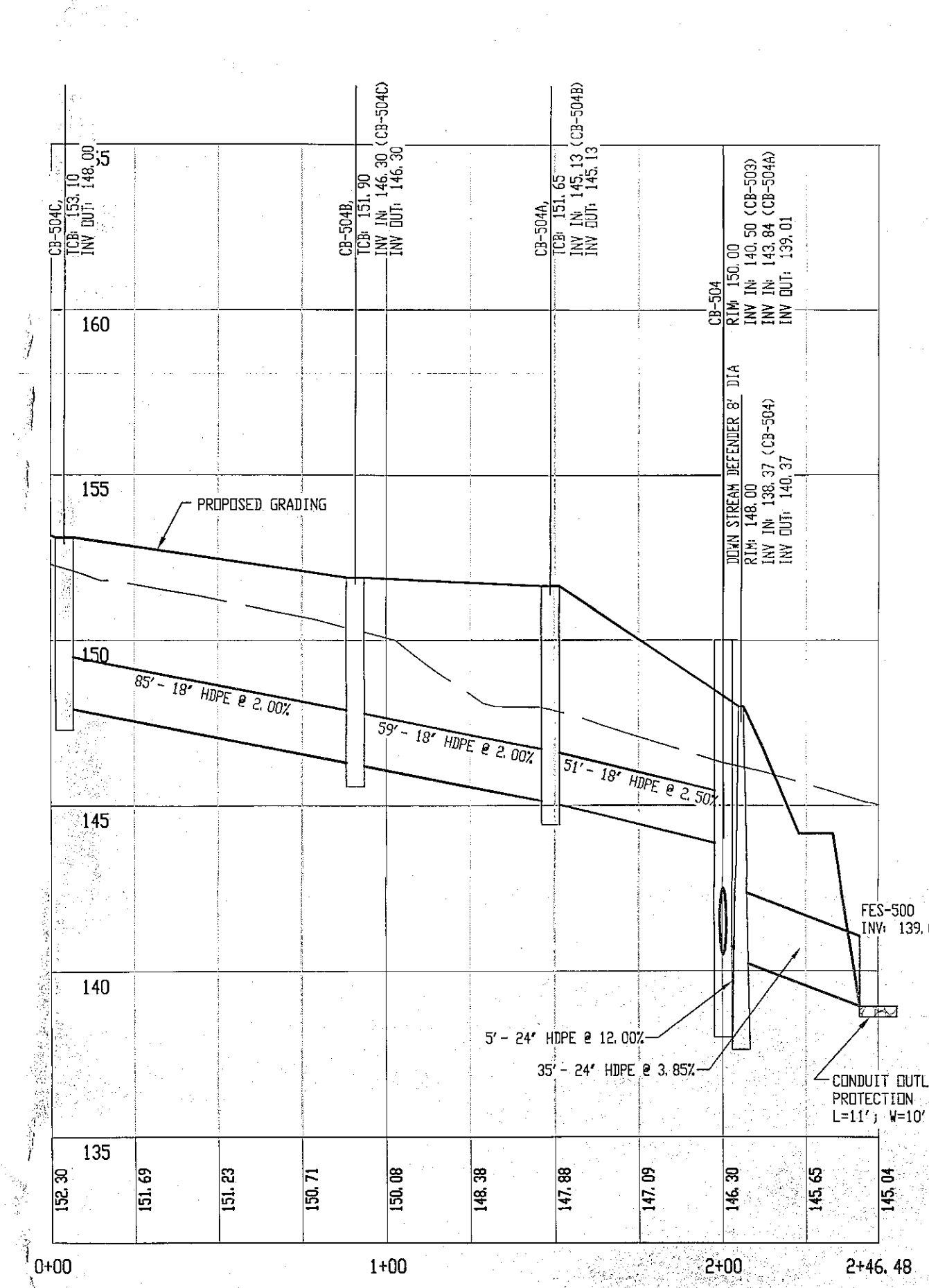
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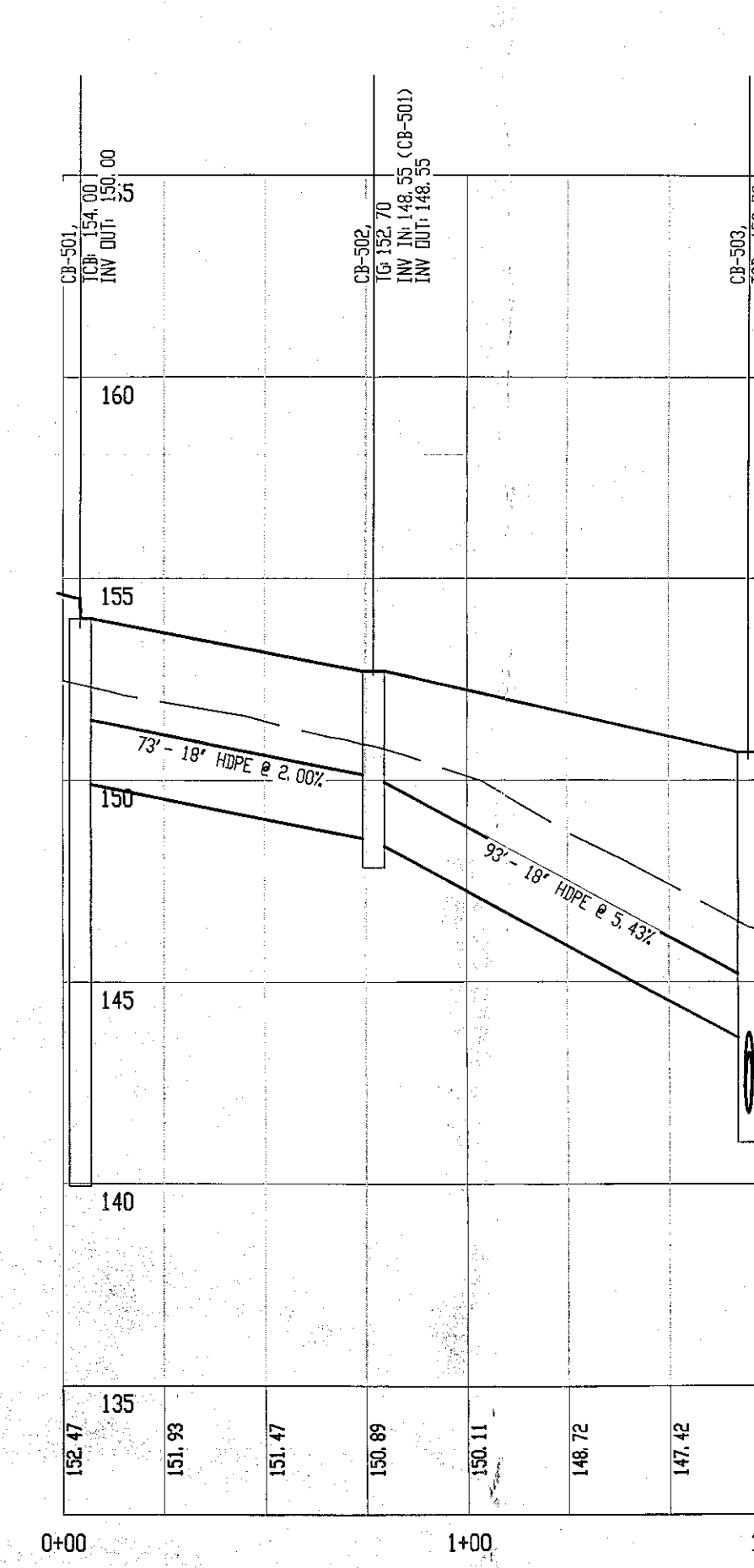
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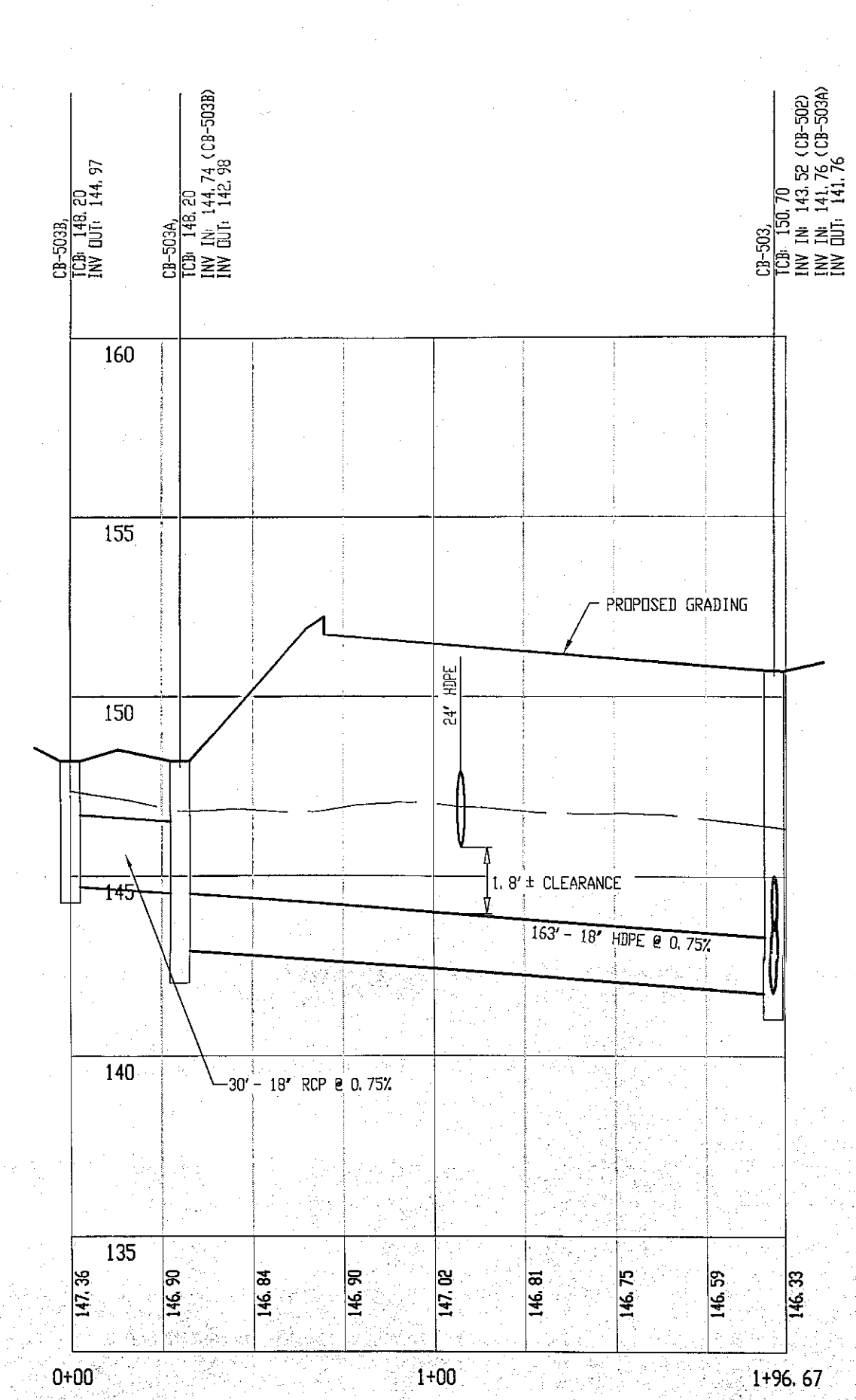
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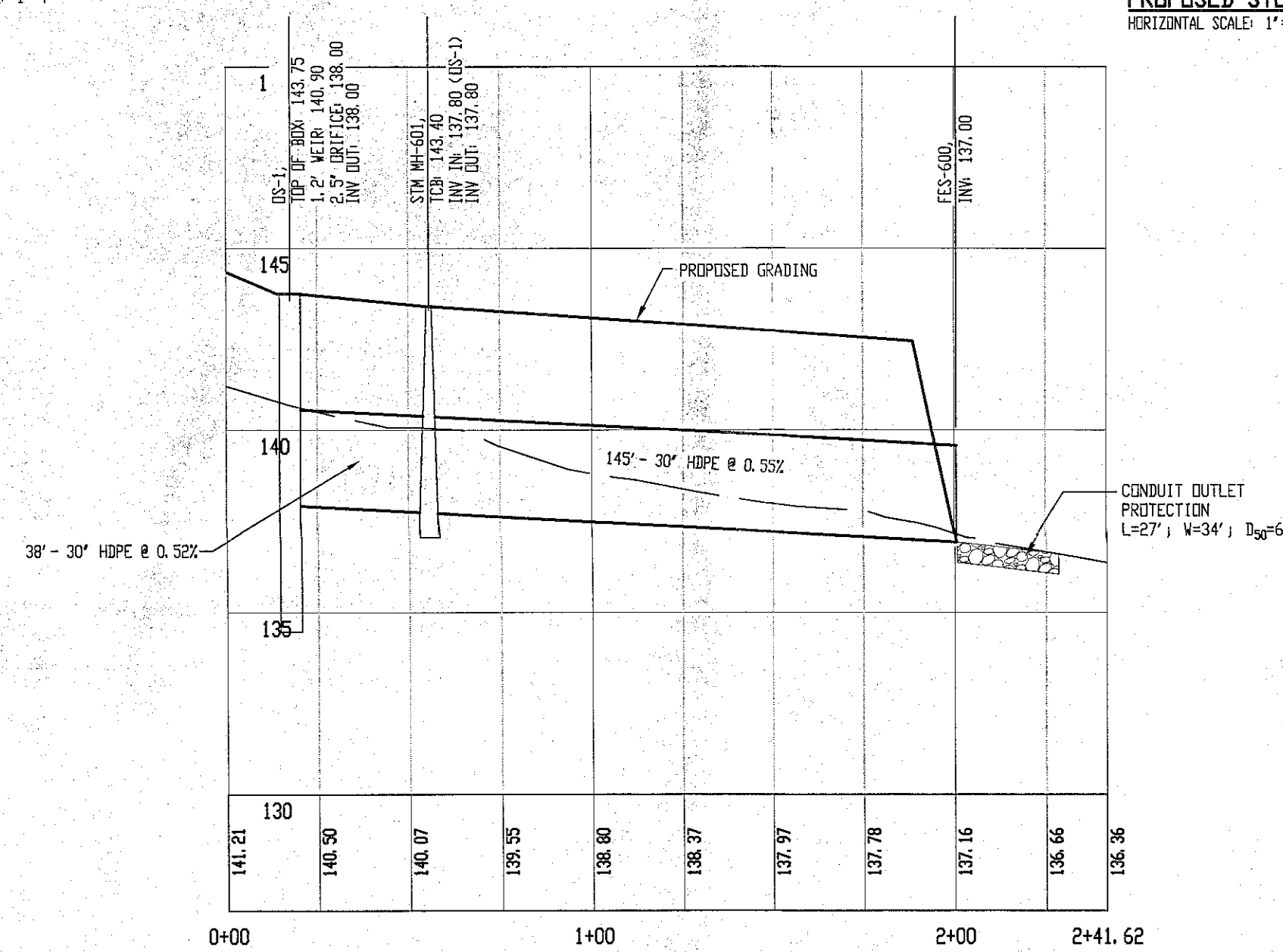
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HORIZONTAL SCALE: 1"=40' VERTICAL SCALE: 1"=4'



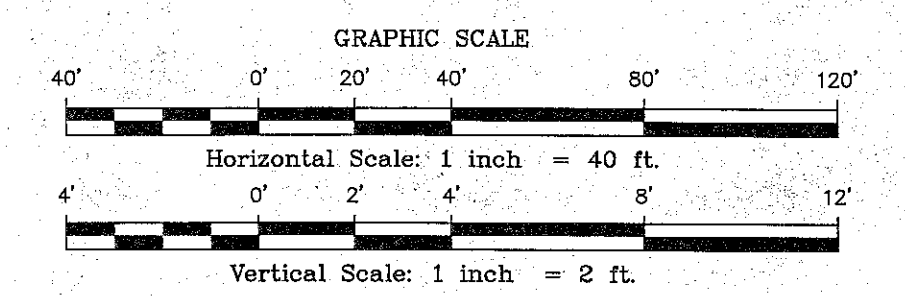
PROPOSED STORM DRAINAGE SEWER 500-SERIES (B)
HORIZONTAL SCALE: 1"=40' VERTICAL SCALE: 1"=4'



PROPOSED STORM DRAINAGE SEWER 500-SERIES (C)
HORIZONTAL SCALE: 1"=40' VERTICAL SCALE: 1"=4'



PROPOSED STORM DRAINAGE SEWER 600-SERIES
HORIZONTAL SCALE: 1"=40' VERTICAL SCALE: 1"=4'



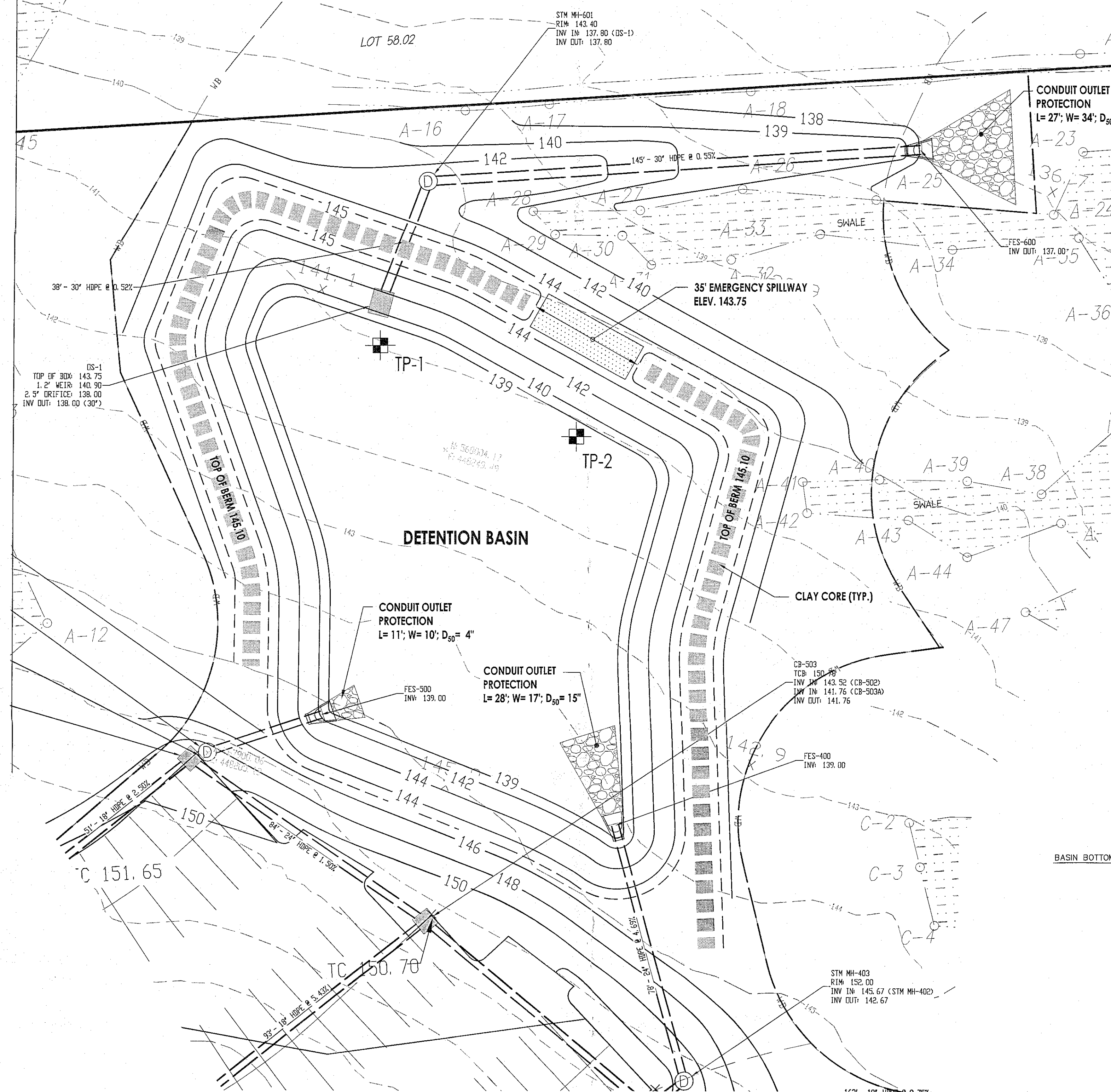
DATE: NOVEMBER 10, 2015		SCALE: AS SHOWN	
DESIGNED BY: R.B.H.		DRAWN BY: A.B.	
CHECKED BY: R.B.H.		JOB No. 0142M-A	
PER TOWNSHIP	R.B.H. 4/19/16	AUTH.	DATE
PER TOWNSHIP	C.R.A. 3/4/16	DATE	

BY: *Robert B. Heibell*
Robert B. Heibell

New Jersey Professional Engineer
And Land Surveyor No. 20702

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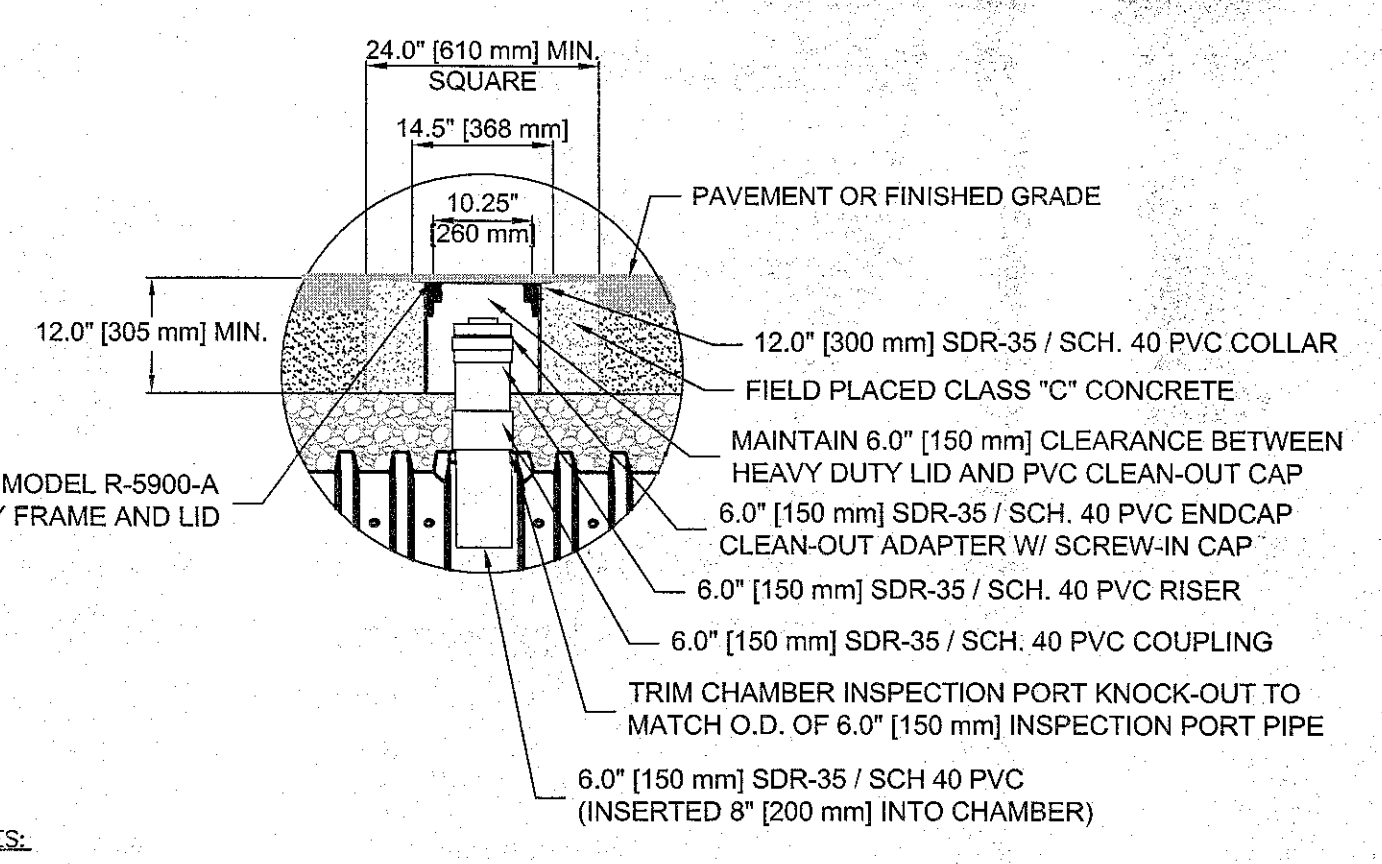
STORM DRAINAGE PROFILES
FOR
PRINCETON AUDI SERVICE CENTER
LOT 64 IN BLOCK 34001
MONTGOMERY TOWNSHIP,
SOMERSET COUNTY, NEW JERSEY



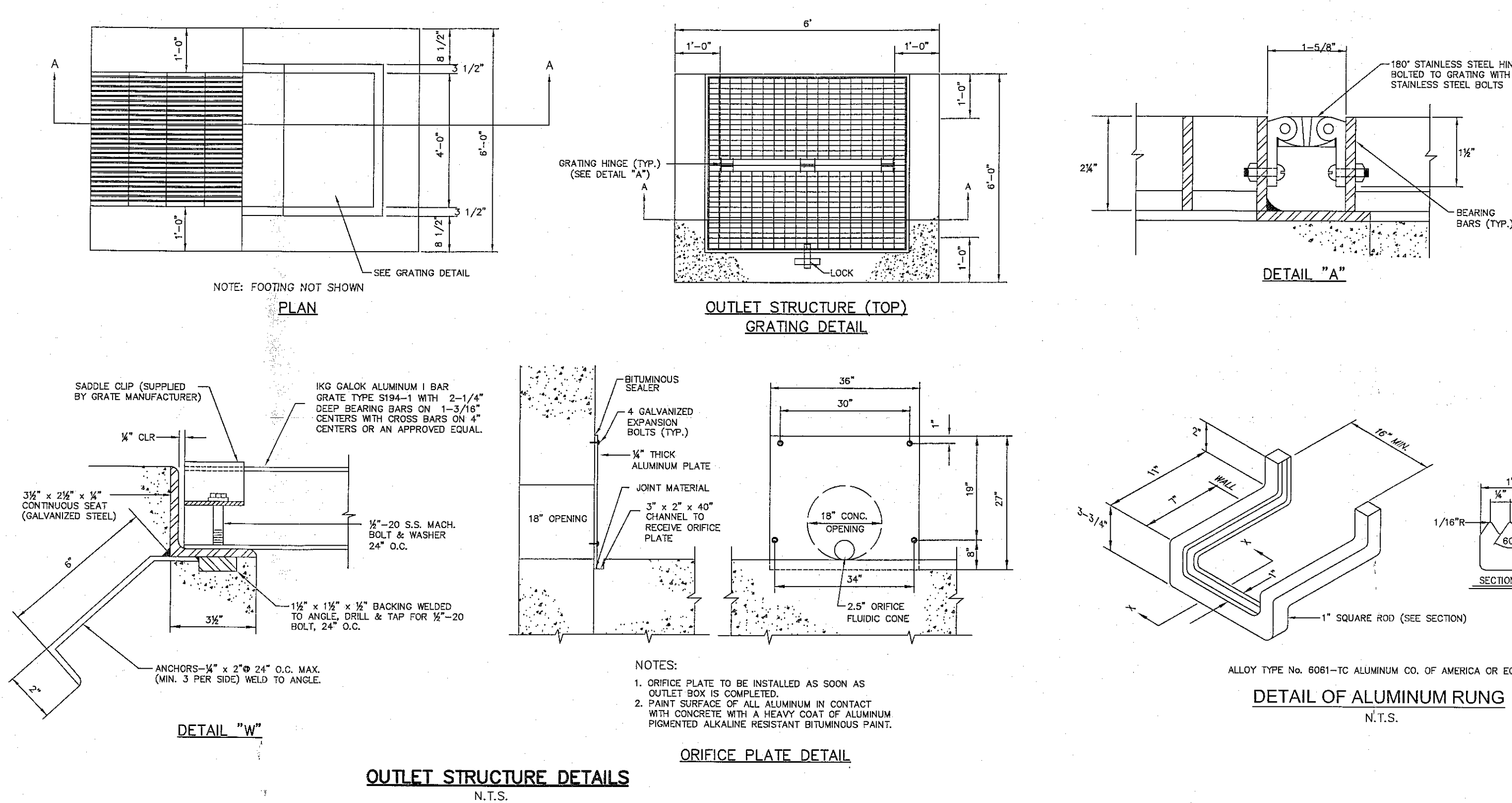
DETENTION BASIN SITE VIEW
GRAPHIC SCALE
Scale: 1 inch = 20 ft.

- NOTES:**
1. IMPERVIOUS CORE AND CUTOFF TRENCH NOT REQUIRED FOR PORTIONS OF BASIN WHERE FINISHED TOP OF BASIN ELEVATION IS LESS THAN 1'-0" ABOVE EXISTING GROUND.
 2. ALL FILL MATERIAL IN EMBANKMENT SHALL BE COMPACTED TO AT LEAST 95% OF MAXIMUM DENSITY OBTAINED FROM COMPACTION TESTS - ASTM D 1557.
 3. COMPACTED FILL TO BE FREE OF ORGANIC MATERIAL.
 4. IMPERVIOUS CORE AND CUTOFF TRENCH TO BE CONSTRUCTED OF COMPACTED MATERIAL CONSISTING OF WELL-GRADED MIXTURE OF SAND, GRAVEL, AND CLAY FINES. DUE TO BE COMPACTED TO 1 INCH FINES SHALL CONSIST OF NON-CLAY CLAY (CL) WITH PLASTICITY INDEX GREATER THAN 12.

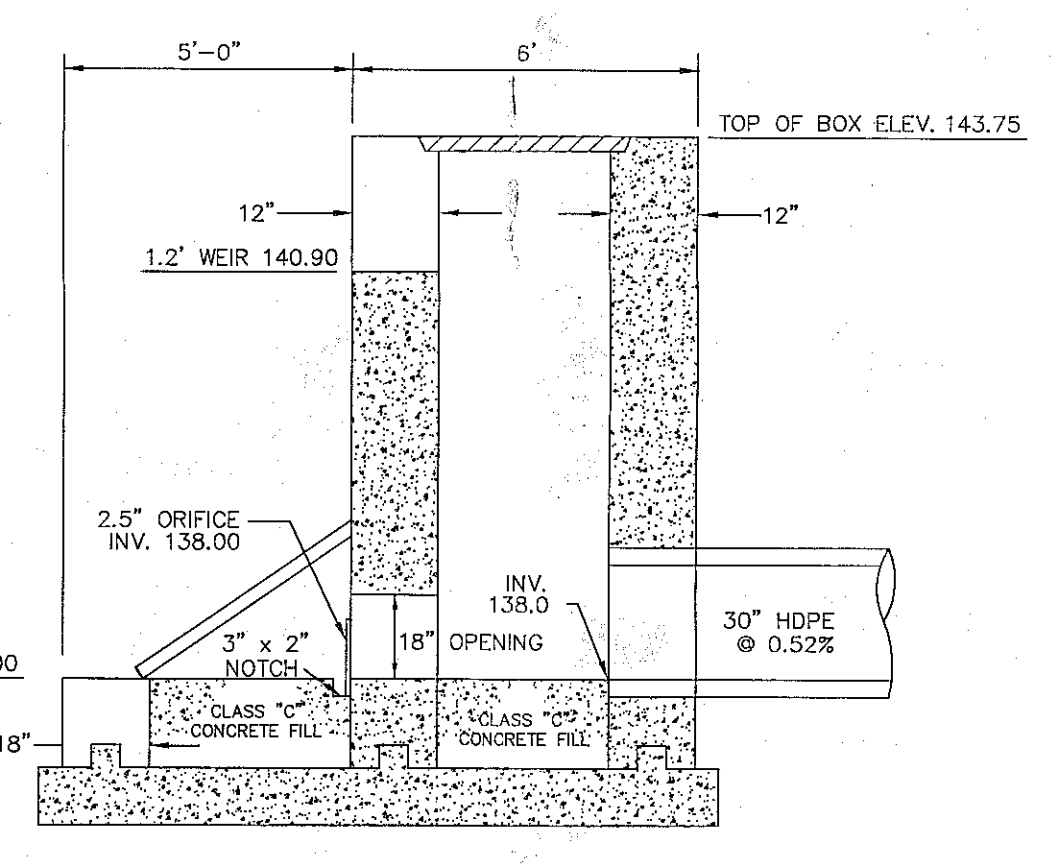
DETENTION BASIN EMBANKMENT DETAIL
N.T.S.



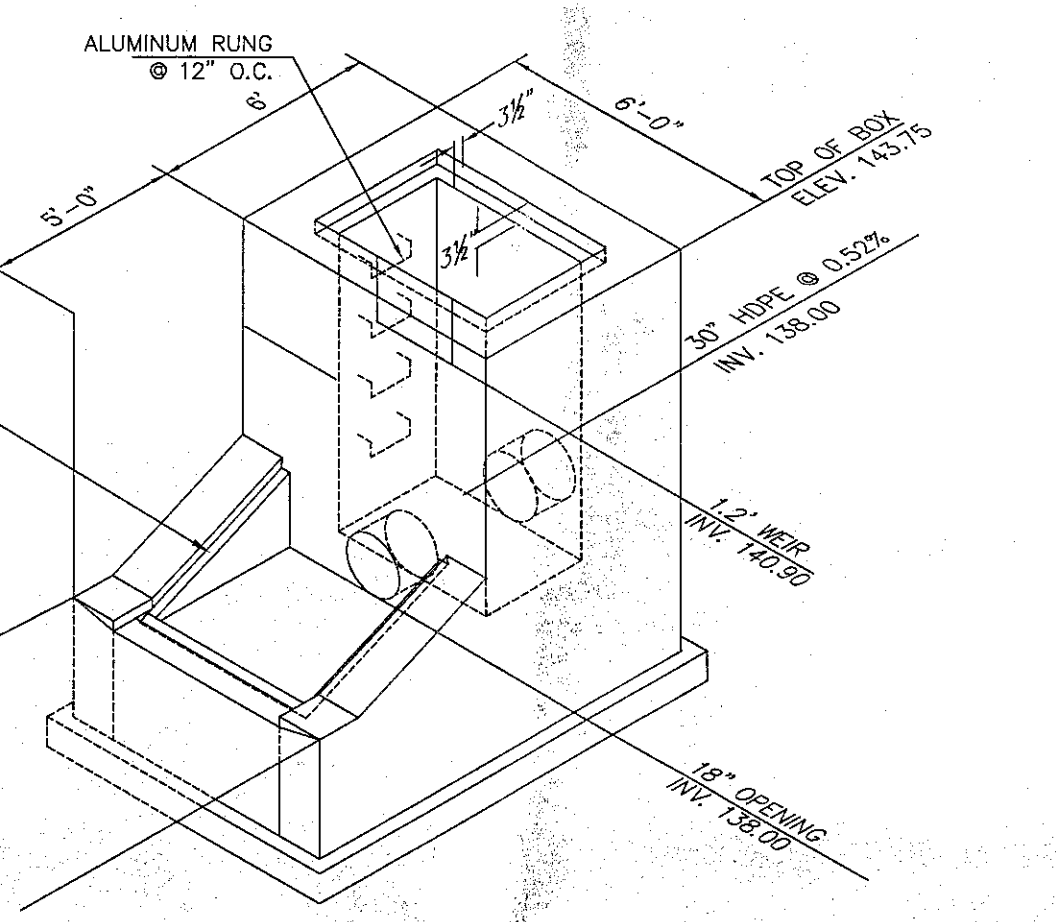
RECHARGE AREA INSPECTION PORT DETAIL
N.T.S.



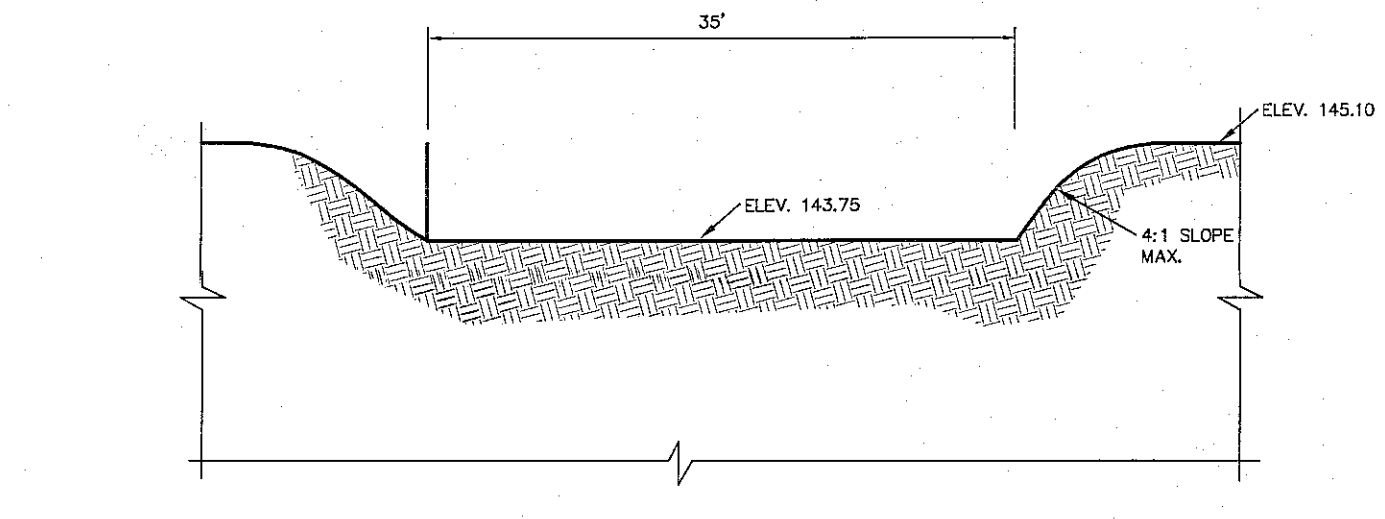
OUTLET STRUCTURE DETAILS
N.T.S.



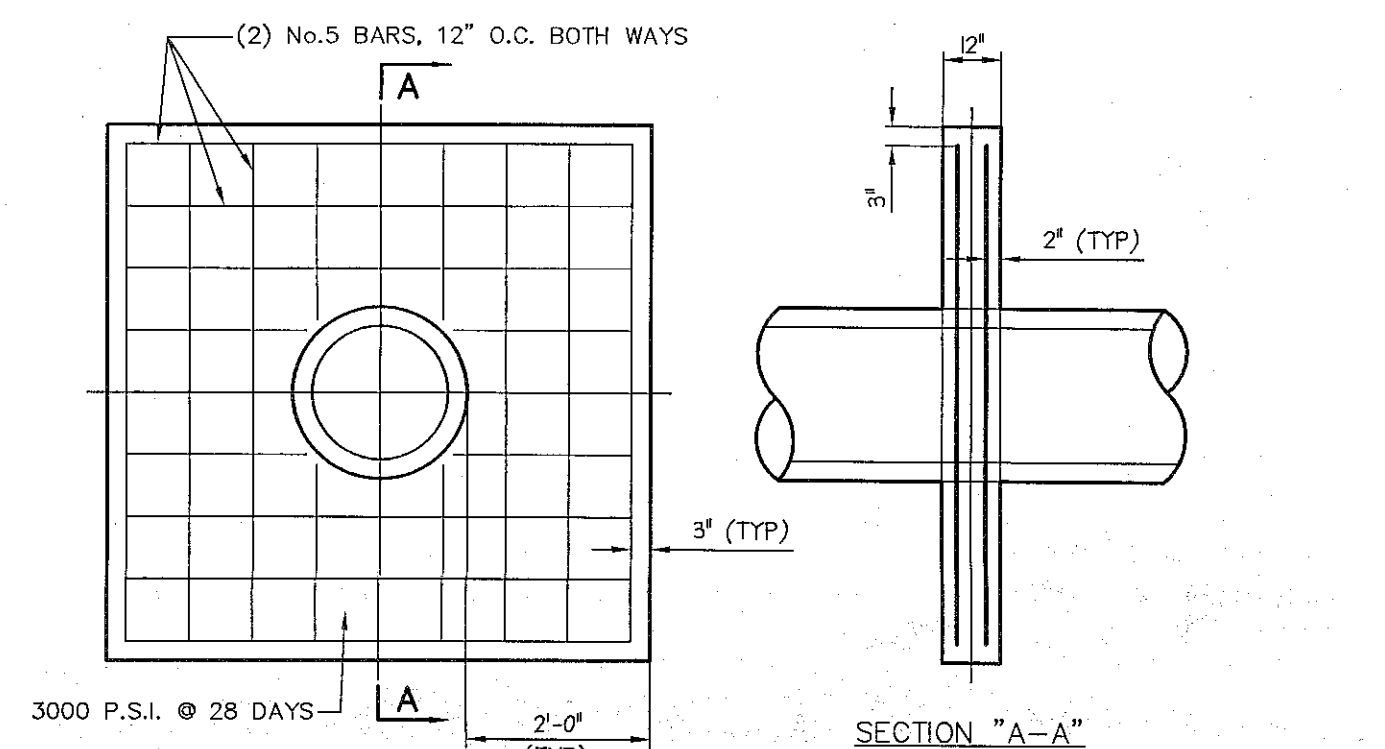
DETENTION BASIN OUTLET STRUCTURE DETAIL
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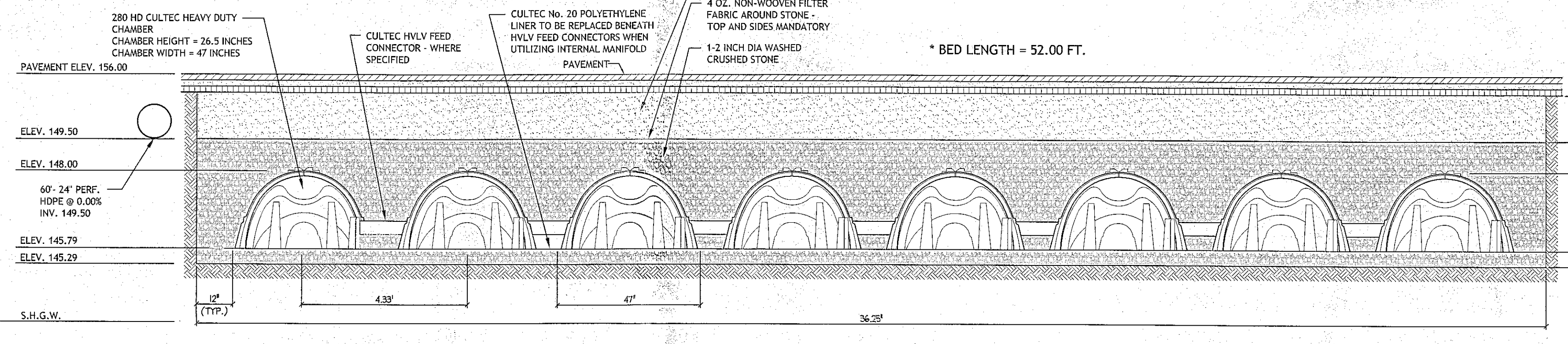
DETENTION BASIN OUTLET STRUCTURE (OS 1) ISOMETRIC VIEW
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DETENTION BASIN EMERGENCY SPILLWAY DETAIL
N.T.S.



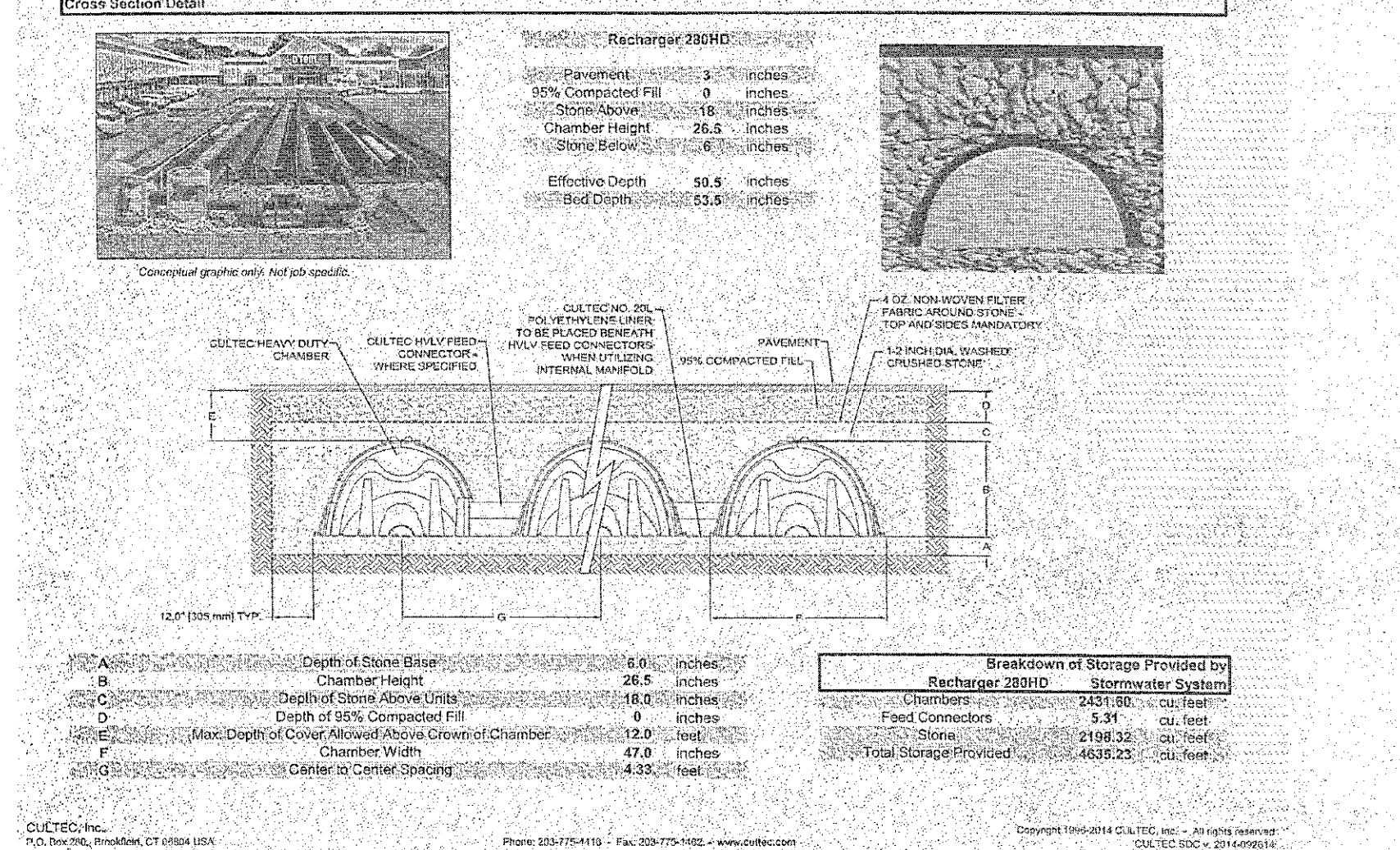
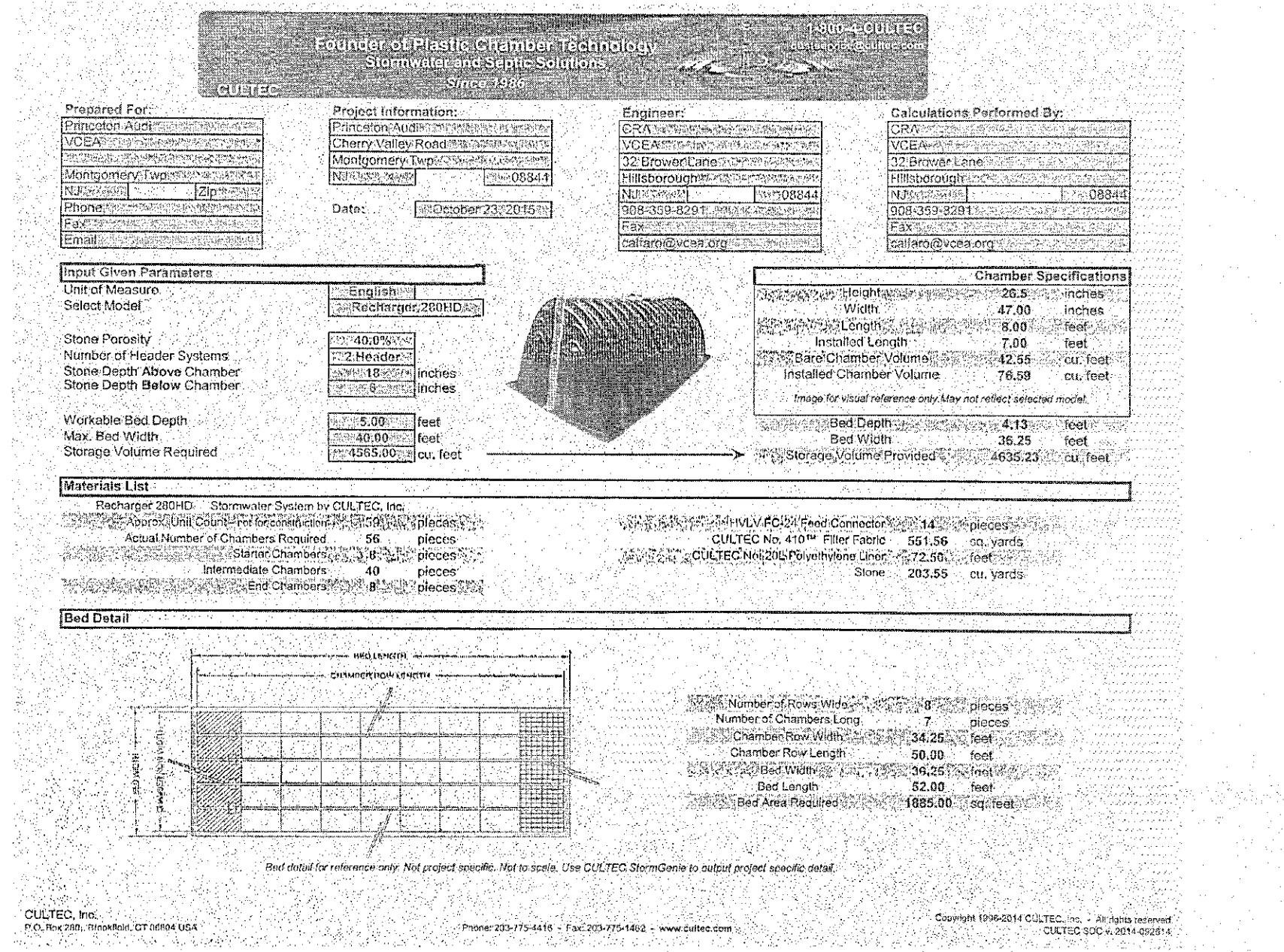
ANTI-SEEP COLLAR DETAIL
N.T.S.



RECHARGE AREA DETAIL
N.T.S.

DETENTION BASIN CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MOST RECENT N.J. DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND SUPPLEMENTS, AND ALSO THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY, JULY 1999.
2. ALL CONCRETE SHALL BE NO. 2 CLASS B CONCRETE.
3. ALL CONCRETE SHALL BE PLACED ON FIRM UNDISTURBED SOIL OR CLEAN ROCK.
4. ALL EXPOSED CONCRETE EDGES SHALL HAVE A 1 INCH, 45 DEGREE CHAMFER UNLESS OTHERWISE APPROVED.
5. ALL REINFORCING STEEL SHALL BE INTERMEDIATE GRADE, NEW PREFORMED BUILT-UP STEEL CONFORMING TO A.S.T.M. A615 (LATEST EDITION), GRADE 60 MINIMUM. ALLOWABLE STRESS IN TENSION SHALL BE 24,000 P.S.I.
6. ALL REINFORCEMENT STEEL SPLICES SHALL BE MINIMUM 30 BAR DIAMETERS UNLESS NOTED OTHERWISE.
7. FINAL REINFORCEMENT STEEL BAR LIST SHALL BE SUBMITTED PRIOR TO FINAL APPROVAL.
8. ALL REINFORCEMENT SHALL BE SUITABLY SUPPORTED AND SECURELY HELD IN PLACE WHILE PLACING CONCRETE.
9. ALL EARTH SHALL BE FREE FROM BRUSH, ROOTS AND OTHER ORGANIC MATERIAL SUBJECT TO DECOMPOSITION.
10. MAXIMUM SLOPES FOR ALL EMBANKMENTS ARE 3 HORIZONTAL TO 1 VERTICAL.
11. CUTOFF TRENCHES ARE TO BE EXCAVATED ALONG THE EMBANKMENT CENTERLINE TO IMPERVIOUS SUBSOIL OR BEDROCK.
12. AN IMPERVIOUS CLAY CORE IS TO BE CONSTRUCTED IN THE EMBANKMENT CONSISTING OF COMPACTED MATERIAL AS DESCRIBED IN NOTE #4 OF DETENTION BASIN EMBANKMENT DETAIL, THIS SHEET.
13. THE FILL MATERIAL IN ALL EARTH EMBANKMENTS SHALL BE COMPACTED TO AT LEAST 95% OF THE MAXIMUM DENSITY OBTAINED FROM COMPACTION TESTS PERFORMED BY THE APPROPRIATE METHOD OF A.S.T.M. D698.
14. PRIOR TO PLACEMENT OF FILL MATERIAL, THE EXISTING GROUND SURFACE BENEATH THE EMBANKMENT SHALL BE CLEARED OF ALL TREE STUMPS, UNDERBUSH AND ALL OTHER ORGANIC MATERIAL, FOLLOWING CLEARING, THE SURFACE ON OR AGAINST WHICH THE FILL IS TO BE PLACED SHALL BE THOROUGHLY BROKEN TO A DEPTH OF SIX (6) INCHES. THE BREAKING OF THE SURFACE SHALL BE DONE PARALLEL TO THE CENTERLINE OF THE EMBANKMENT.
15. THE DESIGN DIMENSIONS OF THE DETENTION BASIN SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION UNLESS IT IS TO BE USED AS A SILTATION BASIN DURING CONSTRUCTION IN THE WATERSHED. IF SO, IT SHALL BE IMMEDIATELY RETURNED TO DESIGN DIMENSIONS FOLLOWING THE COMPLETION OF SUCH CONSTRUCTION.
16. ALL OUTLET PIPES ARE TO BE REINFORCED CONCRETE PIPE CONFORMING TO A.S.T.M. C76 WITH RUBBER GASKETS PURSUANT TO A.S.T.M. C443.
17. THE BASIN IS TO BE SOILED OR TOPSOILED AND SEEDING, INCLUDING THE BOTTOM SIDE SLOPES AND ALL EARTHEN EMBANKMENTS, IN ACCORDANCE WITH THE STANDARD SEED SPECIFICATIONS. MULCH AND BINDERS TO CONFORM WITH THE STANDARD MULCHING SPECIFICATIONS.
18. ALL PIPES AND STUBS ARE TO BE MONOLITHICALLY CAST IN STRUCTURES.
19. DETENTION BASIN WILL BE USED AS A SEDIMENT BASIN DURING CONSTRUCTION. THE DESIGN OF THE SEDIMENT BASIN SHALL BE IN ACCORDANCE WITH NJ STATE STANDARDS 26-1 THRU 26-10.
20. SHOP DRAWINGS AND MANUFACTURER'S INFORMATION SHALL BE PROVIDED TO THE TOWNSHIP ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION OF ALL PRECAST CONCRETE STRUCTURES. THE DEVELOPER SHALL NOT ORDER ANY PRECAST STRUCTURES UNTIL APPROVAL IS GRANTED BY THE TOWNSHIP ENGINEER.
21. BASIN BOTTOM SHALL BE EXCAVATED TO EXPOSE NATIVE BROKEN SHALE GEOLOGY AND BACKFILLED WITH UNCOMPACTED SOIL TO FORM A PERMEABLE SURFACE.



DATE:	NOVEMBER 10, 2015
SCALE:	AS SHOWN
DESIGNED BY:	C.R.A.
DRAWN BY:	A.B.
CHECKED BY:	R.B.H.
REVISIONS:	AUTH. DATE JOB No. 0142M-A

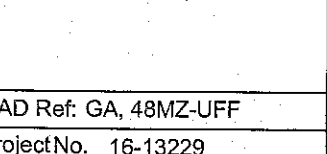
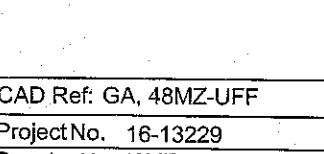
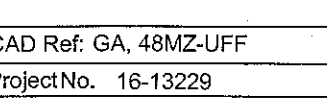
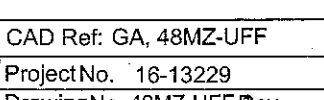
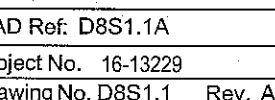
BY: *Robert B. Heibell*
Robert B. Heibell
New Jersey Professional Engineer
And Land Surveyor No. 20792

Van Cleef
ENGINEERING ASSOCIATES

Consulting Civil Engineering
Environmental Engineering
Municipal Engineering
Land Surveying
Professional Planning
Landscape Architecture

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DETENTION BASIN AND OUTLET STRUCTURE DETAILS
FOR
PRINCETON AUDI SERVICE CENTER
LOT 64 IN BLOCK 34001
MONTGOMERY TOWNSHIP,
SOMERSET COUNTY, NEW JERSEY



GENERAL NOTES FOR SOIL EROSION AND SEDIMENT CONTROL PLANS

- ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCES, OR IN THEIR PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
- ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN 30 DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO NJ STATE STANDARDS.
- PERMANENT VEGETATION SHALL BE SEEDING OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING. MULCH WILL BE USED FOR PROTECTION UNTIL SEEDING IS ESTABLISHED.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE NJ STATE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL, IN NEW JERSEY.
- A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS IN ORDER TO STABILIZE STREETS, ROADS, DRIVEWAYS AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN 5 DAYS OF PRELIMINARY GRADING.
- IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. STEEP SLOPES, ROADWAY EMBANKMENTS) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO THE NJ STATE STANDARDS.
- ANY STEEP SLOPES RECEIVING PIPELINE INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION PROCEEDS (I.E. SLOPES GREATER THAN 3:1).
- TRAFFIC CONTROL STANDARDS REQUIRE THE INSTALLATION OF A 50X50X1/2" OF 1 1/2" OR 2" STONE, AT ALL CONSTRUCTION DRIVEWAYS, IMMEDIATELY AFTER INITIAL SITE DISTURBANCE IN ADVANCE OF ANY LAND DISTURBING ACTIVITY.
- AT THE TIME WHEN THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER, SHALL BE REMOVED OR TREATED IN SUCH A MANNER THAT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
- IN THAT N.J.S.A. 42A-34 ET SEQ., REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE THE PROVISIONS OF THE CERTIFIED PLAN FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES, ALL SITE WORK FOR SITE PLANS AND ALL WORK AROUND INDIVIDUAL LOTS IN SUBDIVISIONS, WILL HAVE TO BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY.
- CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
- ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RE-CERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT NJ STATE SOIL EROSION & SEDIMENT CONTROL STANDARDS.
- THE SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED OF ANY CHANGES IN OWNERSHIP.
- MULCHING TO THE NJ STANDARDS IS REQUIRED FOR OBTAINING A CONDITIONAL PERMIT FOR COMPLIANCE. CONDITIONALS ARE ONLY ISSUED WHEN THE SEASON PROHIBITS SEEDING.
- CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL ADJACENT ROADS CLEAN DURING LIFE OF CONSTRUCTION PROJECT.
- THE DEVELOPER SHALL BE RESPONSIBLE FOR REMEDIATING ANY EROSION OR SEDIMENT PROBLEMS THAT ARISE AS A RESULT OF ONGOING CONSTRUCTION AT THE REQUEST OF THE SOMERSET-UNION SOIL CONSERVATION DISTRICT.
- HYDRO SEEDING IS A TWO-STEP PROCESS. THE FIRST STEP INCLUDES SEED, FERTILIZER, LIME, ETC., ALONG WITH MINIMAL AMOUNTS OF MULCH TO PROMOTE CONSISTENCY, GOOD SEED TO SOIL CONTACT, AND GIVE A VISUAL INDICATION OF COVERAGE. UPON COMPLETION OF SEEDING OPERATION, HYDRO-MULCH SHOULD BE APPLIED AT A RATE OF 100 LBS. PER ACRE IN SECOND STEP. THE USE OF HYDRO-MULCH, AS OPPOSED TO STRAW, IS LIMITED TO OPTIMUM SEEDING DATES AS LISTED IN THE NJ STANDARDS.

BASIN COMPACTION NOTES

- IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 4" TO 12" INCHES WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).
- INSPECT SITE JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILED AND FIRMED IN ACCORDANCE WITH ABOVE.
- IMMEDIATELY PRIOR TO TOPSOILING, THE SURFACE SHOULD BE SCARIFIED 4" TO 12" INCHES WHERE THERE HAS BEEN SOIL COMPACTION. THIS WILL HELP INSURE A GOOD BOND BETWEEN THE TOPSOIL AND SUBSOIL. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).
- SOIL COMPACTION RESULTING FROM LAND GRADING ACTIVITIES CAN IMPACT THE INFILTRATION RATE OF THE SOIL. RESTORATION OF COMPACTED SOILS THROUGH DEEP TILLAGE (6" TO 12") AND THE ADDITION OF ORGANIC MATTER MAY BE REQUIRED IN PLANNED PEROUS AREAS TO ENHANCE THE INFILTRATION RATE OF THE DISTURBED SOIL. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLE, IRRIGATION SYSTEMS, ETC.).
- TO PREVENT COMPACTION OF THE SUBSOIL WHICH WILL REDUCE ITS INFILTRATION CAPACITY, BASINS SHOULD BE EXCAVATED WITH LIGHT EARTH MOVING EQUIPMENT, PREFERABLY WITH TRACKS OR OVER-CAT Tires RATHER THAN THE NORMAL RUBBER TIRES. ONCE THE FINAL CONSTRUCTION PHASE IS REACHED, THE FLOOR OF THE BASIN SHALL BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW AND SMOOTHED OVER WITH A LEVELING DRAG OR EQUIVALENT GRADING EQUIPMENT.
- FOR BASINS, ANNUAL TILLING OPERATIONS MAINTAIN INFILTRATION CAPACITY. THESE TILLED AREAS SHOULD BE RE-VEGETATED IMMEDIATELY TO PREVENT EROSION. DEEP TILLING CAN BE USED TO BREAKUP CLOGGED SURFACE LAYERS FOLLOWED BY REGRADING AND LEVELING. SAND OR ORGANIC MATTER CAN BE TILLED INTO THE BASIN FLOOR TO PROMOTE A RESTORED INFILTRATION CAPACITY. SEDIMENT REMOVAL PROCEDURES SHOULD NOT BE UNDERTAKEN UNTIL THE BASIN IS THOROUGHLY DRY. THE TOP LAYER SHOULD BE REMOVED BY LIGHT EQUIPMENT TO PREVENT COMPACTION. THE REMAINING SOIL CAN BE RETILED AND DISTURBED VEGETATION REPLANTED.

AGRONOMIC RECOMMENDATIONS

- SEED, FERTILIZER, LIME AND TOPSOIL, (IF REQUIRED) ALL SCALPED AREAS IMMEDIATELY AFTER FINISHED GRADING IS COMPLETED. LIME AND FERTILIZER RECOMMENDATIONS ARE AS FOLLOWS OR ACCORDING TO RESULTS OF SOIL TESTS.
 - FERTILIZER TO BE APPLIED AT THE RATE OF 500 LBS. PER ACRE, 10-20-10.
 - TEMPORARY SEEDING:
 - LIME: 2 TONS PER ACRE GROUND AREA
 - FERTILIZER: 500 LBS. PER ACRE 10-20-10
 - SEED: USE THE FOLLOWING SEED MIXTURE(S) AND RATES BASED ON TIME OF YEAR:
 - EARLY SPRING/LATE SUMMER TO EARLY FALL: 100% PERENNIAL RYEGRASS
 - LATE FALL: 100% LBS/ACRE
 - LATE FALL: 100% CEREAL RYE
 - MID-SUMMER: 40% PEARL MILLET
 - 40% MILLET (GERMAN OR HUNGARIAN)
 - 20% KEEPING LOVEGRASS
 - RATE = 100 LBS/ACRE
 - PERMANENT SEEDING: (TO BE APPLIED DURING PERIODS OF 3/01 - 11/15, TEMPORARY SEEDING TO BE APPLIED ALL OTHER TIMES OF THE YEAR)
 - LIME: 2 TONS PER ACRE GROUND AREA
 - FERTILIZER: 500 LBS. PER ACRE 10-20-10
 - SEED:
 - LAWS - QUALITY SUN AND SHADE
 - 25% PERENNIAL RYEGRASS
 - 20% CHISHAM FESCUE
 - 20% CREEPING RED FESCUE
 - 5% KENTUCKY BLUEGRASS
 - (* INCLUDE AT LEAST TWO DIFFERENT VARIETIES IN MIX)
 - RATE = 200 LBS/ACRE

MINIMUM STABILIZATION REQUIREMENTS

- SITE PREPARATION**
 - GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDING, PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING AND MAINTENANCE. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING.
 - INSTALL NEEDED EROSION CONTROL PRACTICES AND FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS AND WATERWAYS.
- SEEDING PREPARATION**
 - APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS THOSE OFFERED BY RUTGERS UNIVERSITY SOIL TESTING LABORATORY. SOIL SAMPLE ANALYSES ARE AVAILABLE FROM THE LOCAL COOPERATIVE EXTENSION SERVICE OFFICE. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-20-10 OR EQUIVALENT WITH SOIL WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE. APPLY LIMESTONE AS FOLLOWS:

SOIL TEXTURE	TONS/ACRE	LBS./1,000 SQ. FT.
CLAY, CLAY LOAM AND HIGH ORGANIC SOIL	3	135
SANDY LOAM, LOAM, SILT LOAM	2	90
LOAMY SAND, SAND	1	45
 - PULVERIZED DOLICMITIC LIMESTONE IS PREFERRED FOR MOST SOUTHS OF THE NEW BRUNSWICK-TRENTON LINE.
 - WORK LIME AND FERTILIZER INTO SOIL AS NEARLY AS PRACTICAL, TO A DEPTH OF 2 INCHES WITH A DISC, SPRINGTOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE DISC HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM FINE SEEDBED IS PREPARED. ALL BUT CLAY OR SILTY SOILS AND COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.
 - REMOVE FROM THE SURFACE ALL STONES 2 INCHES OR LARGER IN ANY DIMENSION, REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, GLASS, LUMPS OR OTHER UNSUITABLE MATERIAL.
 - INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILED AND FIRMED AS ABOVE.
- ACID SOIL CONDITIONS**

SOILS HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH OF 5 OR MORE BEFORE SEEDING PREPARATION. THE ADDED SOIL SHALL BE LIMED AS ABOVE.
- SEEDING**
 - SEE AGRONOMIC RECOMMENDATIONS OR USE MIXTURE RECOMMENDED BY THE COOPERATIVE EXTENSION SERVICE OR SOIL CONSERVATION SERVICE WHICH IS APPROVED BY THE SOIL CONSERVATION DISTRICT.
 - APPLY SEED UNIFORMLY BY HAND, CYCLOCONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL, CULTIPACKER SEEDER OR HYDROSEEDER. THE LATTER MAY BE JUSTIFIABLE FOR LARGE, STEEP AREAS WHERE CONVENTIONAL VEHICLES CANNOT TRAVEL. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH THE SEED EXCEPT FOR DRILLED, HYDROSEEDER OR CULTIPACKED SEEDINGS. SEED SHALL BE INCORPORATED INTO THE SOIL TO A DEPTH OF 1/4 TO 1/2 INCH BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/2 INCH DEEPER ON COARSE TEXTURED SOIL.
 - AFTER SEEDING, FIRING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, REDUCE CAPABILITY AND IMPROVE SEEDLING EMERGENCE. THIS IS THE PREFERRED METHOD, WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.
- MULCHING**

MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. (THE EXISTENCE OF SATISFACTORY PERMANENT VEGETATION AT THE TIME OF PROJECT OR UNIT COMPLETION SHALL BE DEEMED AS COMPLIANCE WITH THIS MULCHING REQUIREMENT.)

 - MULCH MATERIALS SHOULD BE UNROOTED SMALL GRAINS OF STRAW, HAY FREE OF SEEDS OR SALT HAY TO BE APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET) EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION MUST BE DOUBLE THE LOWER RATE. MULCH CRIMPER-BLINDERS MUST NOT GRIND THE MATERIAL.
 - SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 75 PERCENT TO 95 PERCENT OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE TO 10 POUNDS WITHIN EACH SECTION.
 - MULCH ANCHORING SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES AND COSTS.
 - PEG AND TWINE - DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CROSS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE SOUND TURNS.
 - MULCH NETTINGS - STAPLE PAPER, JUTE, COTTON OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.
 - CRIMPER (MULCH ANCHORING TOOL) - A TRACTOR-DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC-HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.
 - LIQUID MULCH-BINDERS - MAYBE USED TO ANCHOR SALT HAY, HAY OR STRAW MULCHES.
 - APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND CATCHES THE MULCH, IN VALLEYS AND AT CRESTS OF BANKS. REMAINDER OF AREA SHOULD BE UNIFORM IN APPEARANCE.
 - SYNTHETIC OR ORGANIC BINDERS - BINDERS SUCH AS GUARCOL, PCA-70, PETRO-SET AND TERRA-TACK MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS.
 - NOTE: ALL NAMES GIVEN ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A RECOMMENDATION OF THESE PRODUCTS TO THE EXCLUSION OF OTHER PRODUCTS.
 - WOOD-FIBER OR PAPER-FIBER MULCH AT THE RATE OF 1,000 POUNDS PER ACRE MAY BE APPLIED BY A HYDROSEEDER. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.

IRRIGATION (WHERE FEASIBLE)

- IF SOIL MOISTURE IS DEFICIENT AND MULCH IS NOT USED, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER (A MINIMUM OF 1/4 INCH TAKE A DAY UNTIL VEGETATION IS WELL ESTABLISHED). THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE IN ABNORMALLY DRY OR HOT WEATHER OR ON DROUGHTY SITES.
- TOPDRESSING**
 - SPRING SEEDINGS WILL REQUIRE AN APPLICATION OF FERTILIZER SUCH AS 10-10-10 OR EQUIVALENT AT 400 POUNDS PER ACRE OR 10 POUNDS PER 1,000 SQUARE FEET BETWEEN SEPTEMBER 1 AND OCTOBER 15.
 - FALL SEEDINGS WILL REQUIRE THE ABOVE BETWEEN MARCH 15 AND MAY 1.
 - MIXTURES DOMINATED BY KEEPING LOVEGRASS OR LEGUMES MAY NOT NEED TOPDRESSING.
 - BERMUDAGRASS SHOULD BE TOPDRESSED BEFORE AUGUST 15.
 - IF SLOW RELEASE NITROGEN (300 POUNDS 38-0-0 PER ACRE OR EQUIVALENT) IS USED IN ADDITION TO SUGGESTED FERTILIZER, THIS FOLLOW-UP OF TOPDRESSING IS NOT MANDATORY.

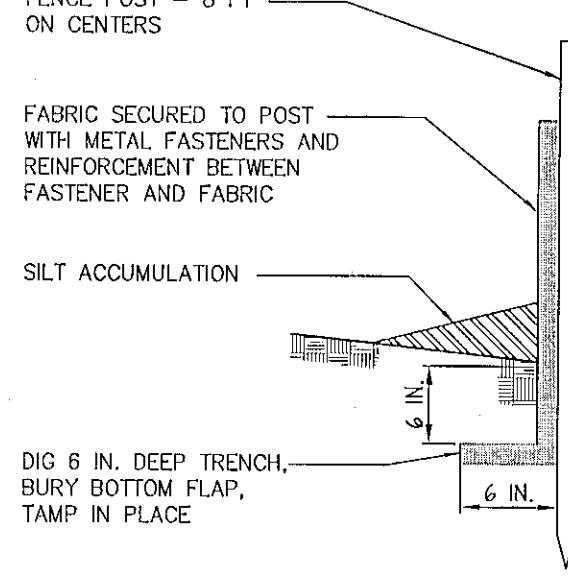
SEQUENCE OF CONSTRUCTION

- INSTALL ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON PLANS.
 - INSTALL STABILIZED CONSTRUCTION ENTRANCE AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLANS AND DETAILS.
 - CLEAR AND GRUB ALL AREAS IN ACCORDANCE WITH THE LIMITS OF DISTURBANCE AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN. IMMEDIATELY REMOVE DEBRIS FROM SITE.
 - CONSTRUCT DETENTION BASIN, STABILIZE ALL DISTURBED AREAS IN ACCORDANCE WITH THE MINIMUM STABILIZATION REQUIREMENTS.
 - STRIP, STOCKPILE AND STABILIZE TOPSOIL AT LOCATIONS AS SHOWN ON PLANS.
 - ROUGH GRADE SITE.
 - CONSTRUCT ALL ONSITE AND OFFSITE UTILITIES, UNDERGROUND DETENTION FACILITIES, SOIL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED AS CONSTRUCTION PROGRESSES.
 - INSTALL CURBING, BACKFILL AS SOON AS CURB HAS ATTAINED SUFFICIENT SUPPORTING STRENGTH, FINE GRADE PAVEMENT AREAS.
 - INSTALL SUBBASE IF REQUIRED.
 - CONSTRUCT STRUCTURE, SOIL EROSION SEDIMENT CONTROL DEVICES SHALL BE INSTALLED AS CONSTRUCTION PROGRESSES.
 - FINE GRADE AND STABILIZE ALL DISTURBED AREAS IN ACCORDANCE WITH THE MINIMUM STABILIZATION REQUIREMENTS.
 - STABILIZE ANY REMAINING DISTURBED AREAS.
 - REMOVE ALL SOIL EROSION AND SEDIMENT CONTROL DEVICES.
 - INSTALL ALL SIGNS, FENCES, LIGHTING AND LANDSCAPING AS SHOWN ON THE PLANS.
 - REMOVE AND REPLACE ALL BROKEN CURBS, SIDEWALK AND DISTRESSED PAVEMENT.
 - INSTALL F.A.B.C. TOP COURSE PAVING, ON NON POROUS PAVEMENT AREAS.
- ESTIMATED DURATION OF BUILDING CONSTRUCTION: 12 MONTHS.

SOIL NOTE:

NO SOIL CAN BE IMPORTED TO OR REMOVED FROM THE SITE UNTIL A SOIL IMPORTATION OR EXPORTATION PERMIT HAS BEEN OBTAINED FROM THE TOWNSHIP, AS REQUIRED BY ORDINANCE.

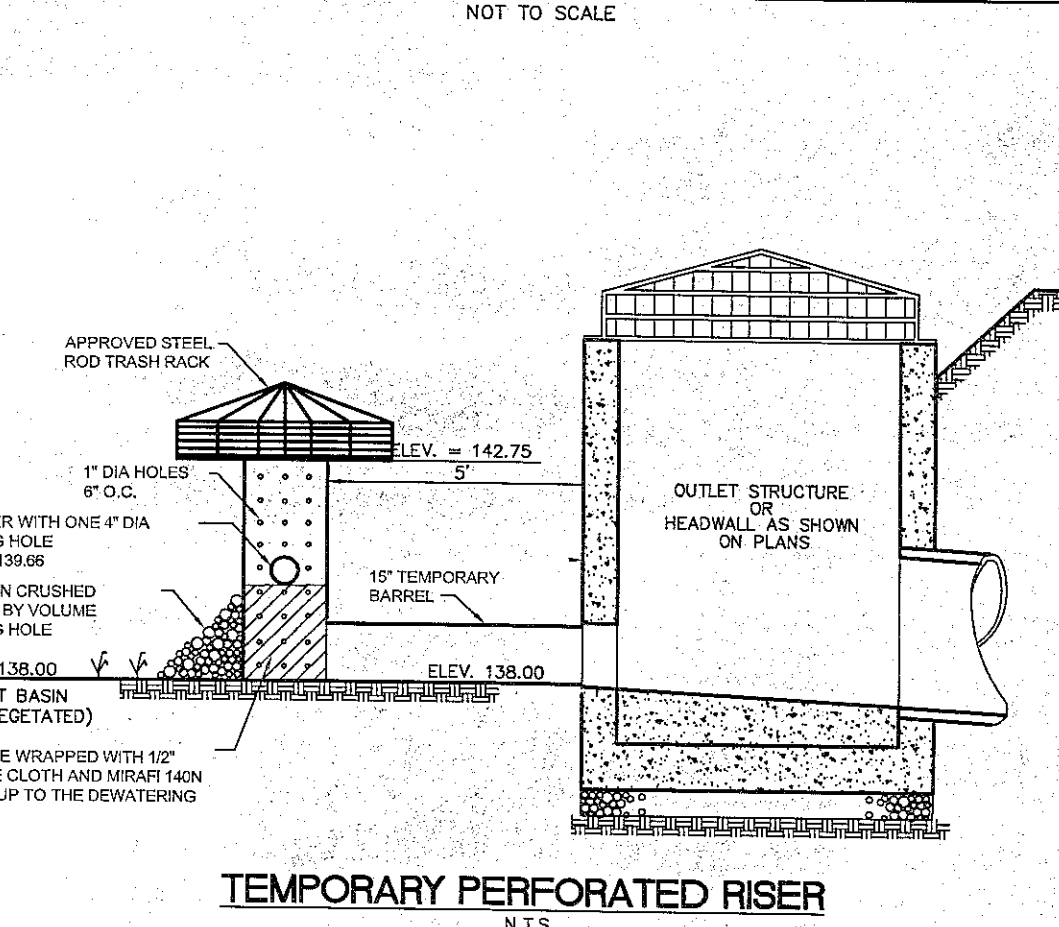
FENCE POST - 6 FT. ON CENTERS



NOTES

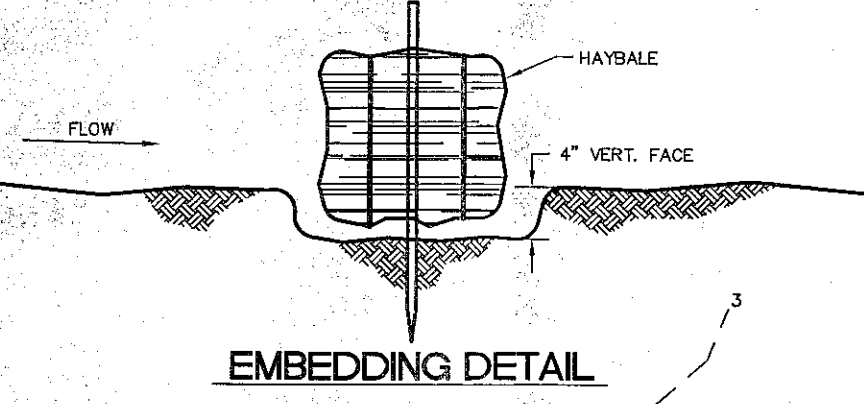
- PLACE SILT FENCE AT LOCATIONS AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN.
- THE SLOPE OF THE LAND FOR AT LEAST 30 FEET ADJACENT TO ANY SILT FENCE SHALL NOT EXCEED ONE.
- SILT FENCE SHALL BE INSTALLED SO WATER CANNOT BYPASS THE FENCE AROUND ITS ENDS.
- INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE AS PROMPTLY AS POSSIBLE.

SILT FENCE CONSTRUCTION AND INSTALLATION DETAIL

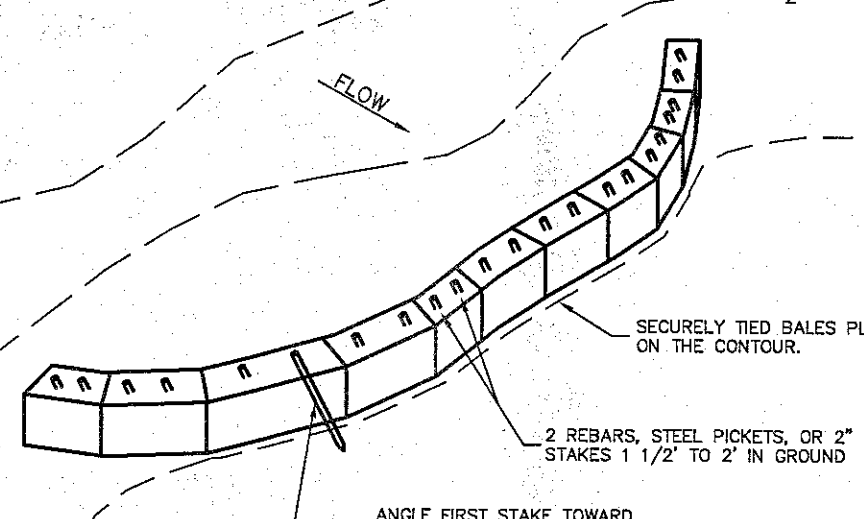


TEMPORARY PERFORATED RISER

N.T.S.

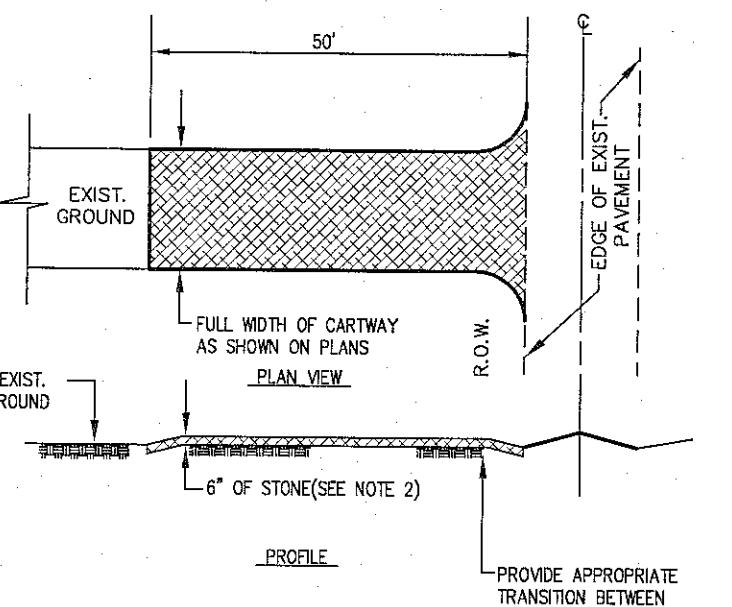


EMBEDDING DETAIL



PLACEMENT AND ANCHORING DETAIL BALE SEDIMENT BARRIERS

NOT TO SCALE

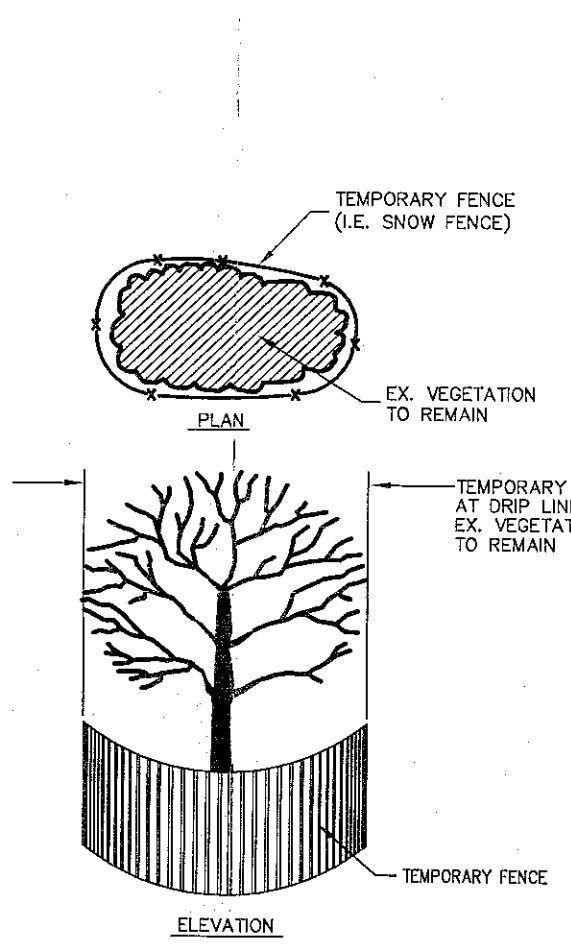


NOTES

- PLACE STABILIZED CONSTRUCTION ENTRANCE AT LOCATIONS AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN.
- STONE SIZE SHALL BE ASTM C-33, SIZE NO. 2 OR 3, CRUSHED STONE.
- THE THICKNESS OF THE STAR CONST. ENT. SHALL NOT BE LESS THAN 12".
- THE WIDTH AT THE EXIST. PAVEMENT SHALL NOT BE LESS THAN THE FULL WIDTH OF POINT OF WORKING EXTERIOR.
- THE STAR CONST. ENT. SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF FLOWS OF SEDIMENT ONTO THE EXIST. PAVEMENT. THE REMOVED FLOWS TOP DRESSING WITH ADDITIONAL STONE OF ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANUP OF ANY MEASURE USED TO TEMP. SEWMENT.
- ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO THE PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.
- WHERE TRACKING OF SOIL ONTO ROADWAYS IS A CONTINGUAL OCCURRENCE, ALL CONTRACTORS BOTH SITE AND DRAINAGE CONTRACTORS SHALL BE REQUIRED TO BROADCAST THE ROADWAY AT 16-HOUR INTERVALS MINIMUM AND PRIOR TO LEAVING THE CONSTRUCTION SITE AT THE DAY END.

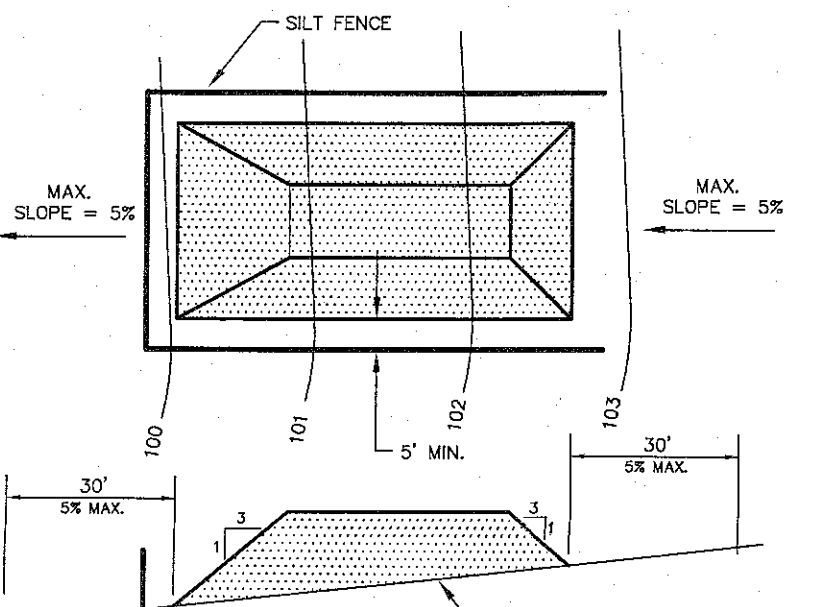
STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE



TREE PROTECTION BARRIER DETAIL

N.T.S.

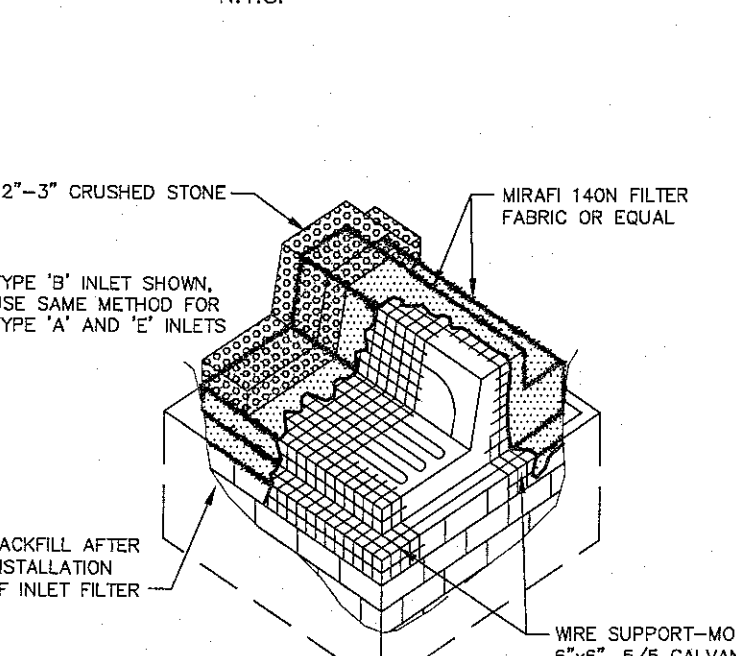


NOTES

- PLACE STOCKPILES AT LOCATIONS AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN.
- ALL SIDE SLOPES SHALL BE 3 TO 1 OR FLATTER.
- STOCKPILE SHALL RECEIVE A VEGETATIVE COVER IN ACCORDANCE WITH MINIMUM STABILIZATION REQUIREMENTS.
- SILT FENCE SHALL BE INSTALLED AS DETAILED HEREON.

TOPSOIL STOCKPILE

N.T.S.

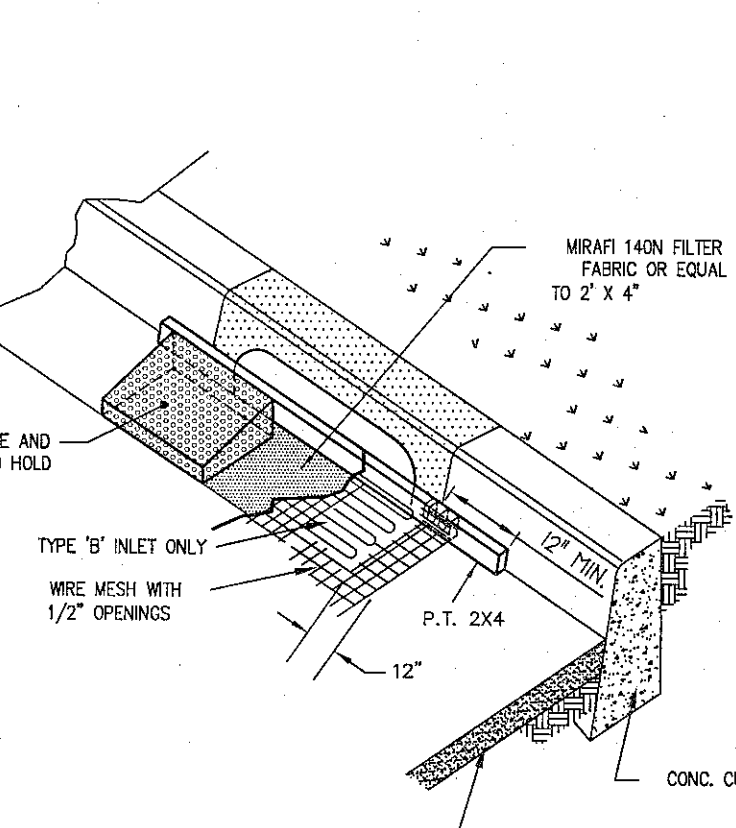


NOTES

- PLACE INLET FILTER AT LOCATIONS AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN.
- INSPECT THE FILTER AFTER EACH RAINFALL. CLEAN AND REPLACE ANY FILTERS AS REQUIRED.
- INLET FILTER SHALL BE REMOVED JUST PRIOR TO PAVING. INLET FILTER AFTER PAVING SHALL BE INSTALLED IMMEDIATELY AFTER PAVEMENT COMPACTION.

INLET FILTER BEFORE PAVING

N.T.S.

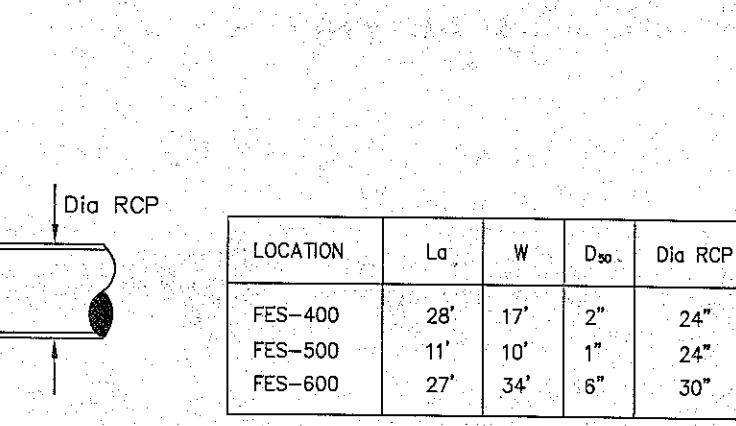


NOTES

- PLACE INLET FILTERS AT LOCATIONS AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN.
- STONE SHALL BE FIRMED SO THAT ALL OPENINGS IN THE INLET ARE NOT COMPLETELY COVERED AND FILTER POSITION TO ALLOW FLOW INTO THE EXISTING BASIN.
- INLETS ARE TO BE CLEANED AFTER EVERY STORM.

INLET FILTER AFTER PAVING

NOT TO SCALE

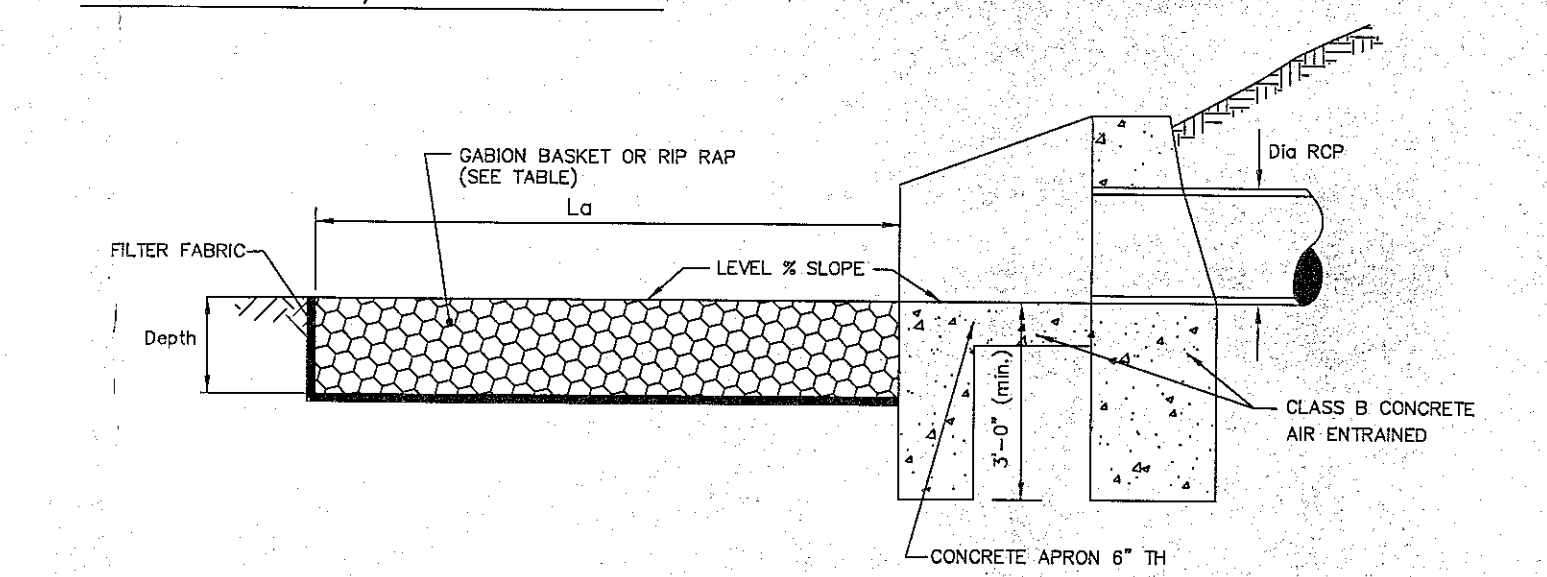


LOCATION	L ₀	W	D ₀	D ₀ RCP	Depth (in)
FES-400	28'	17'	2'	24"	12"
FES-500	11'	10'	1'	24"	12"
FES-600	27'	34'	6"	30"	12"

(1) TO BE PLACED IN GABION BASKETS.

CONCRETE APRON AND CONDUIT OUTLET PROTECTION

N.T.S.



DATE: NOVEMBER 13, 2015	SCALE: AS SHOWN
DESIGNED BY: C.R.A.	DRAWN BY: A.B.
CHECKED BY: R.B.H.	JOB No. 0142M-A
REVISIONS	AUTH. DATE

BY: *Robert B. Heibell*
Robert B. Heibell
New Jersey Professional Engineer
And Land Surveyor No. 20792

Van Cleeef
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Consulting Civil Engineering
Environmental Engineering
Municipal Engineering
Land Surveying
Professional Planning
Landscape Architecture

SOIL EROSION AND SEDIMENT CONTROL DETAILS

FOR
PRINCETON AUDI SERVICE CENTER
LOT 64 IN BLOCK 34001
MONTGOMERY TOWNSHIP,
SOMERSET COUNTY, NEW JERSEY



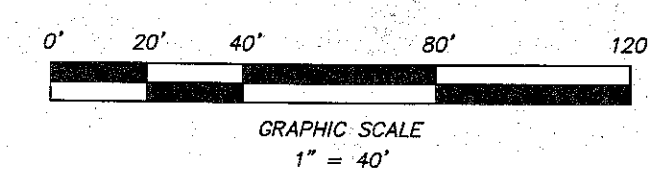
- SUMMARY:**
(TOTAL AREA = 43,480 S.Y.)
- 1) SITE VOLUME VS. EXISTING TIN ANALYSIS = 8,413 C.Y. (FILL)
 - 2) BASEMENT EXCAVATION: NA = 0 C.Y.
 - 3) ROADS PAVEMENT BOX: 2,315 S.Y. x 0.389 Y. (14" THICKNESS) = 900 C.Y. (CUT)
 - 4) PARKING FACILITIES PAVEMENT: 21,340 S.Y. x 0.278 Y. (10" THICKNESS) = 5,933 C.Y. (CUT)
 - 5) CONCRETE SIDEWALK BOX: 942 S.Y. x 0.222 Y. (8" THICKNESS) = 209 C.Y. (CUT)
 - 6) STORM SEWER UTILITIES:
AVERAGE PIPE DIAMETER = 18"
AVERAGE AREA PIPE + STONE = 3.5' x 2.5' = 8.75 S.F.
LENGTH OF PIPE = 3,937 L.F.
8.75 S.F. x 3,937 L.F. / 27' = 1,276 C.Y. (CUT)
 - 7) SANITARY SEWER UTILITIES:
AVERAGE PIPE DIAMETER = 8"
AVERAGE AREA PIPE + STONE = 0.5' x 2' = 1 S.F.
LENGTH OF PIPE = 650 L.F.
1 S.F. x 650 L.F. / 27' = 24 C.Y. (CUT)
 - 8) WATER + MISC. UTILITIES:
AVERAGE PIPE DIAMETER = 8"
AVERAGE AREA PIPE + STONE = 0.83' x 2' = 1.66 S.F.
LENGTH OF PIPE = 896 L.F.
1.66 S.F. x 896 L.F. / 27' = 55 C.Y. (CUT)
 - 9) LANDSCAPING:
AVERAGE TREE B&B VOLUME = 0.05 C.Y.
NUMBER OF TREES = 319
0.05 x 319 = 16 C.Y. (CUT)
- TOTAL: 8,413 - 900 - 5,933 - 209 - 1,276 - 24 - 55 - 16 = 0 C.Y. (FILL)**

Cut/Fill Earthwork

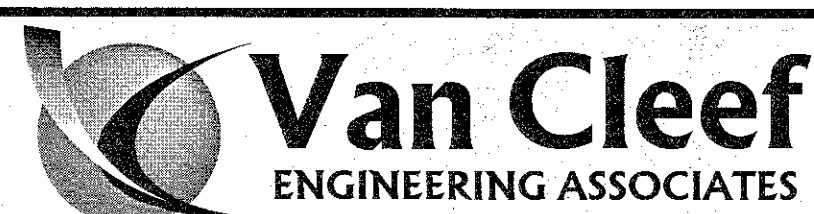
Name	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
Cut-Fill	1.000	1.000	380209.33 Sq. Ft.	8707.20 Cu. Yd.	17120.12 Cu. Yd.	8412.92 Cu. Yd. <Fill>

LEGEND:

Elevations Table			
Number	Minimum Elevation	Maximum Elevation	Color
1	-8.000	-6.000	
2	-6.000	-4.000	
3	-4.000	-2.000	
4	-2.000	0.000	
5	0.000	2.000	
6	2.000	4.000	
7	4.000	6.000	
8	6.000	8.000	
9	8.000	10.000	



		DATE: MARCH 4, 2016
		SCALE: 1" = 40'
		DESIGNED BY: C.R.A.
		DRAWN BY: A.B.
PER TOWNSHIP	R.B.H. 4/19/16	CHECKED BY: R.B.H.
REVISIONS	AUTH. DATE	JOB No. 0142M-A



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NJ LLC CERT. No. 24G028132300

BY: *Robert B. Heibell*
Robert B. Heibell
New Jersey Professional Engineer
And Land Surveyor No. 20792

CUT & FILL ANALYSIS PLAN
FOR
PRINCETON AUDI SERVICE CENTER
LOT 64 IN BLOCK 34001
MONTGOMERY TOWNSHIP,
SOMERSET COUNTY, NEW JERSEY