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SP2.2.2	CANOPY AND TANK GRADING DETAILS
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TOTAL SHEETS = 26

LIST OF STANDARD ABBREVIATIONS

&	AND
AB	AUGER BORING
ADT	AVERAGE DAILY TRAFFIC
BC	BOTTOM OF CURB
BM	BENCHMARK
BOC	BACK OF CURB
BR	BOTTOM OF RAMP
BS	BOTTOM OF STEPS
BW	BOTTOM OF WALL
CB	CATCH BASIN
CMAC	CORRUGATED METAL ARCH CULVERT
CMBC	CORRUGATED METAL BOX CULVERT
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CONC.	CONCRETE
CPP	CORRUGATED PLASTIC PIPE
DGB	DENSE GRADED BASE
DIP	DUCTILE IRON PIPE
D/S	DOWNSTREAM
(E)	EAST
ELEV.	ELEVATION
EOG	EDGE OF GRAVEL
FFE	FINISHED FLOOR ELEVATION
FG	FINISH GRADE
F.O.	FIBER OPTIC
INL	INLET
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HMA	HOT MIX ASPHALT
HP	HIGH POINT
IE	INVERT ELEVATION
LF	LINEAL FEET
LP	LOW POINT
MEG	MATCH EXISTING GRADE
MH	MANHOLE
(N)	NORTH
(NE)	NORTHEAST
(NW)	NORTHWEST
OH	OVERHEAD
PC	POINT OF CURVATURE
P/L	PROPERTY LINE
PP	POWER POLE
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE PIPE
RCB	REINFORCED CONCRETE BOX CULVERT
RCP	REINFORCED CONCRETE PIPE
RR	RAIL ROAD
R/W	RIGHT OF WAY
(S)	SOUTH
SAN	SANITARY SEWER
SB	SOIL BORING
SS	STORM SEWER
STM	STORM
(SW)	SOUTHWEST
TC	TOP OF CURB
TBR	TO BE REMOVED
TLE	TEMPORARY LIMITED EASEMENT
TNH	TOP NUT FIRE HYDRANT
TP	TEST PIT
TR	TOP OF RAMP
TYP.	TYPICAL
TS	TOP OF STEPS
TW	TOP OF WALL
U/S	UPSTREAM
VAR.	VARIES
(W)	WEST

REVIEW PLANS FOR:

KWIK TRIP #1283

VILLAGE OF HARTLAND,
WAUKESHA COUNTY, WISCONSIN

LEGEND

- BENCHMARK
- I" IRON BAR
- EXISTING MANHOLE
- EXISTING TELEPHONE MANHOLE
- EXISTING STORM SEWER MANHOLE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING HYDRANT
- EXISTING WATER VALVE
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING WATER SHUTOFF
- EXISTING DECIDUOUS TREE
- EXISTING CONIFEROUS TREE
- EXISTING GAS VALVE
- EXISTING CURB INLET
- EXISTING WELL
- TEST PIT LOCATION
- SOIL BORING
- EXISTING AIR CONDITIONING UNIT
- EXISTING GAS METER
- EXISTING ELECTRIC METER
- EXISTING UTILITY PEDESTAL
- EXISTING RAILROAD TRACKS
- EXISTING TREE LINE
- EXISTING GUY POLE
- EXISTING CABLE TV
- EXISTING FIBER OPTIC CABLE
- EXISTING UNDERGROUND GAS
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND TELEPHONE
- EXISTING OVERHEAD UTILITIES
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING PROPERTY LINE
- PROPOSED HANDICAP PARKING
- PROPOSED CURB STOP
- PROPOSED HYDRANT
- PROPOSED WATER VALVE
- PROPOSED SANITARY SEWER
- PROPOSED STORM SEWER
- PROPOSED FORCE MAIN
- PROPOSED SANITARY SEWER LATERAL
- PROPOSED WATER LATERAL
- PROPOSED WATER MAIN
- PROPOSED PUMP STATION
- PROPOSED SANITARY MANHOLE
- PROPOSED STORM MANHOLE
- PROPOSED CURB INLET
- PROPOSED CATCH BASIN
- PROPOSED CLEANOUT
- PROPOSED DRAINAGE FLOW
- PROPOSED SLOPE
- PROPOSED CURB & GUTTER
- PROPOSED REJECT CURB & GUTTER
- PROPOSED MOUNTABLE CURB & GUTTER
- EXISTING GROUND CONTOUR(INTERVAL-1 FT.)
- PROPOSED GROUND CONTOUR(INTERVAL-1 FT.)
- PROPOSED SPOT ELEVATION (TOP OF CURB)
- PROPOSED SPOT ELEVATION (BOTTOM OF CURB)
- PROPOSED SILT FENCE
- PROPOSED INLET PROTECTION
- PROPOSED RIPRAP
- PROPOSED EROSION MAT
- PROPOSED SAWCUT
- PROPOSED DRAINAGE SWALE

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KWIK TRIP STORES

KWIK STAR STORES

KWIK TRIP, Inc.
P.O. BOX 2107
1626 OAK STREET
LA CROSSE, WI 54602-2107
PH. (608) 781-8988
FAX (608) 781-8960

REI
CIVIL & ENVIRONMENTAL ENGINEERING, SURVEYING
REI Engineering, INC.
4080 N. 20TH AVENUE
WAUSAU, WISCONSIN 54401
PHONE: 715.675.9786 FAX: 715.675.4060
EMAIL: MAIL@REIENGINEERING.COM

TITLE SHEET

CONVENIENCE STORE #1283

STH 83 AND W. CAPITOL DRIVE
HARTLAND, WI

#	DATE	DESCRIPTION
1		

DRAWN BY NAP
SCALE GRAPHIC
PROJ. NO. 10827
DATE 8/17/23 - REVIEW DOCUMENTS
SHEET T1

DRAWING FILE: Q:\10800 - 10899\10827 - KWIK TRIP #1283 - HARTLAND\DRAWINGS\PLANS\10827-KT TITLE PAGE.DWG LAYOUT: TITLE
PLOTTED: AUG 17, 2023 - 4:56PM PLOTTED BY: DAN

ALTA/NSPS LAND TITLE SURVEY
HARTLAND #1283

THAT PART OF THE NORTHWEST 1/4 OF SECTION 3, TOWNSHIP 7 NORTH, RANGE 18 EAST, IN THE VILLAGE OF HARTLAND, WAUKESHA COUNTY, WISCONSIN DESCRIBED AS FOLLOWS:

COMMENCE AT THE WEST 1/4 CORNER OF SAID SECTION 3; THENCE NORTH 01° 13' 55" EAST 714.49 FEET ALONG THE WEST LINE OF SAID SECTION; THENCE NORTH 78°38'16" EAST 264.49 FEET TO THE NORTHERLY LINE OF VETTELSON ROAD AND THE POINT OF BEGINNING; THENCE NORTH 11°05'52" WEST 588.24 FEET; THENCE NORTH 03°28'40" WEST 207.94 FEET TO A POINT ON A CURVE OF NORTHEASTERLY CONVEXITY, WHOSE RADIUS IS 289.79 FEET AND WHOSE CHORD BEARS SOUTH 58°41'25" EAST 267.03 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE 277.51 FEET; THENCE SOUTH 31°15'22" EAST 364.31 FEET TO A POINT ON A CURVE OF SOUTHWESTERLY CONVEXITY, WHOSE RADIUS IS 510.47 FEET AND WHOSE CHORD BEARS SOUTH 43°11'47" EAST 211.21 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE 212.75 FEET; THENCE SOUTH 29°52'13" WEST 121.27 FEET TO THE NORTHERLY LINE OF VETTELSON ROAD; THENCE SOUTH 78°38'16" WEST 383.01 FEET ALONG SAID NORTHERLY LINE TO THE POINT OF BEGINNING.

Prepared for: Kwik Trip, Inc.

Survey No. 168756-RMK

A. Basis of Bearings
Bearings are based on the West line of the Northwest 1/4 of Section 3-7-18, which to bears North 00°00'51" East, State Plane Coordinate System, South Zone (NAD27).

B. Title Commitment
This survey was prepared based on First American Title Insurance Company title commitment number NCS-1114827-MAD, Revision No.1 (August 16, 2022), commitment date August 09, 2022 , which lists the following easements and/or restrictions from schedule B-II:

1-3, 5, 13, 8. Visible evidence shown, if any.

4, 6-7, 12, 14. Not survey related.

9. Utility Easement to Wisconsin Electric Power Company, dated April 11, 1955, recorded/filed April 23, 1955 in Volume 662, Page 593 as Document No. 414551. Lies within or crosses the surveyed property - it is a blanket easement - its location is not shown.

10. Matters in a document entitled "Deed", executed by and between Butler Line and Cement Company, a corporation duly organized and existing under and by virtue of the laws of the State of Wisconsin and State of Wisconsin, Department of Transportation, Division of Highways, recorded May 22, 1974 in Reel 079, Image 579 as Document No. 882105 of Official Records, including but not limited to covenants, conditions, restrictions, easements, assessments, liens and charges. Lies within or crosses the surveyed property - its location is shown.

11. Utility Easement to Wisconsin Electric Power Company, a public utility, dated November 25, 1974, recorded/filed April 29, 1975 in Reel 116, Image 1100 as Document No. 908937. Lies within or crosses the surveyed property - it is a blanket easement - its location is not shown.

15. Covenants, Conditions and Restrictions as set forth in Quit Claim Deed recorded in April 22, 2022 as Document No. 4664010. Correction Instrument recorded August 12, 2022 as Document No. 4684059. Lies within or crosses the surveyed property - its location is shown.

C. Flood Note
According to flood insurance rate map of the Village of Hartland, community panel number 55133C0176H, effective date of 11/05/2014, this site falls in zone X (areas determined to be outside the 0.2% annual chance floodplain).

D. Parking Spaces
There are no regular and no handicapped parking spaces marked on this site.

E. Elevations
Elevations refer to NGVD 1929 Datum. Starting benchmark - Southwest corner of the Southwest 1/4 of Section 3-7-18.
Found brass cap monument, elevation = 927.70

F. Municipal Zoning
The zoning information listed is taken from the Village of Hartland website - site is zoned Q-1, Quarry/Extractive District.

Sec. 46-626. - Building height. (See also section 46-926.)
No structure, building or parts of a building in the Q-1 district shall exceed 75 feet in height above the original land elevation of the parcel.

Sec. 46-627. - Yards. (See also section 46-926.)
Yard regulations in the Q-1 district shall be as follows:

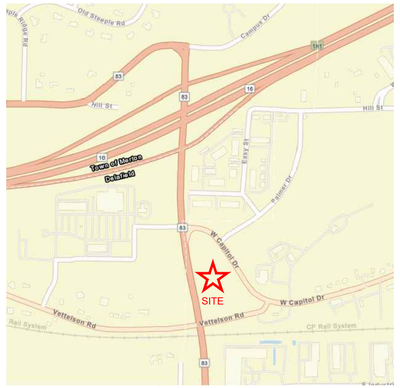
(1)The extractive operation shall have a minimum yard of 200 feet from the right-of-way line of all highways, streets or roads and all exterior property lines.
(2)Uses accessory to the extractive operations such as offices, parking and unloading areas and stockpiles of materials shall be set back a minimum of 100 feet from the right-of-way line of all highways or roads and all property lines.
(3)Shore yard: See section 46-16.

G. Notes
As to table A item 11
Surveyor's responsibility to coordinate markings shall be limited to one marking request to 811 (national "call before you dig" number) based on the property address, as provided by the client.
Note to the client, insurer, and lender - With regard to Table A, item 11, information from the sources checked within will be combined with observed evidence of utilities pursuant to Section 5.E.iv. to develop a view of the underground utilities. However, lacking excavation, the exact location of underground features cannot be accurately, completely, and reliably depicted. In addition, in some jurisdictions, 811 or other similar utility locate requests from surveyors may be ignored or result in an incomplete response. As of the field date indicated below in certificate (most recent site visit/inspection), it appears some underground utilities were not marked. This affected the surveyor's assessment of the location of the utilities resulting in partial illustration and/or mapping per plan. Where additional or more detailed information is required, the client is advised that excavation may be necessary.

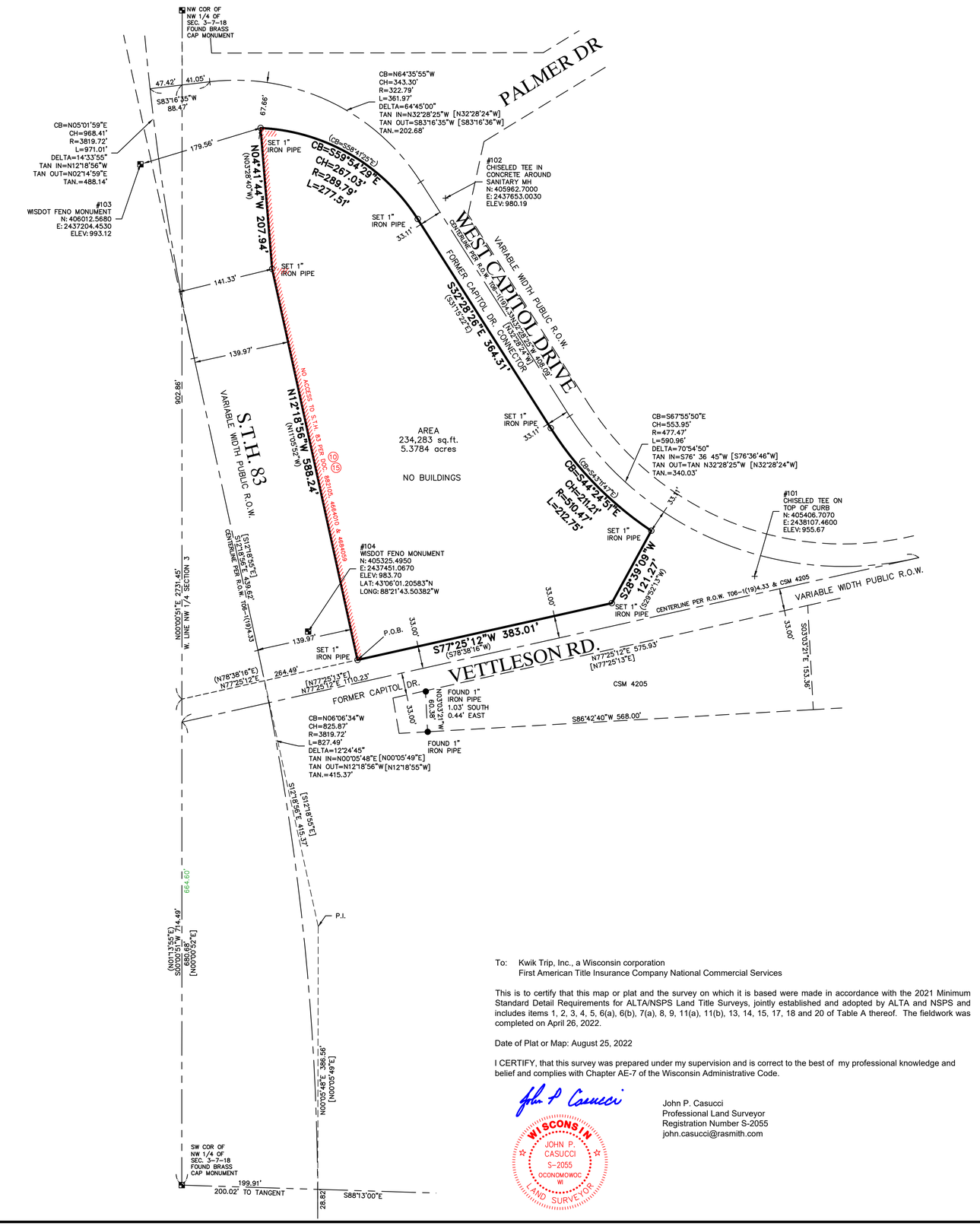
There are no proposed changes in street right of way lines, if such information is made available to the surveyor by the controlling jurisdiction observed in the process of conducting the fieldwork.

There is no visible evidence of recent street or sidewalk construction or repairs observed in the process of conducting the fieldwork.

Vettleson (Vettelson) Road spelling varies. Surveyor utilized street signs.



VICINITY MAP – NOT TO SCALE



GRAPHIC SCALE
40 0 40 80 160
1" = 80'

LEGEND

- BOLLARD
- SOIL BORING/MONITORING WELL
- FLAGPOLE
- MAILBOX
- SIGN
- AIR CONDITIONER
- CONTROL BOX
- TRAFFIC SIGNAL
- CABLE PEDESTAL
- POWER POLE
- GUY POLE
- GUY WIRE
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- T – MARKED TELEPHONE
- TV – MARKED CABLE TV LINE
- FO – MARKED FIBER OPTIC
- 780 – INDICATES EXISTING CONTOUR ELEVATION
- × 780.55 – INDICATES EXISTING SPOT ELEVATION

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To: Kwik Trip, Inc., a Wisconsin corporation
First American Title Insurance Company National Commercial Services

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS and includes items 1, 2, 3, 4, 5, 6(a), 6(b), 7(a), 8, 9, 11(a), 11(b), 13, 14, 15, 17, 18 and 20 of Table A thereof. The fieldwork was completed on April 26, 2022.

Date of Plat or Map: August 25, 2022

I CERTIFY, that this survey was prepared under my supervision and is correct to the best of my professional knowledge and belief and complies with Chapter AE-7 of the Wisconsin Administrative Code.

WISCONSIN JOHN P. CASUCCI S-2055 OCONOMOWOC WI LAND SURVEYOR

John P. Casucci
Professional Land Surveyor
Registration Number S-2055
john.casucci@rasmith.com

raSmith
CREATIVITY BEYOND ENGINEERING
16745 W. Bluemound Road
Brookfield, WI 53005-5938
(262) 781-1000
rasmith.com

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ALTA/NSPS LAND TITLE SURVEY

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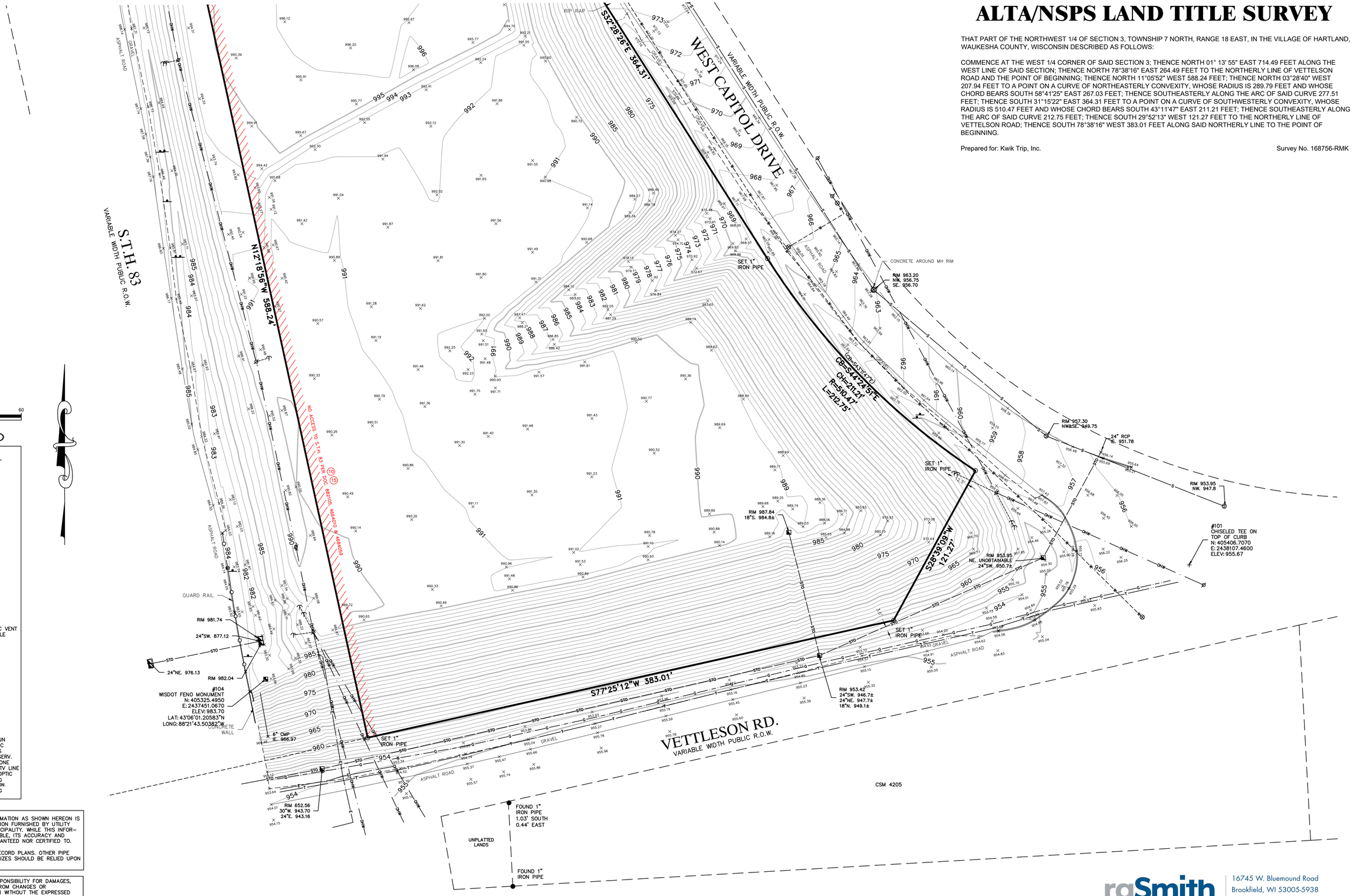
Prepared for: Kwik Trip, Inc.

Survey No. 168756-RMK



GRAPHIC SCALE

15 0 15 30 60

(IN FEET)

LEGEND

- BOLLARD
- SOIL BORING/MONITORING WELL
- FLAGPOLE
- MAILBOX
- SIGN
- AIR CONDITIONER
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S:\5168756\dwg\ AS101D.dwg \ SHEET 2

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Prepared for: Kwik Trip, Inc.

Survey No. 168756-RMK

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(IN FEET)

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THE UNDERGROUND UTILITY INFORMATION AS SHOWN HEREON IS BASED, IN PART, UPON INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED TO.

(P) INDICATES PIPE SIZES PER RECORD PLANS. OTHER PIPE SIZES ARE ESTIMATED. NO PIPE SIZES SHOULD BE RELIED UPON WITHOUT FURTHER VERIFICATION.

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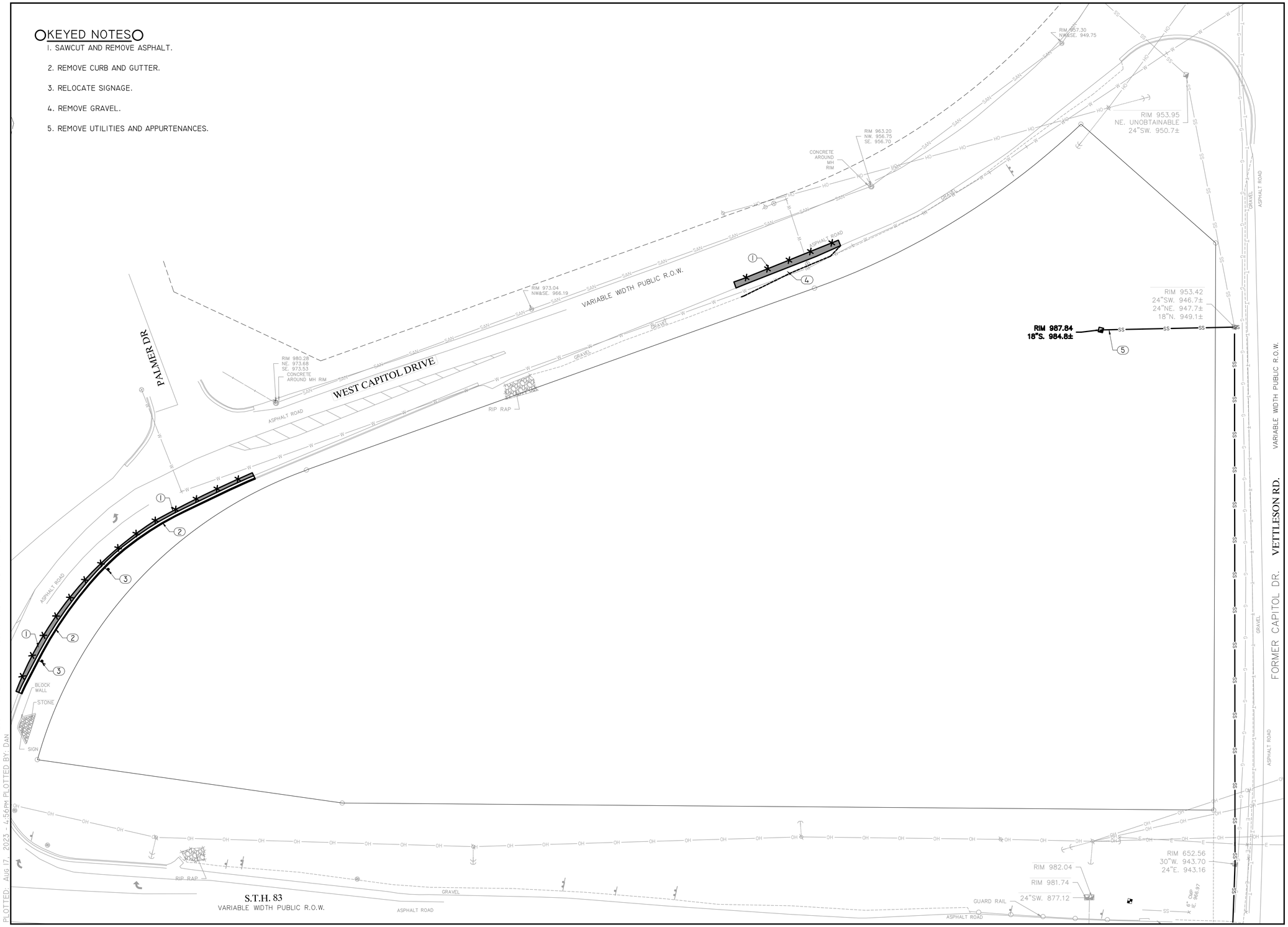
raSmith
CREATIVITY BEYOND ENGINEERING
16745 W. Bluemound Road
Brookfield, WI 53005-5938
(262) 781-1000
rasmith.com

KEYED NOTES

1. SAWCUT AND REMOVE ASPHALT.
2. REMOVE CURB AND GUTTER.
3. REMOVE SIGNAGE.
4. REMOVE GRAVEL.
5. REMOVE UTILITIES AND APPURTENANCES.



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PLOTTED: AUG 17, 2023 - 4:56PM PLOTTED BY: DAN

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KWIK STAR STORES

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EMAIL: MAIL@REIENGINEERING.COM

SCALE
0 30 60

DEMO PLAN

CONVENIENCE STORE #1283

STH 83 AND W. CAPITOL DRIVE
HARTLAND, WI

#	DATE	DESCRIPTION
1		

DRAWN BY NAP
SCALE GRAPHIC
PROJ. NO. 10827
DATE 8/17/23 - REVIEW DOCUMENTS
SHEET SP0

LAYOUT NOTES:

1. PLAN PREPARED FROM AN ALTA/ACSM LAND TITLE SURVEY BY:
   R.A. SMITH, INC.
   262-781-1000
2. CURBS ARE DIMENSIONED TO BACK OF CURB.
3. CONVENIENCE STORE, AND ISLAND COMPLEXES ARE LOCATED FROM THE NORTHEASTERN MOST PROPERTY CORNER AND ALIGNED PARALLEL/PERPENDICULAR TO THE REFERENCE LINE LABELED S32°28'26.00"W, UNLESS OTHERWISE INDICATED ON THIS PLAN.
4. UNLESS SHOWN OTHERWISE ON THIS DRAWING, CONTRACTOR SHALL PROVIDE CONTROL JOINTS, CONSTRUCTION JOINTS, AND EXPANSION JOINTS IN SLAB ON GRADE, SIDEWALKS AND DRIVES.
   CONTROL JOINT MAXIMUM DISTANCE: WALKS- 8' O.C., ALL OTHERS- 15' O.C. SAW CUT CONTROL JOINTS MINIMUM ONE-QUARTER CONCRETE THICKNESS.
   EXPANSION JOINT MAXIMUM DISTANCE: WALKS- 24' O.C., ALL OTHERS- 40' O.C.
   DOWEL ALL EXPANSION JOINTS- MAXIMUM 24" O.C.
5. CONCRETE IN ISLAND COMPLEX SHALL BE SMOOTH FINISHED.
6. EXTERIOR CONCRETE SURFACES TO BE SEALED. CONCRETE SEALER:
   APR 15- OCT 31 USE: TK-26UV
   NOV 1- DEC 31 USE: TK-290
7. EXPANSION JOINTS SHALL BE DECK-O-FOAMED AND CAULKED WITH SLI.
8. DIAGONAL STRIPING LINES (HATCHING) IN THE "NO PARKING LOADING ZONE" AREA AND ANY OTHER AREA THAT IS HATCHED SHALL BE SPACED 5' ON CENTER.
9. LETTERING FOR ALL WORDING SUCH AS "NO PARKING LOADING ZONE" AND CARWASH SHOULD BE 12" TALL.
10. ALL DIAGONAL STRIPING SHALL BE ANGLED AS CLOSE TO 45° AS POSSIBLE.

SITE DATA:

ZONING DISTRICT: Q-1 (QUARRY/EXTRACTIVE)

TOTAL SITE AREA - EXISTING/PROPOSED: 234,283 SF

EX. IMPERVIOUS:	0 SF
EX. PERVIOUS:	234,283 SF
PARKING REQUIREMENTS	
PARKING REQUIRED	SERVICE STATION = 1 STALL PER 2 EMPLOYEES +1
PARKING PROVIDED	50 STALLS
BUILDING HEIGHTS	
CONVENIENCE STORE	20.0'
CANOPY	19.5'

BUILDING SETBACKS
FRONT: TBD
REAR: TBD
SIDE: TBD

PROPOSED LOT GREEN AREA:	129,011 SF	55%
PROPOSED HARD COVER:	105,272 SF	45%
PAVED AREA:	85,390 SF	36%
BUILDING ROOF AREA:	18,220 SF	8%
WATER FEATURE AREA:	12,000 SF	5%
CONVENIENCE STORE: (FLOOR AREA) =	12,220 SF 5,370 SF	

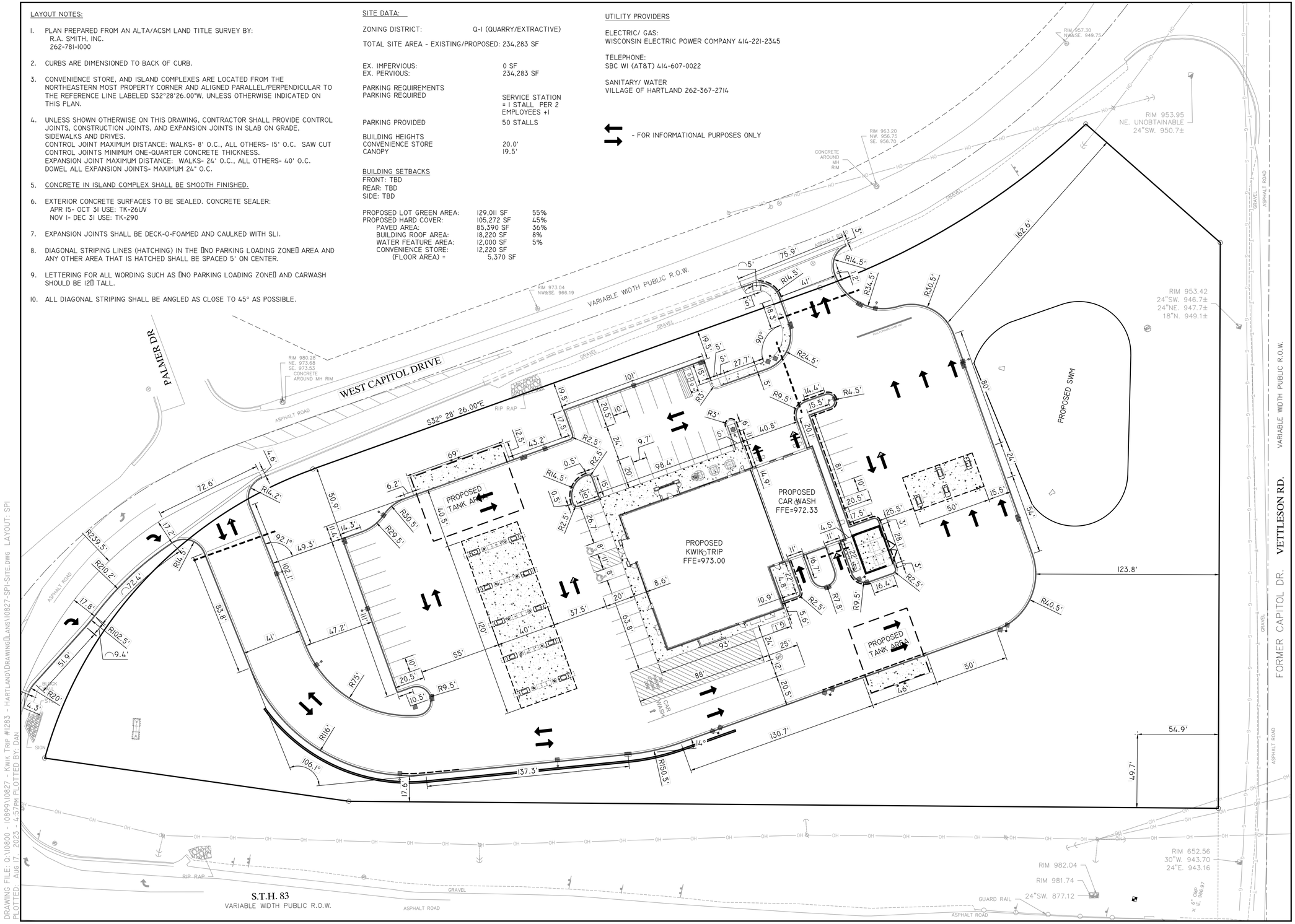
UTILITY PROVIDERS

ELECTRIC/ GAS:
WISCONSIN ELECTRIC POWER COMPANY 414-221-2345

TELEPHONE:
SBC WI (AT&T) 414-607-0022

SANITARY/ WATER
VILLAGE OF HARTLAND 262-367-2714

⇄ - FOR INFORMATIONAL PURPOSES ONLY



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SCALE
0 30 60

SITE PLAN

CONVENIENCE STORE #1283
STH 83 AND W. CAPITOL DRIVE
HARTLAND, WI

#	DATE	DESCRIPTION
1		

DRAWN BY NAP
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DATE 8/17/23 - REVIEW DOCUMENTS
SHEET SP1

KEYED NOTES

2,700 SF — 1. ASPHALT PAVEMENT. SEE DETAIL 1/SP5.

6,200 SF — 2. 6" DEPTH (MIN.) CONCRETE SLAB-ON-GRADE WITH #3 REBAR, 3' O.C. CONCRETE SEALER: TK-26UV. SEE DETAIL 6/SP5.

67,950 SF — 3. 8" DEPTH (MIN.) CONCRETE SLAB-ON-GRADE WITH #4 REBAR, 4' O.C. CONCRETE SEALER: TK-26UV. SEE DETAIL 6/SP5.

1,750 SF — 4. 8" DEPTH CONCRETE APPROACH SIMILAR TO DETAIL 7/SP5.

4,800 SF — 5. 6" CONCRETE WALK. SEE DETAIL 2/SP5. CONCRETE SEALER: TK-26UV

129,000 SF
UNDISTURBED=30,150 SF — 6. LANDSCAPE AREA. SEE SHEET L1.

7. 30" CURB AND GUTTER, SEE DETAIL 8/SP5.

8. 18" CURB AND GUTTER, SEE DETAIL 9/SP5.

9. 18" REJECT CURB AND GUTTER, SEE DETAIL 9/SP5.

10. TRANSITION CURB & GUTTER. SEE DETAIL 4/SP5.

11. STANDARD CURB & GUTTER TERMINATION. SEE DETAIL 5/SP5.

12. TAPER CURB FROM FLUSH TO FULL HEIGHT OVER 6' LENGTH. SEE DETAIL 5A/SP5.

13. A.D.A. ACCESSIBLE PARKING SPACE WITH LOADING ZONE. PROVIDE APPROPRIATE STRIPING AND PAVEMENT MARKINGS. SEE SHEET SP2.3.

14. OFF-STREET PARKING STALLS
STRIPING - 4" WIDE STALL LINES, USE HIGH VISIBILITY YELLOW PAINT.
SPACES PROVIDED
(49) 10.0' x 20.0' (MIN.) GENERAL PARKING
(2) 8.0' x 20.0' ACCESSIBLE PARKING WITH
(1) 11.0' x 20.0' LOADING ZONE
(15) 15.0' x 70.0' TRAILER PARKING

15. EXTERNAL TRASH ENCLOSURE TO MATCH BUILDING. SEE ARCHITECTURAL DETAILS.

16. KWIK TRIP TRADEMARK SIGN SUBJECT TO SEPARATE REVIEW AND APPROVAL (VERIFY FINAL LOCATION WITH SIGN PERMIT)

17. 4" WIDE, HIGH VISIBILITY, PAVEMENT STRIPING, LANE MARKINGS AND TEXT. COLOR: HC MARKINGS- YELLOW, ALL OTHERS- YELLOW.

18A. SIDEWALK RAMP (12:1 SLOPE MAX). SEE DETAIL 12/SP5.

18B. SIDEWALK RAMP (12:1 SLOPE MAX). SEE DETAIL 13/SP5.

18C. SIDEWALK RAMP (12:1 SLOPE MAX). SEE DETAIL 14/SP5.

19. GAS TANK VENT AREA.

20. 30" HT., 6" DIA. CONCRETE FILLED PIPE BOLLARD INSTALLED AT EACH PARKING STALL ALONG BUILDING. SEE DETAIL 10/SP5.

21. 40'-0" x 120'-0" DISPENSER ISLAND CANOPY. VERIFY SIZE, PLACEMENT, COLUMN AND FOOTING SIZE WITH CANOPY AND STRUCTURAL PLANS. CANOPY GRAPHICS PER OWNER.

22. CONCRETE ISLANDS W/ 6" EXPOSURE WITH FUEL DISPENSERS. DISPENSER PER OWNER, 3'-6"x 6'-0".

23. 36" HT., 6" DIA. CONCRETE FILLED PIPE BOLLARD SIMILAR TO DETAIL 10/SP5.

24. OUTDOOR MERCHANDISING AREA.

25. UNDERGROUND FUEL STORAGE TANKS PER OWNER. PROVIDE PIPING AND VENTING PER OWNER'S SPECIFICATIONS. SEE DETAIL 1/SP6.

26. HC PVC BOLLARD SLEEVE PER OWNER. VAN ACCESS SIGNAGE AT 48" HT. STALL PARKING AT 60" HT. SEE SHEET SP2.3.

27. STORM STRUCTURE. SEE SHEET SP3 FOR FURTHER STORM SEWER INFORMATION.

28. LP CAGE.

29. 'FREE AIR' COMPRESSOR. PROVIDE SIGNAGE PER OWNER.

30. SITE AREA LIGHT WITH CONCRETE BASE. SEE DETAIL 11/SP5.

31. PVC IRRIGATION SLEEVE UNDER PAVEMENT. VERIFY W/ IRRIGATION PLAN FOR EXACT SIZE AND LOCATION BEFORE INSTALLATION. SEE DETAIL 3/SP5.

32. 24'-0" x 50'-0" DISPENSER ISLAND CANOPY. VERIFY SIZE, PLACEMENT, COLUMN AND FOOTING SIZE WITH CANOPY AND STRUCTURAL PLANS. CANOPY GRAPHICS PER OWNER.

33. BIKE RACK.

34. VACUUM. SEE DETAIL 15/SP5.

35. 18" EPOXY STOP BAR (YELLOW).

36. TRANSFORMER PAD.

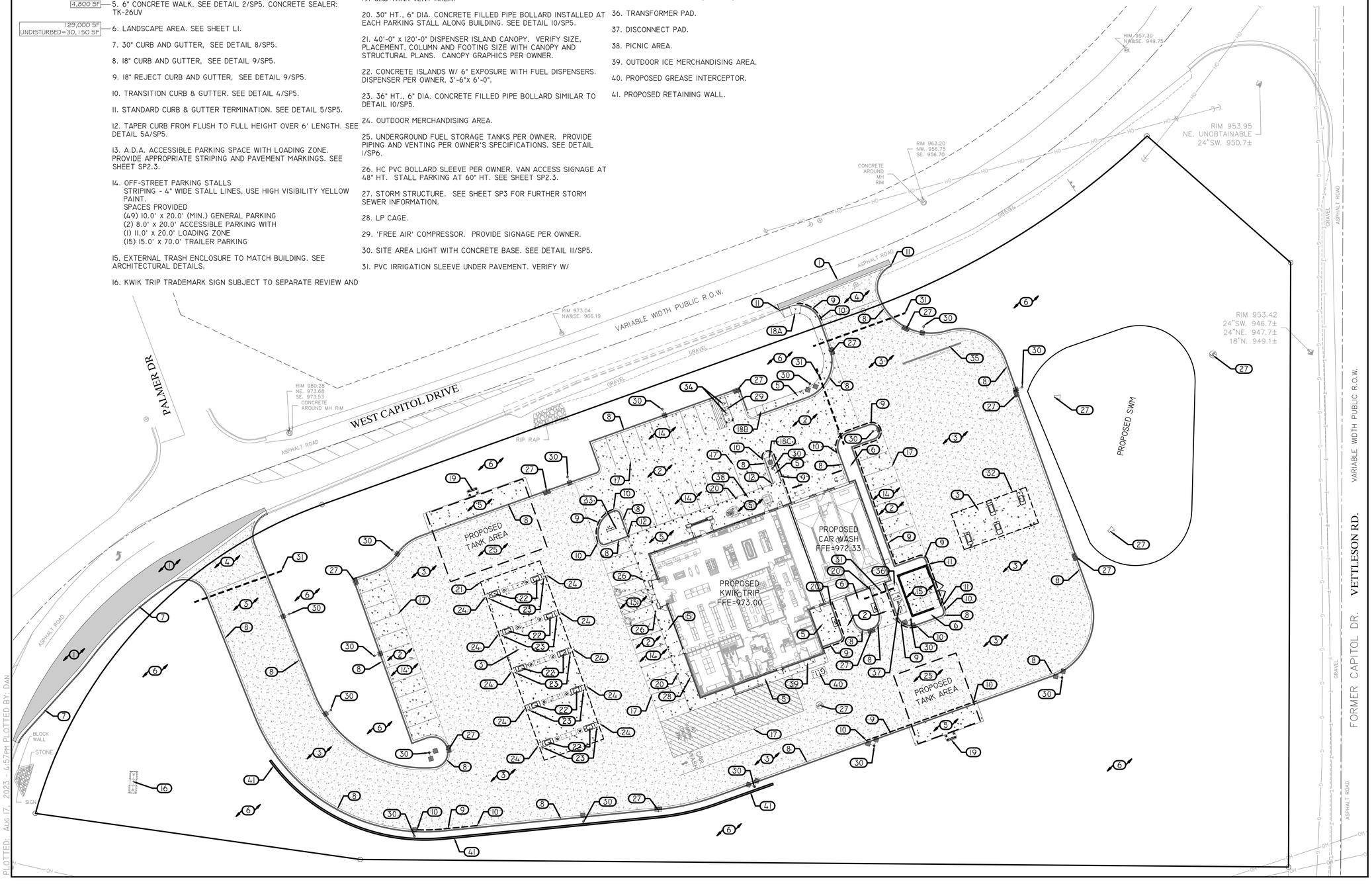
37. DISCONNECT PAD.

38. PICNIC AREA.

39. OUTDOOR ICE MERCHANDISING AREA.

40. PROPOSED GREASE INTERCEPTOR.

41. PROPOSED RETAINING WALL.



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SCALE
0 30 60

SITE PLAN (KEYNOTES)

CONVENIENCE STORE #1283

STH 83 AND W. CAPITOL DRIVE
HARTLAND, WI

#	DATE	DESCRIPTION
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NOTE: CONTRACTOR TO OBTAIN RIGHT-OF-WAY EXCAVATION PERMIT PRIOR TO BEGINNING SITE WORK.
CALL DIGGERS HOTLINE @ 1-800-242-8511 AT LEAST 3 WORKING DAYS PRIOR TO EXCAVATING.

CONSTRUCTION NOTE:

COORDINATE WITH OWNER FOR POSSIBLE CONSTRUCTION FENCING AND GATE LOCATIONS AND APPROPRIATE SIGNAGE INSTALLATION.

NOTE:

- REFER TO OTHER PROJECT PLANS AND INFORMATION RELATED TO THIS PROJECT PRIOR TO BEGINNING ANY GRADING WORK.

- PLAN PREPARED FROM ALTA/ACSM LAND TITLE SURVEY BY:
  R.A. SMITH, INC.
  262.781.1000

- CONTRACTOR SHALL LOCATE ALL UTILITIES WHICH MAY AFFECT THIS WORK AND NOTIFY OWNER OF ANY CONFLICTS.

- CONTRACTOR SHALL VERIFY ALL EXISTING AND PROPOSED ELEVATIONS PRIOR TO START OF CONSTRUCTION. VERIFY CRITICAL ELEVATIONS TO ENSURE CONFORMANCE WITH GRADING PLAN, PARTICULARLY WITH WALK AND/ OR PAVEMENTS TO REMAIN. MEET EXISTING GRADES ALONG STREETS, PROPERTY LINES AND DRIVEWAY ENTRANCES. RESTORE ALL EXISTING PAVEMENTS THAT REMAIN TO THEIR ORIGINAL, IF NOT BETTER CONDITION. NOTIFY OWNER OF ANY CONFLICTS.

- AREAS NOT PAVED AND TO BE LANDSCAPED SHALL RECEIVE MINIMUM OF 4" DEPTH COMPACTED TOPSOIL.

- CONTRACTOR SHALL COORDINATE GRADING AND INSTALLATION OF DRIVES IN R.O.W. WITH APPROPRIATE GOVERNMENT AGENCIES. OBTAIN APPROPRIATE PERMITS FOR GRADING AND DRAINAGE IN ALL R.O.W.

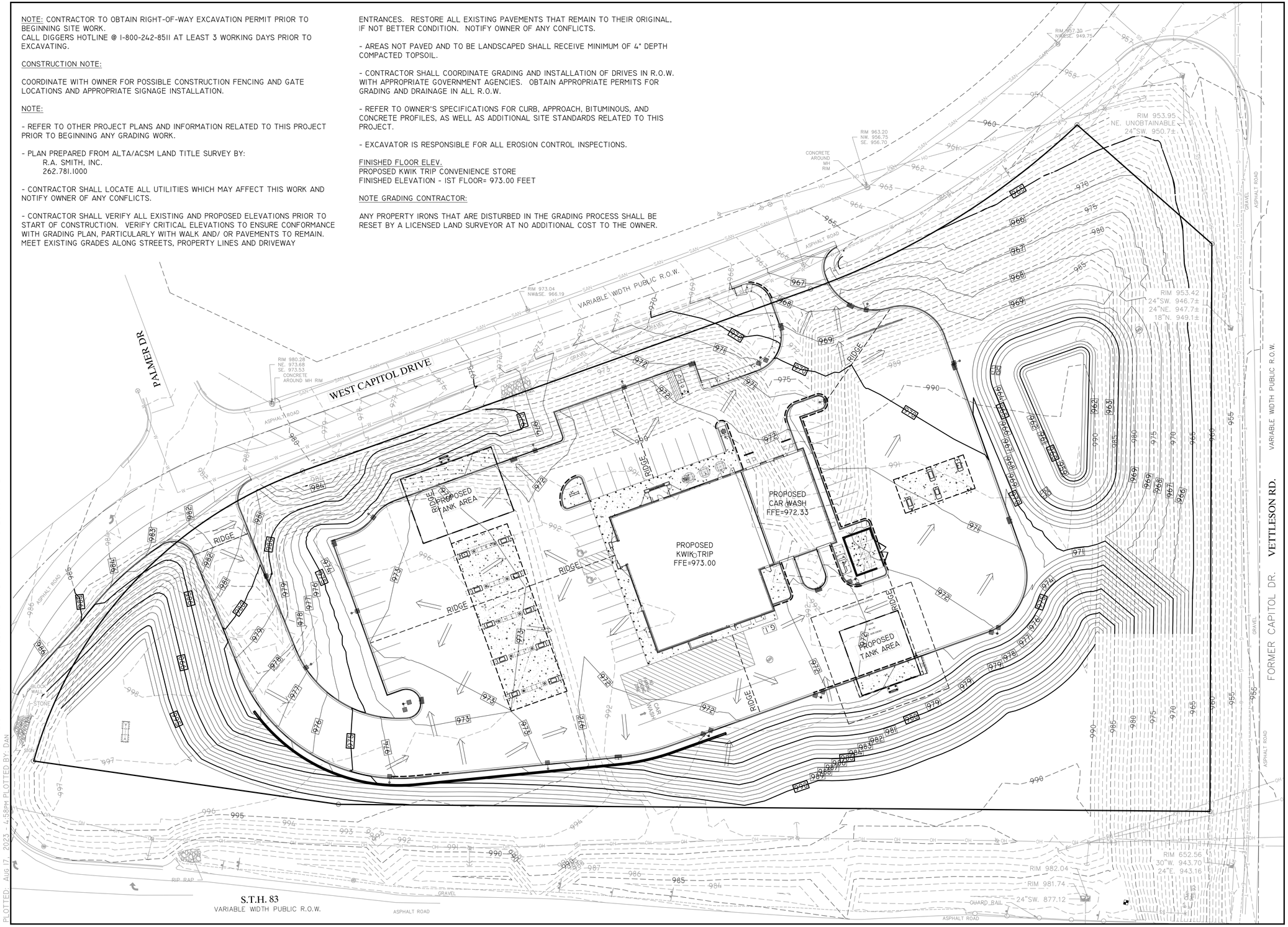
- REFER TO OWNER'S SPECIFICATIONS FOR CURB, APPROACH, BITUMINOUS, AND CONCRETE PROFILES, AS WELL AS ADDITIONAL SITE STANDARDS RELATED TO THIS PROJECT.

- EXCAVATOR IS RESPONSIBLE FOR ALL EROSION CONTROL INSPECTIONS.

FINISHED FLOOR ELEV.
PROPOSED KWIK TRIP CONVENIENCE STORE
FINISHED ELEVATION - IST FLOOR= 973.00 FEET

NOTE GRADING CONTRACTOR:

ANY PROPERTY IRONS THAT ARE DISTURBED IN THE GRADING PROCESS SHALL BE RESET BY A LICENSED LAND SURVEYOR AT NO ADDITIONAL COST TO THE OWNER.



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SCALE
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GRADING PLAN

CONVENIENCE STORE #1283

STH 83 AND W. CAPITOL DRIVE
HARTLAND, WI

#	DATE	DESCRIPTION
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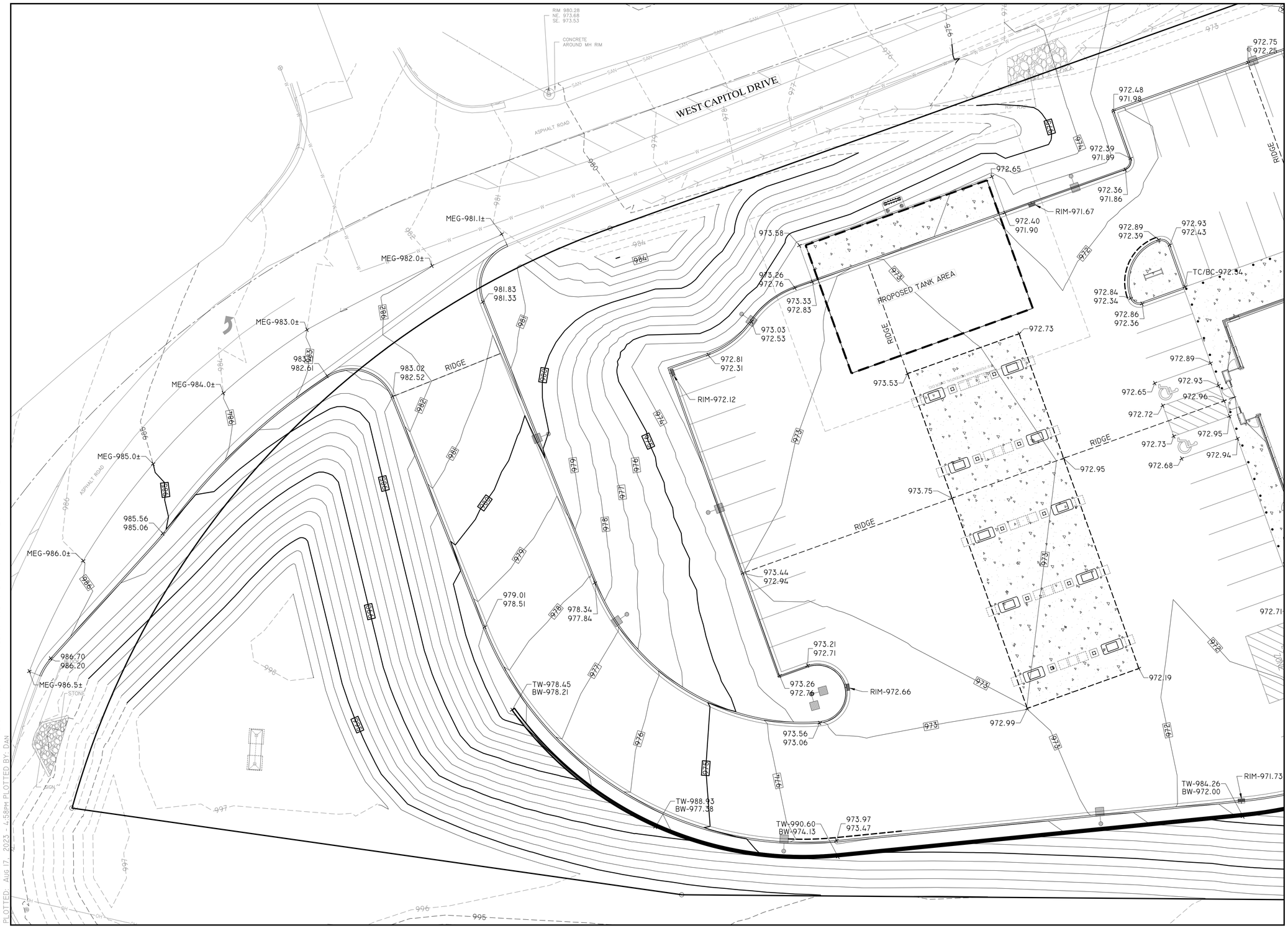

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SCALE
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GRADING PLAN DETAIL - WEST

CONVENIENCE STORE #1283
STH 83 AND W. CAPITOL DRIVE
HARTLAND, WI

#	DATE	DESCRIPTION
1		

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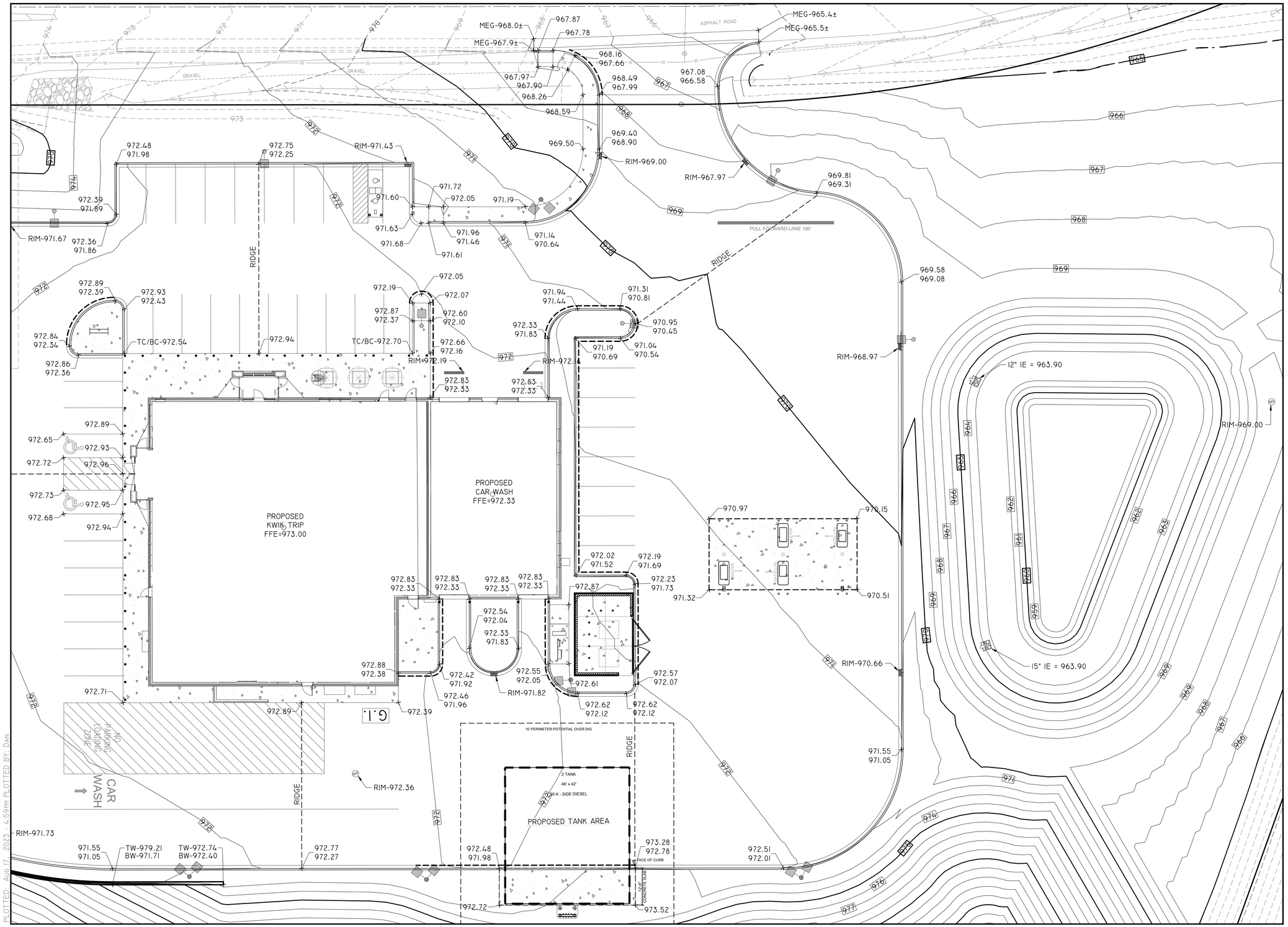

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GRADING PLAN DETAIL - EAST

CONVENIENCE STORE #1283

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DATE 8/17/23 - REVIEW DOCUMENTS
SHEET SP2.1.2

PALMER DR

WEST CAPITOL DRIVE

VARIABLE WIDTH PUBLIC R.O.W.

ASPHALT ROAD

GRAVEL

RIDGE

PROPOSED TANK AREA

PROPOSED KWIK TRIP FFE=973.00

PROPOSED CAR WASH FFE=972.33

CAR WASH

PROPOSED TANK AREA

RESERVED FOR CONCRETE JOINT LINES AND SPOT DETAIL

RIM 980.28
NE: 973.68
SE: 973.53

RIM 973.04
NW&SE: 966.19

RIM 963.20
NW: 956.75
SE: 956.70

CONCRETE AROUND MH RIM

970.97

970.15

971.32

970.51

DRAWING FILE: Q:\10800 - 10899\10827 - KWIK TRIP #1283 - HARTLAND\DRAWINGS\PLANS\10827-SP2.0-GRADING.DWG LAYOUT: SP2.2.1
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SCALE
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GRADING PLAN SPOT DETAIL

CONVENIENCE STORE #1283

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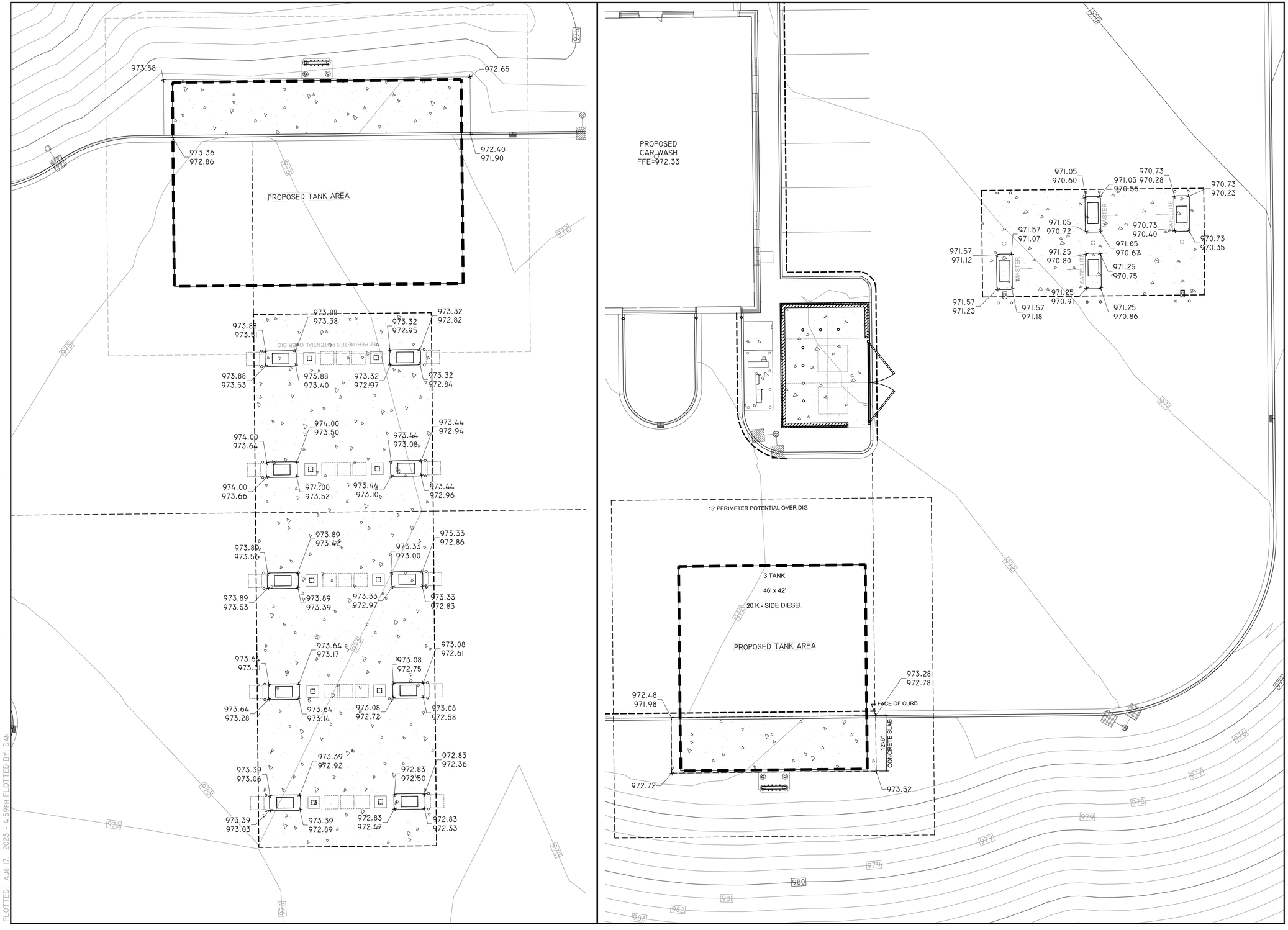

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CANOPY AND TANK GRADING DETAILS

CONVENIENCE STORE #1283

STH 83 AND W. CAPITOL DRIVE
HARTLAND, WI

#	DATE	DESCRIPTION
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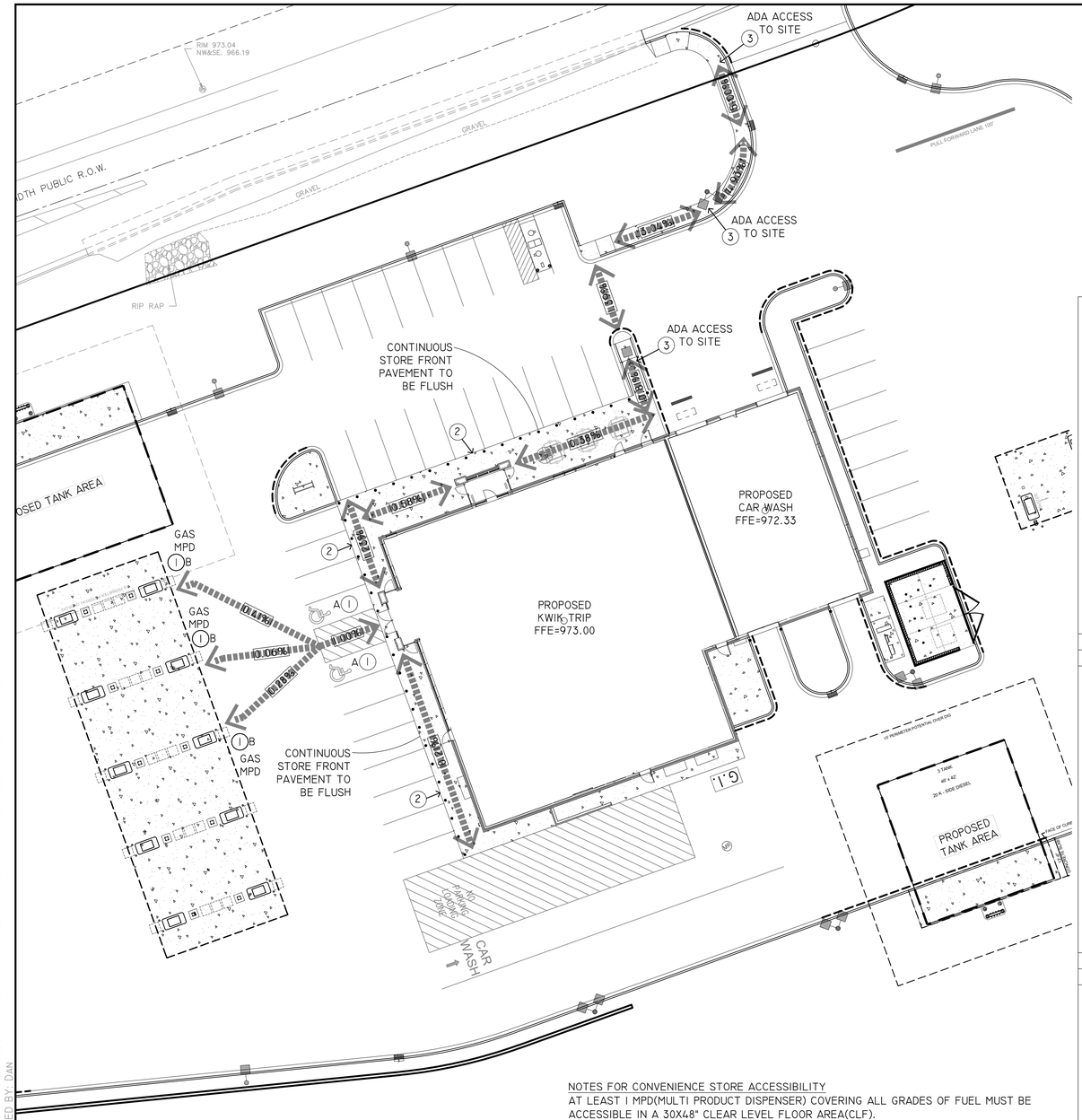


PLAN KEYNOTES

1. ACCESSIBLE STALLS
   A. STRIPING - 4" WIDE STALL LINES, USE HIGH VISIBILITY BLUE PAINT.
   SPACES PROVIDED
   (2) 8'-0"X 20'-0" ACCESSIBLE PARKING WITH
   (1) 11'-0"X 20'-0" LOADING ZONE
   B. ACCESSIBLE FUELING POINT AND DISPENSER AND VALET. VALET AND KEY PAD ON PUMP SHALL CONFORM TO ADA REACH DIMENSIONS AS SHOWN IN DETAIL. SEE NOTES FOR CONVENIENCE STORE ACCESSIBILITY.
2. PAVEMENTS FLUSH FOR ACCESSIBILITY.
3. ACCESSIBLE ROUTE TO STORE.

Know what's **below.** **Call** before you dig.

NOTES FOR CONVENIENCE STORE ACCESSIBILITY

AT LEAST 1 MPD(MULTI PRODUCT DISPENSER) COVERING ALL GRADES OF FUEL MUST BE ACCESSIBLE IN A 30X48" CLEAR LEVEL FLOOR AREA(CLF).

ALL PUMP CONTROLS SHALL BE < 48"(2010 STANDARD). WINDOW WASHER, PAPER TOWEL DISPENSER, LITERATURE, FIRE EXTINGUISHER, EMERGENCY FUEL STOPS, ETC. BE ACCESSIBLE 30"X48" CLF SPACE AND WITHIN A FORWARD OR SIDE APPROACH REACH RANGE.

PROVIDE ISA(INDUSTRY STANDARD ARCHITECTURE) AT EACH ACCESSIBLE FUEL POSITION ON FACE OF PUMP.

PROVIDE ISA AT EACH ACCESSIBLE FUELING POSITION VISIBLE TO APPROACHING VEHICLES.

PROVIDE A SIGN AT EACH ACCESSIBLE FUELING POSITION WITH STORE TELEPHONE NUMBER, ADVISING AVAILABLE FUELING ASSISTANCE.

ANY PAY FUNCTION- I.E. AIR/VACUUM ETC. ARE REQUIRED TO HAVE AN ACCESSIBLE ROUTE TO STORE ENTRANCE. CONTROLS SHALL BE ACCESSIBLE 30"X48" CLF SPACE AND WITHIN A FORWARD OR SIDE APPROACH REACH RANGE.

NOTES:

-REFER TO THE DOCUMENT FROM THE DEPARTMENT OF JUSTICE ON "2010 ADA STANDARDS FOR ACCESSIBLE DESIGN". CONTRACTOR SHALL REFERENCE CURRENT A.D.A. GUIDELINES AND LOCAL REGULATIONS FOR SITE ACCESSIBILITY. IN ALL CASES THE MINIMUM REQUIREMENTS SHALL BE PROVIDED ON SITE TO ENSURE COMPLIANCE TO ALL REGULATIONS.

- KWIK TRIP STANDARD ENTRANCE DOOR IS AUTOMATIC SLIDING DOOR SYSTEM DESIGNED TO COMPLY WITH ALL ACCESS CODES AND LAWS. ENTRANCE DOORS FOR ACCESSIBLE ROUTES WILL HAVE A MINIMUM CLEAR OPENING OF 32"

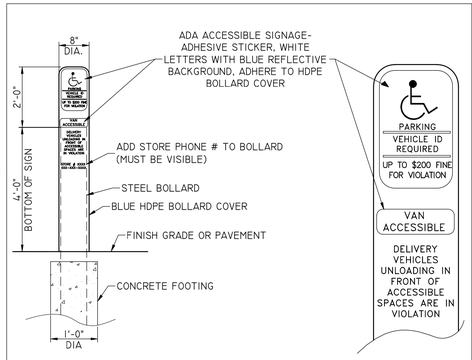
-STORE FRONTS WILL PROVIDE FLUSH PAVEMENTS ALONG ACCESSIBLE ROUTES WITH PROTECTIVE SECURITY BOLLARDS INDICATED AND SPACED BETWEEN PARKING SURFACES AND BUILDING WALK PER PLAN.

-NO OBJECTS OR DISPLAYS SHOULD PROTRUDE INTO THE MINIMUM CLEAR SPACE OF THE ACCESSIBLE ROUTES TO THE STORE ENTRANCE. THIS WILL INCLUDE SEASONAL DISPLAY VENDING AREAS AS WELL AS OTHER OUTDOOR STORAGE UNITS FOR PROPANE AND ICE, ETC.

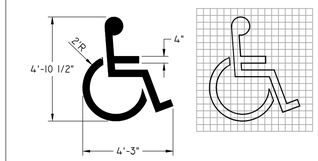
-PER A.D.A GUIDELINES- CLEAR WIDTH OF ACCESSIBLE ROUTES SHALL BE 36" AND PERMITTED TO BE REDUCED TO 32" FOR A LENGTH OF 24".

- ACCESS ISLES SERVING WHEEL CHAIR LIFTS OR CHAIR ACCESS FROM VEHICLES ARE REQUIRED TO BE NEARLY LEVEL IN ALL DIRECTIONS TO PROVIDE SAFE TRANSFER OF WHEELCHAIRS TO AND FROM VEHICLES. THE EXCEPTION WOULD BE FOR DRAINAGE. MAXIMUM SLOPE FOR THE ACCESS ISLE IS 1:48. NO CURB RAMPS SHALL BE A PART OF THE ACCESS ISLE.

-IDENTIFICATION SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY WITH THE DESIGNATION OF 1 "VAN ACCESSIBLE' IN EVERY 8 ACCESSIBLE SPACES ON SITE.



ADA BOLLARD SIGNAGE
NOT TO SCALE

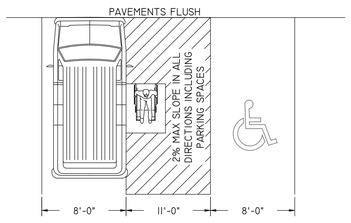


ACCESSIBILITY SYMBOL PAINTED ON PAVEMENT

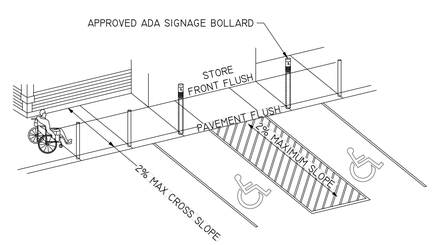
PROPORTIONING GUIDE

* TO BE YELLOW IN COLOR, UNLESS OTHERWISE SPECIFIED.

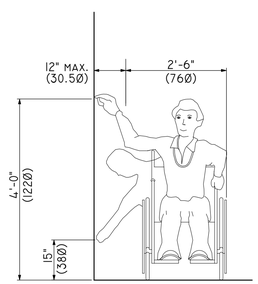
HANDICAP SYMBOL
NOT TO SCALE



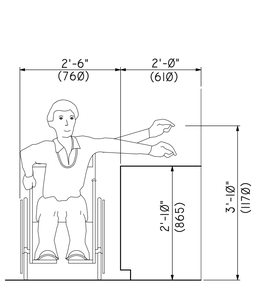
PLAN VIEW



VAN ACCESSIBLE PARKING
NOT TO SCALE



HIGH AND LOW - SIDE REACH LIMITS



MAXIMUM SIDE REACH OVER OBSTRUCTION

ACCESSIBLE REACH DIMENSIONS
NOT TO SCALE

KWIK TRIP STORES

KWIK STAR STORES

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N

SCALE
0 20 40

ACCESSIBLE PLAN

CONVENIENCE STORE #1283

STH 83 AND W. CAPITOL DRIVE
HARTLAND, WI

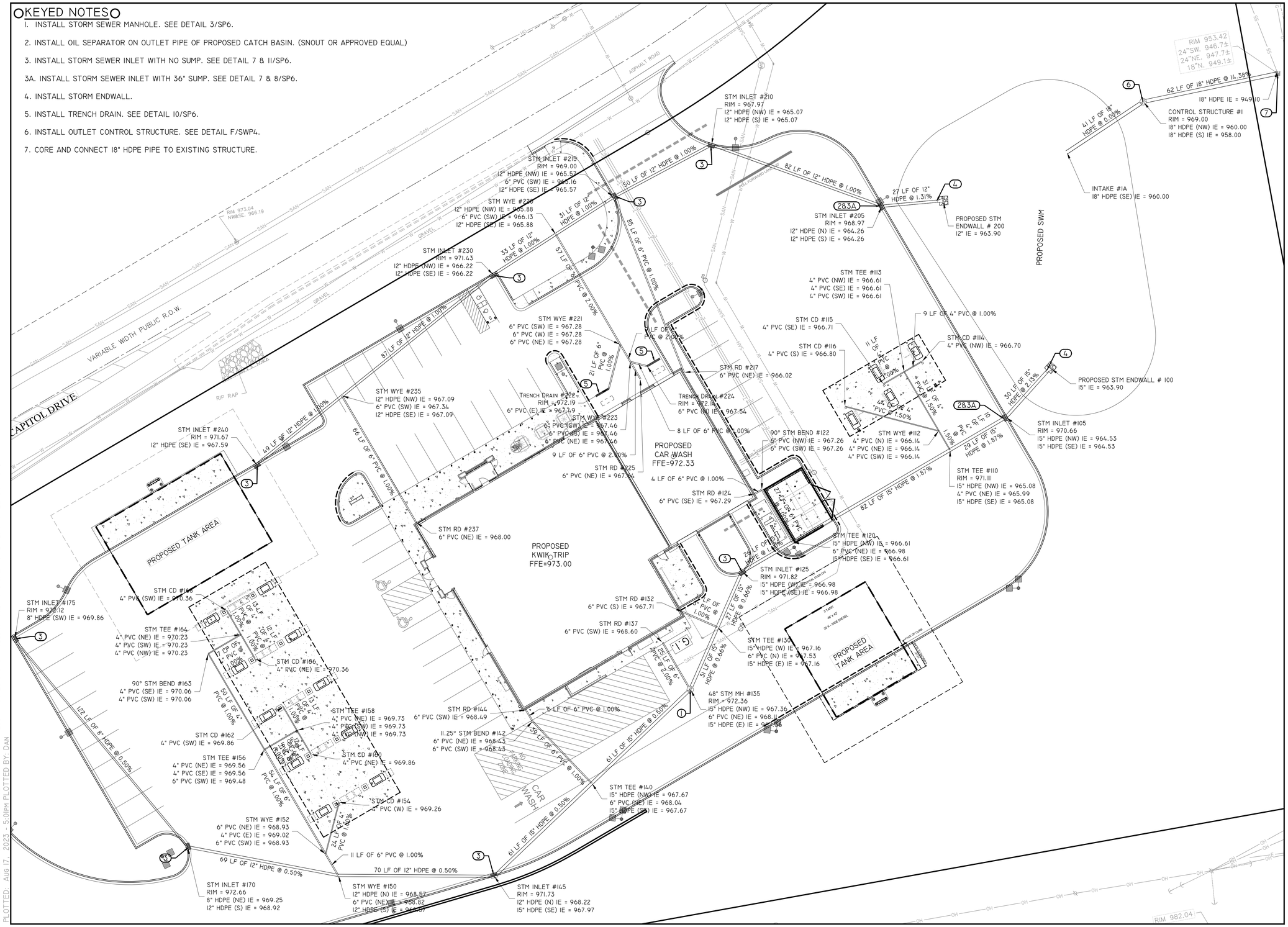
#	DATE	DESCRIPTION
1		

DRAWN BY NAP
SCALE GRAPHIC
PROJ. NO. 10827
DATE 8/17/23 - REVIEW DOCUMENTS
SHEET SP2.3

DRAWING FILE: Q:\10800 - 10899\10827 - KWIK TRIP #1283 - HARTLAND\DRAWING\PLANS\10827-SP2.3-ACCESSIBLE.DWG LAYOUT: SP2.3
PLOTTED: Aug 17, 2023 - 5:00PM PLOTTED BY: DAN

KEYED NOTES

1. INSTALL STORM SEWER MANHOLE. SEE DETAIL 3/SP6.
2. INSTALL OIL SEPARATOR ON OUTLET PIPE OF PROPOSED CATCH BASIN. (SNOUT OR APPROVED EQUAL)
3. INSTALL STORM SEWER INLET WITH NO SUMP. SEE DETAIL 7 & 11/SP6.
3A. INSTALL STORM SEWER INLET WITH 36" SUMP. SEE DETAIL 7 & 8/SP6.
4. INSTALL STORM ENDWALL.
5. INSTALL TRENCH DRAIN. SEE DETAIL 10/SP6.
6. INSTALL OUTLET CONTROL STRUCTURE. SEE DETAIL F/SWP4.
7. CORE AND CONNECT 18" HDPE PIPE TO EXISTING STRUCTURE.



DRAWING FILE: Q:\0800 - 10899\0827 - KWIK TRIP #1283 - HARTLAND\DRAWING\PLANS\0827-SP3-4-4.1-UTILITIES.DWG LAYOUT: SP3
PLOTTED: Aug 17, 2023 - 5:09pm PLOTTED BY: DAN

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SCALE
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STORM SEWER PLAN

CONVENIENCE STORE #1283
STH 83 AND W. CAPITOL DRIVE
HARTLAND, WI

#	DATE	DESCRIPTION
1		

DRAWN BY NAP
SCALE GRAPHIC
PROJ. NO. 10827
DATE 8/17/23 - REVIEW DOCUMENTS
SHEET SP3

PROPOSED
KWIK TRIP
FFE=973.00

PROPOSED
CAR WASH
FFE=972.33

6 LF OF 6" PVC @ 2.00%

SAN WYE
6" PVC (NE) IE = 969.00
4" PVC (SE) IE = 969.08
6" PVC (SW) IE = 969.00

SAN BEND
6" PVC (NE) IE = 968.87
6" PVC (S) IE = 968.87

5 LF OF 6" PVC @ 2.00%

SAN STUB
6" PVC (SW) IE = 969.10

7 LF OF 4" PVC @ 2.00%

4" PVC (NW) IE = 969.23

4" PVC (SE) IE = 969.50

1 LF OF 6" PVC @ 2.00%

1 LF OF 4" PVC @ 2.00%

SAN BEND
6" PVC (N) IE = 968.84
6" PVC (SE) IE = 968.84

SAN BEND
4" PVC (E) IE = 969.52
4" PVC (NW) IE = 969.52

1 LF OF 4" PVC @ 2.00%

SAN BEND
4" PVC (NE) IE = 969.53
4" PVC (W) IE = 969.53

G.I.

4" PLUG

4" PVC ELBOW - 90.00

37 LF OF 4" PVC WATER MAIN

SAN STUB
4" PVC (SW) IE = 969.62

37 LF OF 6" PVC @ 2.00%

5 LF OF 4" PVC @ 2.00%

CLEANOUT #STRUCTURE - (81)
RIM = 971.78
6" PVC (NW) IE = 968.10
6" PVC (SE) IE = 968.10

50 LF OF 6" PVC @ 2.00%

98 LF OF 4" PVC WATER MAIN

15' PERIMETER POTENTIAL OVER DIG

20K - SIDE DIESEL
46' x 42'
3 TANK

SAN BEND
6" PVC (NW) IE = 967.09
6" PVC (E) IE = 967.09

20 LF OF 6" PVC @ 2.00%

30 LF OF 6" PVC @ 2.00%

98 LF OF 6" PVC @ 2.00%

SAN BEND
6" PVC (SW) IE = 964.14
6" PVC (E) IE = 964.14

2 LF OF 6" PVC @ 4.00%

SAN CLEANOUT
6" PVC (W) IE = 964.06
6" PVC (E) IE = 964.06

4" PVC ELBOW - 90.00

135 LF OF 4" PVC WATER MAIN

4" PVC ELBOW - 45.00

100 LF OF 6" PVC @ 4.00%

102 LF OF 4" PVC WATER MAIN

SAN BEND
6" PVC (W) IE = 966.70
6" PVC (NE) IE = 966.70

SAN CLEANOUT #STRUCTURE - (84)
RIM = 971.72
6" PVC (SW) IE = 966.10
6" PVC (NE) IE = 966.10

PULL FORWARD LANE 100'

48" SAN MH #5
RIM = 966.56
6" PVC (W) IE = 960.06
6" PVC (NE) IE = 960.06

52 LF OF 6" PVC @ 6.41%

4" GATE VALVE

4" PVC ELBOW - 45.00

20 LF OF 4" PVC WATER MAIN

3 LF OF
4" PVC WATER MAIN

6" PVC IE = 956.75

RIM 963.20
NW. 956.75
SE. 956.70

CONCRETE
AROUND
MH RIM

MASTER
SATELLITE
MASTER
SATELLITE

GRAVEL

ASPHALT ROAD

KEYED NOTES

1. DRY UTILITY ROUTING SHOWN IS APPROXIMATE. COORDINATE WITH LOCAL UTILITY.
2. INSTALL INSULATION OVER WATER PIPE AT CROSSING. SEE DETAIL 2/SP6.
3. INSTALL 6" SANITARY SERVICE LATERAL @ 1.00% MINIMUM.
3A. INSTALL 4" SANITARY SERVICE LATERAL @ 1.00% MINIMUM.
4. INSTALL WATER SERVICE LATERAL.
5. SANITARY SEWER & WATER SERVICE TRENCH. SEE A/SP4.1 FOR SEPARATION REQUIREMENTS.
6. INSTALL 4" SANITARY CLEANOUT. SEE DETAIL 4/SP6.
7. CONNECT TO EXISTING UTILITY STUBS. FIELD VERIFY LOCATION AND DEPTH.
8. INSTALL GATE VALVE.
9. INSTALL SANITARY MANHOLE. SEE DETAIL 5/SP6.

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SCALE
0 10 20

UTILITY PLAN

CONVENIENCE STORE #1283
STH 83 AND W. CAPITOL DRIVE
HARTLAND, WI

#	DATE	DESCRIPTION
1		

DRAWN BY NAP
SCALE GRAPHIC
PROJ. NO. 10827
DATE 8/17/23 - REVIEW DOCUMENTS
SHEET SP4

DRAWING FILE: Q:\10800 - 10899\10827 - Kwik Trip #1283 - Hartland\Drawings\Plans\10827-SP3-4-4.1-Utilities.dwg LAYOUT: SP4
PLOTTED: Aug 17, 2023 - 5:01PM PLOTTED BY: DAN

GENERAL :

1. COMPLY WITH THE WORK SAFETY PRACTICES SPECIFIED BY THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA). COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY REGULATIONS. OSHA PROHIBITS ENTRY INTO "CONFINED SPACES," SUCH AS MANHOLES AND INLETS (SEE 29 CFR SECTION 1910.146), WITHOUT UNDERTAKING CERTAIN SPECIFIC PRACTICES AND PROCEDURES. CONSTRUCTION SAFETY IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR, WHO IS ALSO SOLELY RESPONSIBLE FOR THE MEANS, METHODS, AND SEQUENCING OF THE CONSTRUCTION OPERATIONS.

2. EXISTING BOUNDARY, LOCATION, TOPOGRAPHIC, AND UTILITY INFORMATION SHOWN ON THIS PLAN IS FROM A FIELD SU RVEY BY R.A. SMITH, AUGUST 25 2022.

3. PERFORM ALL UTILITY WORK IN ACCORDANCE WITH STATE AND CITY REQUIREMENTS.

4. CONNECT TO EXISTING SANITARY SEWER MH'S BY CORE DRILLING. CONNECT TO EXISTING STORM SEWER MH'S BY EITHER SAWCUTTING OR CORE DRILLING. USE SAWS OR DRILLS THAT PROVIDE WATER TO THE BLADE. MEET ALL CITY STANDARDS AND SPECIFICATIONS FOR THE THE CONNECTION. RECONSTRUCT INVERTS AFTER INSTALLATION. USE WATER STOP GASKETS IN ORDER TO PROVIDE WATERTIGHT SEALS WHEN PENETRATING A STRUCTURE WALL WITH A PIPE. TAKE MEASUREMENTS BEFORE BEGINNING CONSTRUCTION TO ENSURE THAT SERVICE CONNECTIONS DO NOT CUT INTO MAINTENANCE ACCESS STRUCTURE JOINTS OR PIPE BARREL JOINTS.

5. PERFORM TRENCH EXCAVATIONS FOR ALL UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS OF O.S.H.A. 29 CFR, PART 1926, SUBPART P, "EXCAVATIONS AND TRENCHES." (WWW.OSHA.GOV)

6. COORDINATE BUILDING UTILITY CONNECTION LOCATIONS AT 5 FT. OUT FROM THE PROPOSED BUILDING WITH THE WITH THE INTERIOR PLUMBING CONTRACTOR PRIOR TO CONSTRUCTION. VERIFY WATER AND SEWER SERVICE LOCATIONS AND ELEVATIONS WITH THE MECHANICAL ENGINEER PRIOR TO CONSTRUCTION.

7. THE SUBSURFACE UTILITY INFORMATION SHOWN ON THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

8. THE LOCATIONS OF EXISTING UTILITIES SHOWN ON THIS PLAN ARE FROM RECORD INFORMATION. THE ENGINEER DOES NOT GUARANTEE THAT ALL EXISTING UTILITIES ARE SHOWN OR, IF SHOWN, EXIST IN THE LOCATIONS INDICATED ON THE PLAN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THE FINAL VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UTILITIES (INCLUDING WATER AND SEWER LINES AND APPURTENANCES). NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

9. CONTACT UTILITY COMPANIES FOR LOCATIONS OF ALL PUBLIC AND PRIVATE UTILITIES WITHIN THE WORK AREA PRIOR TO BEGINNING CONSTRUCTION. CONTACT DIGGER'S HOTLINE AT (414) 259-1181 IN THE MILWAUKEE METRO AREA, OR 1-800-242-8511 ELSEWHERE IN WISCONSIN FOR EXACT LOCATIONS OF EXISTING UTILITIES AT LEAST 72 HOURS (NOT INCLUDING WEEKENDS AND HOLIDAYS) BEFORE BEGINNING ANY CONSTRUCTION. OBTAIN TICKET NUMBER AND MEET WITH REPRESENTATIVES OF THE VARIOUS UTILITIES AT THE SITE. PROVIDE THE OWNER WITH THE TICKET NUMBER INFORMATION. DIGGER'S HOTLINE IS A FREE SERVICE THAT LOCATES MUNICIPAL AND UTILITY COMPANY LINES, BUT DOES NOT LOCATE PRIVATE UTILITY LINES. USE AN INDEPENDENT LOCATOR SERVICE OR OTHER MEANS IN ORDER TO OBTAIN LOCATIONS OF PRIVATE UTILITY LINES INCLUDING, BUT NOT LIMITED TO, UNDERGROUND ELECTRIC CABLES, TELEPHONE, TV, AND LAWN SPRINKLER LINES.

10. POTHOLE TO VERIFY THE POSITIONS OF EXISTING UNDERGROUND FACILITIES AT A SUFFICIENT NUMBER OF LOCATIONS IN ORDER TO ASSURE THAT NO CONFLICT WITH THE PROPOSED WORK EXISTS AND THAT SUFFICIENT CLEARANCE IS AVAILABLE.

11. WHERE EXISTING GAS, ELECTRIC, CABLE, OR TELEPHONE UTILITIES CONFLICT WITH THE WORK, COORDINATE THE ABANDONMENT, RELOCATION, OFFSET, OR SUPPORT OF THE EXISTING UTILITIES WITH THE APPROPRIATE LOCAL UTILITY COMPANIES. COORDINATE NEW GAS METER AND GAS LINE INSTALLATION, ELECTRIC METER AND ELECTRIC SERVICE INSTALLATION, CABLE SERVICE, AND TELEPHONE SERVICE INSTALLATION WITH THE LOCAL UTILITY COMPANIES.

12. ARRANGE FOR AND SECURE SUITABLE DISPOSAL AREAS OFF-SITE. DISPOSE OF ALL EXCESS SOIL, WASTE MATERIAL, DEBRIS, AND ALL MATERIALS NOT DESIGNATED FOR SALVAGE. WASTE MATERIAL AND DEBRIS INCLUDES TREES, STUMPS, PIPE, CONCRETE, ASPHALTIC CONCRETE, CANS, OR OTHER WASTE MATERIAL FROM THE CONSTRUCTION OPERATIONS. OBTAIN THE RIGHTS TO ANY WASTE AREA FOR DISPOSAL OF UNSUITABLE OR SURPLUS MATERIAL EITHER SHOWN OR NOT SHOWN ON THE PLANS. ALL WORK IN DISPOSING OF SUCH MATERIAL SHALL BE CONSIDERED INCIDENTAL TO THE WORK. ALL DISPOSAL MUST CONFORM TO APPLICABLE SOLID WASTE DISPOSAL PERMIT REGULATIONS. OBTAIN ALL NECESSARY PERMITS AT NO COST TO THE OWNER.

13. STRAIGHT LINE SAW-CUT EXISTING BITUMINOUS OR CONCRETE SURFACING AT THE PERIMETER OF PAVEMENT REMOVAL AREAS. USE SAWS THAT PROVIDE WATER TO THE BLADE. TACK, AND MATCH ALL CONNECTIONS TO EXISTING BITUMINOUS PAVEMENT.

14. RELOCATE OVERHEAD POWER, TELEPHONE, AND CABLE LINES AS REQUIRED.

15. ALL MATERIALS REQUIRED FOR THIS WORK SHALL BE NEW MATERIAL CONFORMING TO THE REQUIREMENTS FOR CLASS, KIND, GRADE, SIZE, QUALITY, AND OTHER DETAILS SPECIFIED HEREIN OR AS SHOWN ON THE PLANS. DO NOT USE RECYCLED OR SALVAGED AGGREGATE, ASPHALTIC PAVEMENT, CRUSHED CONCRETE, OR SCRAP SHINGLES. UNLESS OTHERWISE INDICATED, THE CONTRACTOR SHALL FURNISH ALL REQUIRED MATERIALS.

16. RESTORE THE PUBLIC RIGHT-OF-WAY. REPLACE ANY CONCRETE CURB AND GUTTER, BITUMINOUS PAVEMENT, SIDEWALK, OR VEGETATIVE COVER DAMAGED BY THE CONSTRUCTION ACTIVITY. RESTORE DAMAGED TURF WITH SOD WITHIN THE PUBLIC RIGHT-OF-WAY. THE WORK AREA SHOWN IS GENERAL AND MAY NEED TO BE ADJUSTED IN THE FIELD.

17. WHEN SAWING OR DRILLING CONCRETE OR MASONRY, USE SAWS THAT PROVIDE WATER TO THE BLADE. DO NOT ALLOW THE SLURRY PRODUCED BY THIS PROCESS TO BE TRACKED OUTSIDE OF THE IMMEDIATE WORK AREA OR DISCHARGED INTO THE SEWER SYSTEM.

18. ADJUST ALL CURB STOPS, VALVE BOXES, MAINTENANCE HOLE CASTINGS, CATCH BASIN CASTINGS, CLEANOUT COVERS, AND SIMILAR ITEMS TO FINISHED GRADE.

19. INSTALL ALL PIPE WITH THE ASTM IDENTIFICATION NUMBERS ON THE TOP FOR INSPECTION. COMMENCE PIPE LAYING AT THE LOWEST POINT IN THE PROPOSED SEWER LINE. LAY THE PIPE WITH THE BELL END OR RECEIVING GROOVE END OF THE PIPE POINTING UPGRADE. WHEN CONNECTING TO AN EXISTING PIPE, UNCOVER THE EXISTING PIPE IN ORDER TO ALLOW ANY ADJUSTMENTS IN THE PROPOSED LINE AND GRADE BEFORE LAYING ANY PIPE.

20. OBTAIN AND PAY FOR ALL PERMITS, TESTS, INSPECTIONS, ETC. REQUIRED BY AGENCIES THAT HAVE JURISDICTION OVER THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR ALL BONDS, LETTERS OF CREDIT, OR CASH SURETIES RELATED TO THE WORK. EXECUTE AND INSPECT WORK IN ACCORDANCE WITH ALL LOCAL AND STATE CODES, RULES, ORDINANCES, OR REGULATIONS PERTAINING TO THE PARTICULAR TYPE OF WORK INVOLVED.

21. OBTAIN PERMITS FROM THE CITY FOR WORK IN THE PUBLIC RIGHT-OF-WAY.

22. CONSTRUCT SANITARY SEWER, WATERMAIN, AND STORM SEWER UTILITIES IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, SIXTH EDITION, OR THE LATEST REVISED EDITION.

23. TRACER WIRE: LOCATING REQUIREMENTS - A MEANS TO LOCATE BURIED UNDERGROUND EXTERIOR NON METALLIC SEWERS/MAINS MUST BE PROVIDED WITH TRACER WIRE OR OTHER METHODS IN ORDER TO BE LOCATED IN ACCORD WITH THE PROVISIONS OF THESE CODE SECTIONS AS PER 182.0715(2R) OF THE STATUTES.

24. INSTALL ALL PIPE WITH THE ASTM IDENTIFICATION NUMBERS ON THE TOP FOR INSPECTION. COMMENCE PIPE LAYING AT THE LOWEST POINT IN THE PROPOSED SEWER LINE. LAY THE PIPE WITH THE BELL END OR RECEIVING GROOVE END OF THE PIPE POINTING UPGRADE. WHEN CONNECTING TO AN EXISTING PIPE, UNCOVER THE EXISTING PIPE IN ORDER TO ALLOW ANY ADJUSTMENTS IN THE PROPOSED LINE AND GRADE BEFORE LAYING ANY PIPE. DO NOT LAY PIPES IN WATER OR WHEN THE TRENCH CONDITIONS ARE UNSUITABLE FOR SUCH WORK.

WATER DISTRIBUTION SYSTEM :

1. BRING ALL SITE UTILITIES TO 5' OUTSIDE OF THE BUILDING LINE WITH THE EXCEPTION OF THE WATER SERVICE. EXTEND WATER SERVICE INTO THE BUILDING AND UP TO THE FLANGE FOR THE WATER METER.

2. SEPARATION OF WATER AND SEWER: PROVIDE HORIZONTAL AND VERTICAL SEPARATIONS AS REQUIRED BY CODE. SEE DETAIL A/SP4.1.

3. WATERMAIN DEPTH: MAINTAIN 7.5 FEET OF COVER OVER THE TOP OF THE WATER LINES TO THE FINISHED GRADE. VERIFY ELEVATION OF PROPOSED AND EXISTING WATER LINES AT ALL UTILITY CROSSINGS. INSTALL THE WATER LINES AT GREATER DEPTHS IN ORDER TO CLEAR STORM SEWERS, SANITARY SEWERS, OR OTHER UTILITIES AS REQUIRED. INCLUDE COSTS TO LOWER WATER LINES IN THE BASE BID.

4. DISINFECTION: DISINFECT ALL COMPLETED WATERMAINS IN ACCORDANCE WITH AWWA STANDARD C651. IF THE TABLET OR CONTINUOUS FEED METHODS ARE USED, DISINFECT USING WITH WATER THAT CONTAINS AT LEAST 50 PPM OF AVAILABLE CHLORINE. DO NOT USE THE TABLET METHOD ON SOLVENT-WELDED PLASTIC OR ON SCREWED-JOINT STEEL PIPE BECAUSE OF THE DANGER OF FIRE OR EXPLOSION FROM THE REACTION OF THE JOINT COMPOUNDS WITH THE CALCIUM HYPOCHLORITE. RETAIN THE TREATED WATER IN THE PIPELINE FOR AT LEAST 24 HOURS. MEASURE THE CHLORINE RESIDUAL AT THE END OF THE 24 HOUR PERIOD. THE FREE CHLORINE RESIDUAL MUST BE AT LEAST 10 MG/L MEASURED AT ANY POINT IN THE LINE. MEASUREMENT OF THE CHLORINE CONCENTRATION AT REGULAR INTERVALS SHALL BE IN ACCORDANCE WITH STANDARD METHODS, AWWA M-12, OR USING APPROPRIATE CHLORINE TEST KITS.

5. TESTING: PRESSURE TEST AND PERFORM BACTERIOLOGICAL TESTS ON ALL WATER LINES UNDER THE SUPERVISION OF THE CITY PUBLIC WORKS DEPARTMENT. NOTIFY THE CITY AT LEAST 24 WORKING HOURS PRIOR TO ANY TESTING. PRESSURIZE THE WATERLINE TO 1034-KPA (150-PSI) GAUGE PRESSURE (MEASURED AT THE POINT OF LOWEST ELEVATION) BY MEANS OF A PUMP CONNECTED TO THE PIPE IN A SATISFACTORY MANNER. MAINTAIN THE TEST PRESSURE FOR A MINIMUM OF 2 HOURS. DO NOT ADD WATER TO THE WATERMAIN IN ORDER TO MAINTAIN THE REQUIRED PRESSURE DURING THE WATER MAIN PRESSURE TESTING. THE TEST SECTION OF PIPE IS ACCEPTABLE WITH A PRESSURE DROP OF 14 KPA (2 PSI) OR LESS.

6. USE MUELLER H 10300 OR FORD EM 2 7057, OR APPROVED EQUAL, AT ALL CURB STOP LOCATIONS. STATIONARY ROD IS REQUIRED ON ALL CURB STOPS.

7. BUILDING WATER SERVICES: WATER SERVICE PIPE SHALL MEET THE FOLLOWING SPECIFICATIONS AND BE APPROVED BY THE LOCAL GOVERNING AGENCY. 2.5 INCH OR LESS: HDPE PER ASTM D2737 SDR 9 OR TYPE K COPPER PER ASTM B - 88. 4 INCH OR GREATER: DIP PER AWWA C151 OR PVC PER AWWA C-900.

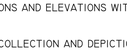
8. TRACER WIRE: LOCATING REQUIREMENTS - A MEANS TO LOCATE BURIED UNDERGROUND EXTERIOR NON METALLIC SEWERS/MAINS MUST BE PROVIDED WITH TRACER WIRE OR OTHER METHODS IN ORDER TO BE LOCATED IN ACCORD WITH THE PROVISIONS OF THE WISCONSIN STATUTES 182.0175(2R) AND THE WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES SPS 382.30(11)(H).

STORM DRAINAGE :

1. UNLESS OTHERWISE INDICATED, USE REINFORCED, PRECAST, CONCRETE MAINTENANCE HOLES AND CATCH BASINS CONFORMING TO ASTM C478, FURNISHED WITH WATER STOP RUBBER GASKETS AND PRECAST BASES. JOINTS FOR ALL PRECAST MAINTENANCE HOLE SECTIONS SHALL HAVE CONFINED, RUBBER "O"-RING GASKETS IN ACCORDANCE WITH ASTM C923. THE INSIDE BARREL DIAMETER SHALL NOT BE LESS THAN 48 INCHES.

2. ALL JOINTS AND CONNECTIONS TO CATCH BASINS OR MANHOLES SHALL BE WATERTIGHT OR APPROVED CONNECTION. USE RESILIENT RUBBER SEALS, WATERSTOP GASKETS, OR APPROVED EQUAL. CEMENT MORTAR JOINTS ARE NOT ALLOWED UNLESS OTHERWISE PERMITTED BY LOCAL MUNICIPALITY.

3. INSTALL CATCH BASIN CASTINGS WITH SPECIFIED TOP ELEVATION AT THE FLOWLINE OF RIM.



4. PVC PIPE: USE SOLID-CORE, SDR-35, ASTM D3034 POLYVINYL CHLORIDE (PVC) PIPE FOR DESIGNATED PVC STORM SEWER SERVICES 4 TO 15-INCHES IN DIAMETER. USE SOLID-CORE, SDR-35, ASTM F679 POLYVINYL CHLORIDE (PVC) PIPE FOR DESIGNATED PVC STORM SEWER SERVICES 18 TO 27-INCHES IN DIAMETER. JOINTS FOR ALL STORM SEWER SHALL HAVE PUSH-ON JOINTS WITH ELASTOMERIC GASKETS. USE OF SOLVENT CEMENT JOINTS IS ALLOWED FOR BUILDING SERVICES. SOLVENT CEMENT JOINTS IN PVC PIPE MUST INCLUDE USE OF A PRIMER WHICH IS OF CONTRASTING COLOR TO THE PIPE AND CEMENT. PIPE WITH SOLVENT CEMENT JOINTS SHALL BE JOINED WITH PVC CEMENT CONFORMING TO ASTM D2564. LAY ALL PVC PIPE ON A CONTINUOUS GRANULAR BED. INSTALLATION MUST COMPLY WITH ASTM D2321.

5. TESTING: TEST ALL PORTIONS OF STORM SEWER THAT ARE WITHIN 10 FEET OF BUILDINGS, WITHIN 10 FEET OF BURIED WATER, LINES, WITHIN 50 FEET OF WATER WELLS, OR THAT PASS THROUGH SOIL OR WATER IDENTIFIED AS BEING CONTAMINATED. TEST ALL FLEXIBLE STORM SEWER LINES FOR DEFLECTION AFTER THE SEWER LINE HAS BEEN INSTALLED AND BACKFILL HAS BEEN IN PLACE FOR AT LEAST 30 DAYS. NO PIPE SHALL EXCEED A DEFLECTION OF 5%. IF THE TEST FAILS, MAKE NECESSARY REPAIRS AND RETEST.

6. USE NEENAH R-1550A FRAME WITH 2050D GRATE ON ALL PROPOSED CATCH BASINS.

7. INSTALL DETECTABLE UNDERGROUND MARKING TAPE DIRECTLY ABOVE ALL PVC, POLYETHYLENE, AND OTHER NONCONDUCTIVE UNDERGROUND UTILITIES AT A DEPTH OF 457 MM (18 INCHES) BELOW FINISHED GRADE, UNLESS OTHERWISE INDICATED. BRING THE TAPE TO THE SURFACE AT VARIOUS LOCATIONS IN ORDER TO PROVIDE CONNECTION POINTS FOR LOCATING UNDERGROUND UTILITIES. INSTALL BLUE RHINO TRIVIEW FLEX TEST STATIONS, OR APPROVED EQUAL, WITH BLACK CAPS AT EACH SURFACE LOCATION.

8. TRACER WIRE: LOCATING REQUIREMENTS - A MEANS TO LOCATE BURIED UNDERGROUND EXTERIOR NON METALLIC SEWERS/MAINS MUST BE PROVIDED WITH TRACER WIRE OR OTHER METHODS IN ORDER TO BE LOCATED IN ACCORD WITH THE PROVISIONS OF THESE CODE SECTIONS AS PER 182.0715(2R) OF THE STATUTES.

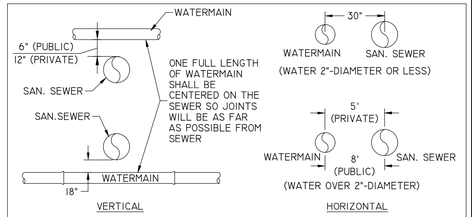
9. THE MINIMUM DEPTH OF COVER FOR BUILDING AND CANOPY ROOF DRAIN LEADERS WITHOUT INSULATION IS 5 FEET. INSULATE ROOF DRAIN LEADERS AT LOCATIONS WHERE THE DEPTH OF COVER IS LESS THAN 5 FEET. PROVIDE A MINIMUM INSULATION THICKNESS OF 2 INCHES. THE INSULATION MUST BE AT LEAST 4 FEET WIDE AND CENTERED ON THE PIPE. INSTALL THE INSULATION BOARDS 6 INCHES ABOVE THE TOPS OF THE PIPES ON MECHANICALLY COMPACTED AND LEVELED PIPE BEDDING MATERIAL. USE HIGH DENSITY, CLOSED CELL, RIGID BOARD MATERIAL EQUIVALENT TO DOW STYROFOAM HI-40 PLASTIC FOAM INSULATION.

10. CLEANOUTS: INSTALL CLEANOUTS ON ALL ROOF DRAINS IN ACCORDANCE WITH S.P.S 382.35 (3)(C)(1.). THE DISTANCE BETWEEN CLEANOUTS IN HORIZONTAL PIPING SHALL NOT EXCEED 100 FEET FOR PIPES 10-INCHES AND UNDER IN SIZE. CLEANOUTS SHALL BE OF THE SAME NOMINAL SIZE AS THE PIPES THEY SERVE OR 6-INCH DIAMETER MINIMUM FOR PIPES 6 INCHES IN DIAMETER OR GREATER. INSTALL A METER BOX FRAME AND SOLID LID (NEENAH R-1914-A, OR APPROVED EQUAL) OVER ALL CLEANOUTS.

11. INSTALL ALL PIPE WITH THE ASTM IDENTIFICATION NUMBERS ON THE TOP FOR INSPECTION. COMMENCE PIPE LAYING AT THE LOWEST POINT IN THE PROPOSED SEWER LINE. LAY THE PIPE WITH THE BELL END OR RECEIVING GROOVE END OF THE PIPE POINTING UPGRADE. WHEN CONNECTING TO AN EXISTING PIPE, UNCOVER THE EXISTING PIPE IN ORDER TO ALLOW ANY ADJUSTMENTS IN THE PROPOSED LINE AND GRADE BEFORE LAYING ANY PIPE. DO NOT LAY PIPES IN WATER OR WHEN THE TRENCH CONDITIONS ARE UNSUITABLE FOR SUCH WORK.

12. INSTALL STORM SEWER IN ACCORDANCE WITH SECTION 608 OF THE WISDOT STANDARD SPECIFICATIONS.

13. INSTALL CATCH BASINS, MANHOLES, AND INLETS IN ACCORDANCE WITH SECTION 611 OF THE WISDOT STANDARD SPECIFICATIONS.



NOTES:
1. WHEN THE ABOVE SEPARATIONS CANNOT BE MAINTAINED, THE ENGINEER MAY REQUIRE THE CONTRACTOR TO ENCASE THE SEWER IN CONCRETE.

2. NO PRIVATE WATER MAIN OR WATER SERVICE SHALL BE INSTALLED WITHIN 6" OF A STORM SEWER. PUBLIC WATER MAIN MUST MEET THE SAME HORIZONTAL AND VERTICAL SEPARATION DISTANCES AS REQUIRED FOR SANITARY SEWER.

A / SP4.1 SEWER / WATERMAIN SEPARATION DISTANCE
NTS

SANITARY SEWER :

1. PIPE: USE SOLID-CORE, SDR-35, ASTM D3034 (OR APPROVED EQUAL) POLYVINYL CHLORIDE (PVC) PLASTIC PIPE FOR ALL DESIGNATED PVC SANITARY SEWER SERVICES. JOINTS FOR ALL SANITARY SEWER SHALL HAVE PUSH-ON JOINTS WITH ELASTOMERIC GASKETS. USE OF SOLVENT CEMENT JOINTS IS ALLOWED FOR BUILDING SERVICES. SOLVENT CEMENT JOINTS IN PVC PIPE MUST INCLUDE USE OF A PRIMER WHICH IS OF CONTRASTING COLOR TO THE PIPE AND CEMENT. PIPE WITH SOLVENT CEMENT JOINTS SHALL BE JOINED WITH PVC CEMENT CONFORMING TO ASTM D2564. LAY ALL PVC PIPE ON A CONTINUOUS GRANULAR BED. INSTALLATION MUST COMPLY WITH ASTM D2321.

2. CLEANOUTS: INSTALL CLEANOUTS ON ALL SANITARY SEWER SERVICES. THE DISTANCE BETWEEN CLEANOUTS IN HORIZONTAL PIPING SHALL NOT EXCEED 100 FEET FOR PIPES 4-INCH AND OVER IN SIZE. CLEANOUTS SHALL BE OF THE SAME NOMINAL SIZE AS THE PIPES THEY SERVE OR 6-INCH DIAMETER MINIMUM FOR PIPES 6 INCHES IN DIAMETER OR GREATER. INCLUDE FROST SLEEVES AND CONCRETE FRAME AND PIPE SUPPORT. INSTALL A METER BOX FRAME AND SOLID LID (NEENAH R-1914-A, OR APPROVED EQUAL) OVER ALL CLEANOUTS.

3. TESTING: PRESSURE TEST ALL SANITARY SEWER LINES. TEST ALL FLEXIBLE SANITARY SEWER LINES FOR DEFLECTION AFTER THE SEWER LINE HAS BEEN INSTALLED AND BACKFILL HAS BEEN IN PLACE FOR AT LEAST 30 DAYS. NO PIPE SHALL EXCEED A DEFLECTION OF 5%. IF THE TEST FAILS, MAKE NECESSARY REPAIRS AND RETEST.

4. UNLESS OTHERWISE INDICATED, USE REINFORCED, PRECAST, CONCRETE MAINTENANCE HOLES CONFORMING TO ASTM C478, FURNISHED WITH PRECAST BASES. SANITARY SEWER MAINTENANCE HOLES SHALL BE SUPPLIED WITH PRE-FORMED INVERTS AND FLEXIBLE NEOPRENE SLEEVE CONNECTIONS FOR ALL LATERAL LINES 375 MM (15 INCHES) IN DIAMETER OR LESS, UNLESS OTHERWISE INDICATED. JOINTS FOR ALL PRECAST MAINTENANCE HOLE SECTIONS SHALL HAVE CONFINED, RUBBER "O"-RING GASKETS IN ACCORDANCE WITH ASTM C923. THE INSIDE BARREL DIAMETER SHALL NOT BE LESS THAN 48 INCHES.

5. INSTALL FLEXIBLE WATERTIGHT OR APPROVED CONNECTION FRAME/CHIMNEY SEALS ON ALL SANITARY SEWER MAINTENANCE HOLES. USE EITHER MANUFACTURED MAINTENANCE HOLE FRAME/CHIMNEY SEALS OR ELASTOMERIC WATERPROOFING FRAME/CHIMNEY SEALS.

6. USE NEENAH FOUNDRY CO. R-1642 CASTING WITH SELF-SEALING, SOLID, TYPE B LID, OR APPROVED EQUAL, ON ALL SANITARY SEWER MAINTENANCE HOLES. COVERS SHALL BEAR THE "SANITARY SEWER" LABEL.

7. THE MINIMUM DEPTH OF COVER FOR SANITARY SEWER WITHOUT INSULATION IS 5 FEET. INSULATE SANITARY SEWER SERVICES AT LOCATIONS WHERE THE DEPTH OF COVER IS LESS THAN 5 FEET. PROVIDE A MINIMUM INSULATION THICKNESS OF 2 INCHES. THE INSULATION MUST BE AT LEAST 4 FEET WIDE AND CENTERED ON THE PIPE. INSTALL THE INSULATION BOARDS 6 INCHES ABOVE THE TOPS OF THE PIPES ON MECHANICALLY COMPACTED AND LEVELED PIPE BEDDING MATERIAL. USE HIGH DENSITY, CLOSED CELL, RIGID BOARD MATERIAL EQUIVALENT TO DOW STYROFOAM HI-40 PLASTIC FOAM INSULATION.

8. TRACER WIRE: LOCATING REQUIREMENTS - A MEANS TO LOCATE BURIED UNDERGROUND EXTERIOR NON METALLIC SEWERS/MAINS MUST BE PROVIDED WITH TRACER WIRE OR OTHER METHODS IN ORDER TO BE LOCATED IN ACCORD WITH THE PROVISIONS OF THE WISCONSIN STATUTES 182.0175(2R) AND THE WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES SPS 82.30(11)(H).

HDPE REQUIREMENTS :

1. INSTALL DUAL-WALL, SMOOTH INTERIOR, CORRUGATED HIGH-DENSITY POLYETHYLENE (HDPE) PIPE AT LOCATIONS INDICATED ON THE PLAN.

2. DUAL-WALL, SMOOTH INTERIOR, CORRUGATED HIGH-DENSITY POLYETHYLENE (HDPE) PIPE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M252 FOR PIPE SIZES 4-INCH TO 10-INCH DIAMETER.

3. DUAL-WALL, SMOOTH INTERIOR, CORRUGATED HIGH-DENSITY POLYETHYLENE (HDPE) PIPE SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2306 FOR PIPE SIZES 12-INCH TO 60-INCH DIAMETER.

4. ALL FITTINGS MUST COMPLY WITH ASTM STANDARD D3212.

5. WATER-TIGHT JOINTS MUST BE USED AT ALL CONNECTIONS INCLUDING STRUCTURES.

6. LAY ALL HDPE PIPE ON A CONTINUOUS GRANULAR BED. INSTALLATION MUST COMPLY WITH ASTM D2321. ALL SECTIONS OF THE CORRUGATED HDPE PIPE SHALL BE COUPLED IN ORDER TO PROVIDE WATER TIGHT JOINTS.

7. PERFORM DEFLECTION TESTS ON ALL HDPE PIPE AFTER THE SEWER LINES HAVE BEEN INSTALLED AND BACKFILL HAS BEEN IN PLACE FOR AT LEAST 30 DAYS. NO PIPE SHALL EXCEED A DEFLECTION OF 5%. IF THE TEST FAILS, MAKE NECESSARY REPAIRS AND PERFORM THE TEST AGAIN UNTIL ACCEPTABLE. SUPPLY THE MANDREL FOR DEFLECTION TESTING. IF THE DEFLECTION TEST IS TO BE RUN USING A RIGID BALL OR MANDREL, IT SHALL HAVE A DIAMETER EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE. THE BALL OR MANDREL SHALL BE CLEARLY STAMPED WITH THE DIAMETER. PERFORM THE TESTS WITHOUT MECHANICAL PULLING DEVICES.

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EMAIL: MAIL@REIENGINEERING.COM

NO SCALE

UTILITY SPECS

CONVENIENCE STORE #1283

STH 83 AND W. CAPITOL DRIVE
HARTLAND, WI

#	DATE	DESCRIPTION
1		

DRAWN BY NAP
SCALE GRAPHIC
PROJ. NO. 10827
DATE 8/17/23 - REVIEW DOCUMENTS
SHEET SP4.1

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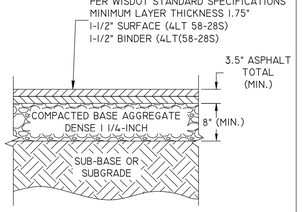
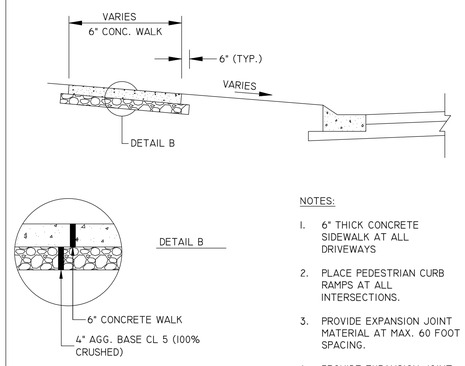
PLOTTED: AUG 17, 2023 - 5:02PM PLOTTED BY: DAN



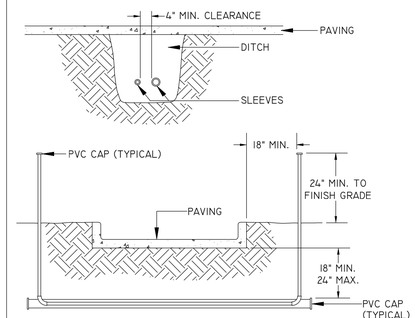
NOTE:
ASPHALT PAVEMENT SECTION SHOWN IS MINIMUM. MATCH IN KIND WITH EXISTING.

1 / SP5 ASPHALT PAVEMENT DETAIL
NOT TO SCALE



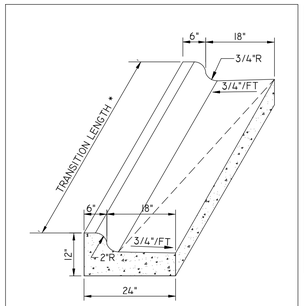
NOTES:
1. 6" THICK CONCRETE SIDEWALK AT ALL DRIVEWAYS
2. PLACE PEDESTRIAN CURB RAMPS AT ALL INTERSECTIONS.
3. PROVIDE EXPANSION JOINT MATERIAL AT MAX. 60 FOOT SPACING.
4. PROVIDE EXPANSION JOINT MATERIAL ALONG BOTH EDGES OF WALK, WHERE WALK IS CONTAINED BETWEEN FIXED OBJECTS.

2 / SP5 CONCRETE WALK/ PAD DETAIL
NOT TO SCALE



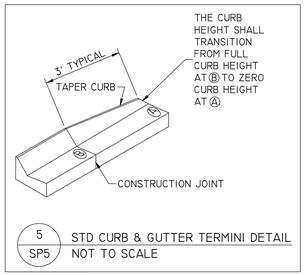
NOTES:
1. ALL PVC IRRIGATION SLEEVES TO BE SCH 40 PVC PIPE.
2. ALL JOINTS TO BE SOLVENT WELDED AND WATERTIGHT.
3. WHERE THERE IS MORE THAN ONE SLEEVE, EXTEND THE SMALLER SLEEVE TO 24-INCHES MINIMUM ABOVE FINISH GRADE.
4. MECHANICALLY TAMP BACKFILL TO 95% PROCTOR.

3 / SP5 TYPICAL SLEEVING DETAIL
NOT TO SCALE

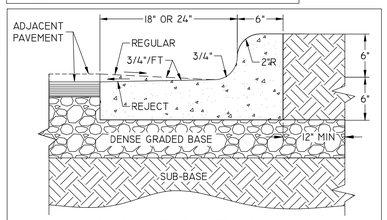


* TRANSITION LENGTH SHALL BE 12 LF ON TANGENTS GREATER THAN 18 LF, OR BETWEEN RADIUS POINTS ON TANGENTS LESS THAN 18 LF, OR BETWEEN RADIUS MID POINTS WHERE TANGENTS ARE LESS THAN 12 LF, OR ACROSS THE RADIUS/RADII WHERE TANGENTS ARE LESS THAN 2 LF.

4 / SP5 TRANSITION CURB & GUTTER DETAIL
NOT TO SCALE

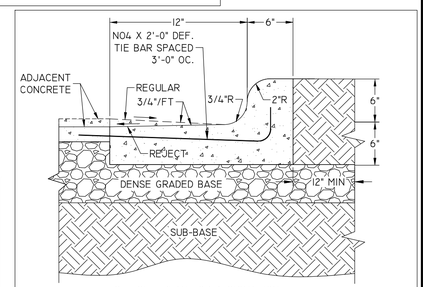


5 / SP5 STD CURB & GUTTER TERMINI DETAIL
NOT TO SCALE



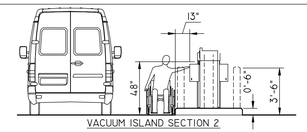
SEE SITE PLAN FOR DESIGNATION

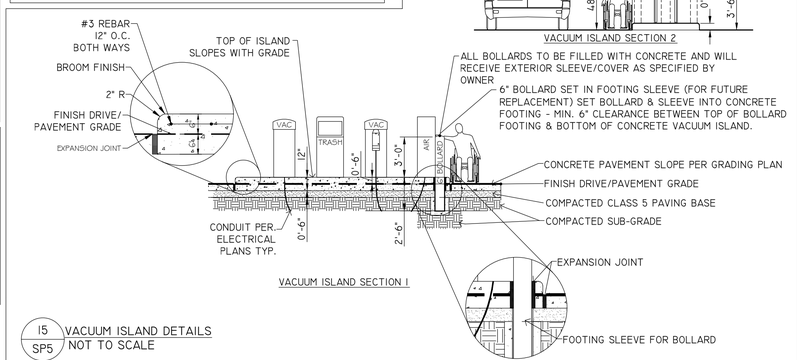
8 / SP5 24" OR 30" CURB & GUTTER DETAIL
NOT TO SCALE



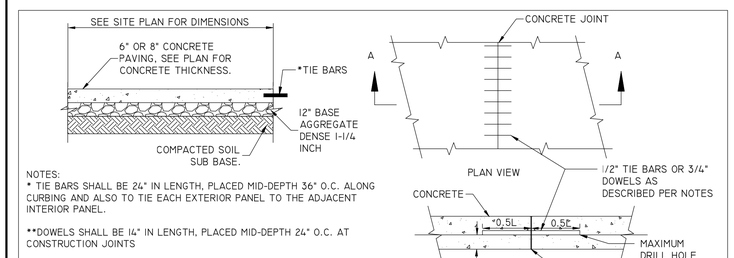
SEE SITE PLAN FOR DESIGNATION

9 / SP5 18" CURB & GUTTER / 18" REJECT CURB & GUTTER DETAIL
NOT TO SCALE





15 / SP5 VACUUM ISLAND DETAILS
NOT TO SCALE



NOTES:
* TIE BARS SHALL BE 24" IN LENGTH, PLACED MID-DEPTH 36" O.C. ALONG CURBING AND ALSO TO TIE EACH EXTERIOR PANEL TO THE ADJACENT INTERIOR PANEL.

**DOWELS SHALL BE 14" IN LENGTH, PLACED MID-DEPTH 24" O.C. AT CONSTRUCTION JOINTS

TIE BARS AND DOWELS SHALL CONFORM WITH SUBSECTION 505.2.6 OF THE STANDARD SPECIFICATIONS. EPOXY COAT TIE BARS IN ACCORDANCE TO SECTION 505.2.4 OF THE WISDOT STANDARD SPECIFICATIONS.

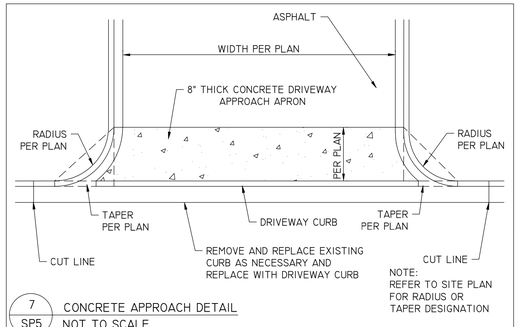
DOWELS SHALL BE FIXED ON ONE END AND GREASED ON THE OTHER

CONCRETE PANELS SHALL NOT BE GREATER THAN 15' IN LENGTH IN ANY DIRECTION AND CONTRACTION JOINTS SHALL BE TO A MINIMUM DEPTH OF 1/4 THE CONCRETE DEPTH

6" DEPTH (MIN.) CONCRETE SLAB-ON-GRADE WITH #3 REBAR, 3' O.C. IN BOTH DIRECTIONS, CONCRETE SEALER: TK-26UV

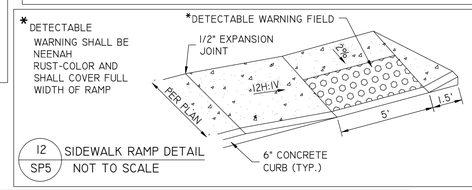
8" DEPTH (MIN.) CONCRETE SLAB-ON-GRADE WITH #4 REBAR, 4' O.C. IN BOTH DIRECTIONS, CONCRETE SEALER: TK-26UV

6 / SP5 CONCRETE PAVEMENT DETAIL
NOT TO SCALE



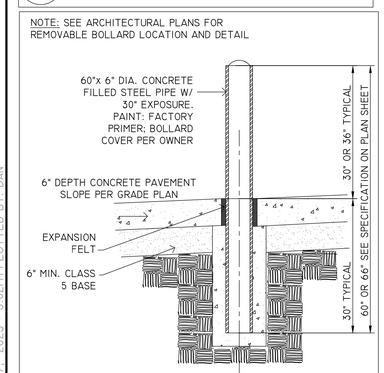
NOTE:
REFER TO SITE PLAN FOR RADIUS OR TAPER DESIGNATION

7 / SP5 CONCRETE APPROACH DETAIL
NOT TO SCALE



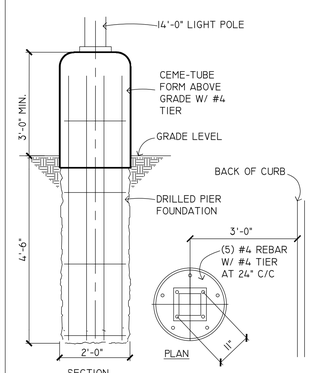
*DETECTABLE WARNING SHALL BE NEENAH RUST-COLOR AND SHALL COVER FULL WIDTH OF RAMP

12 / SP5 SIDEWALK RAMP DETAIL
NOT TO SCALE

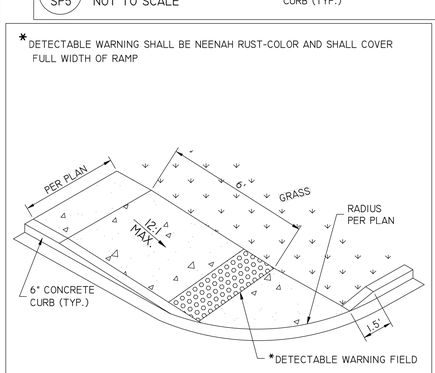


10 / SP5 6" PIPE BOLLARD DETAIL
NOT TO SCALE

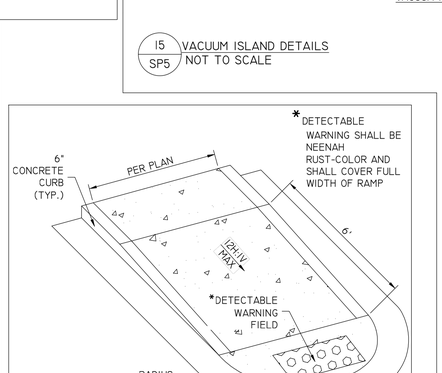
NOTES:
1. BASE PLATE ILLUSTRATION MAY CHANGE WITHOUT NOTICE. DO NOT USE FOR SETTING ANCHOR BOLTS. CONSULT AREA LIGHT MANUFACTURER FOR BASE PLATE TEMPLATE, ANCHOR BOLT SIZE AND EMBEDMENT DEPTH.



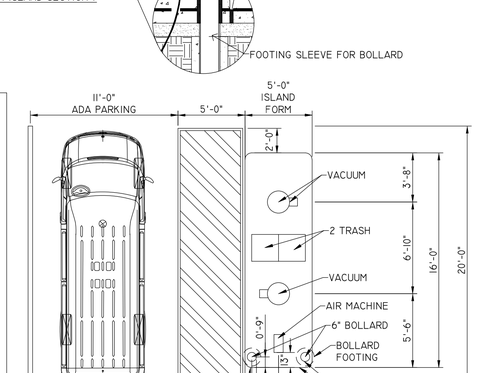
11 / SP5 ROUND AREA LIGHT FOUNDATION DETAIL
NOT TO SCALE



13 / SP5 SIDEWALK RAMP DETAIL
NOT TO SCALE



14 / SP5 SIDEWALK RAMP DETAIL
NOT TO SCALE



KWIK TRIP STORES

KWIK STAR STORES

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NO SCALE

SITE PLAN DETAILS

CONVENIENCE STORE #1283
STH 83 AND W. CAPITOL DRIVE
HARTLAND, WI

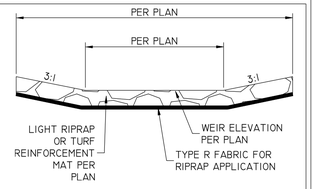
#	DATE	DESCRIPTION
1		

DRAWN BY	NAP
SCALE	NOT TO SCALE
PROJ. NO.	10827
DATE	8/17/23 - REVIEW DOCUMENTS
SHEET	SP5

DRAWING FILE: Q:\10800 - 10899\10827 - KWIK TRIP #1283 - HARTLAND\DRAWING\PLANS\10827-SP5-6-SITE DETAILS.DWG LAYOUT: SP5
PLOTTED: Aug 17, 2023 - 5:02PM PLOTTED BY: DAN

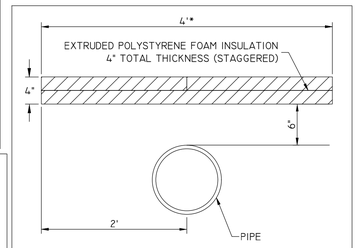
SEE PETROLEUM DETAILS

1 / SP6 STORAGE TANKS COMPLEX DETAIL
NOT TO SCALE



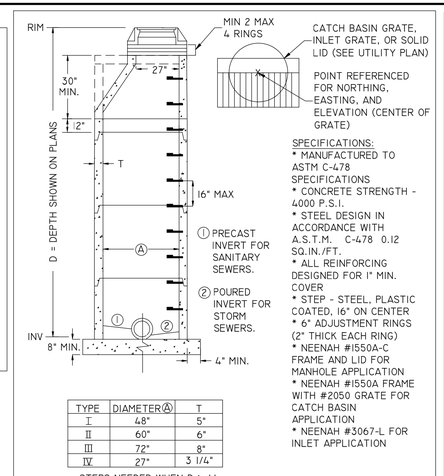
6 / SP6 OVERFLOW WEIR DETAIL
NOT TO SCALE

NOTE:
WEIRS TO USE PERMANENT TURF REINFORCEMENT MAT



*WIDTH OF INSULATION SHALL INCREASE x FT. PER EVERY x FT. OF VERTICAL SEPARATION.

2 / SP6 PIPE INSULATION DETAIL
NOT TO SCALE

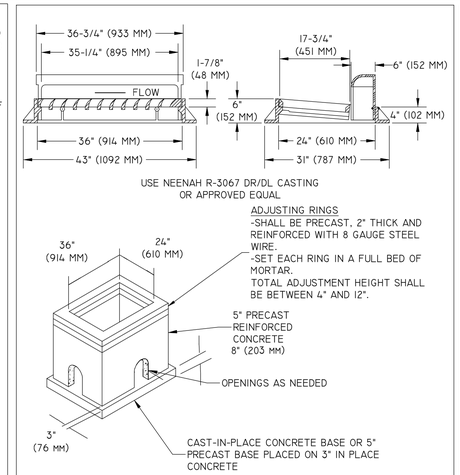


TYPE	DIAMETER Ⓐ	T
I	48"	5"
II	60"	6"
III	72"	8"
IV	27"	3 1/4"

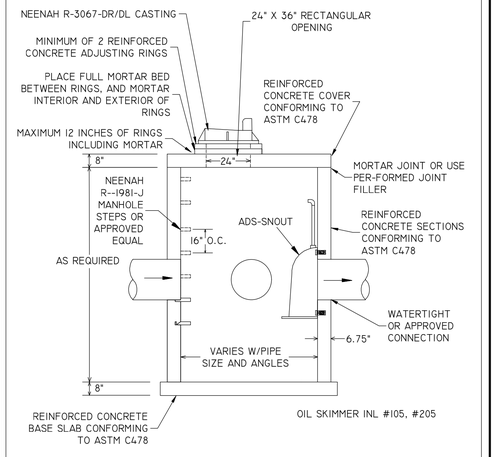
STEPS NEEDED WHEN D > 4'

SPECIFICATIONS:
* MANUFACTURED TO ASTM C-478 SPECIFICATIONS
* CONCRETE STRENGTH - 4000 P.S.I.
* STEEL DESIGN IN ACCORDANCE WITH A.S.T.M. C-478 0.12 SQ.IN./FT.
* ALL REINFORCING DESIGNED FOR 1" MIN. COVER
* STEP - STEEL, PLASTIC COATED, 16" ON CENTER
* 6" ADJUSTMENT RINGS (2" THICK EACH RING)
* NEENAH #1550A-C FRAME AND LID FOR MANHOLE APPLICATION
* NEENAH #3067-L FOR INLET APPLICATION

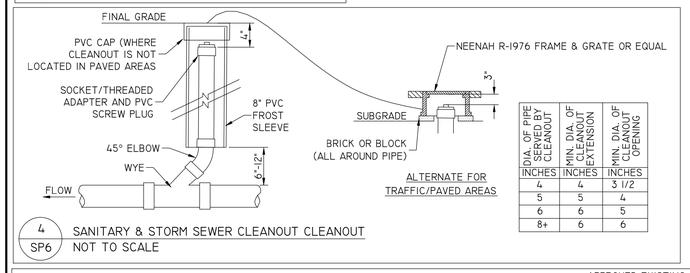
3 / SP6 PRECAST REINFORCED CONC. MANHOLE DETAIL
NOT TO SCALE



7 / SP6 24"x 36" CURB INLET AND CASTING DETAIL
NOT TO SCALE

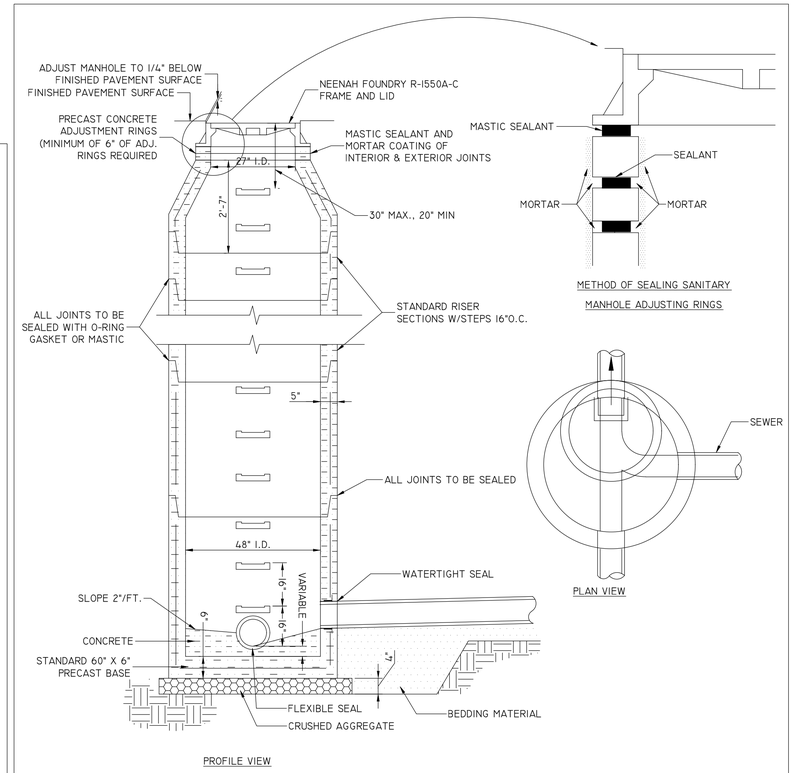


8 / SP6 STORM SEWER INLET WITH SUMP DETAIL
NOT TO SCALE

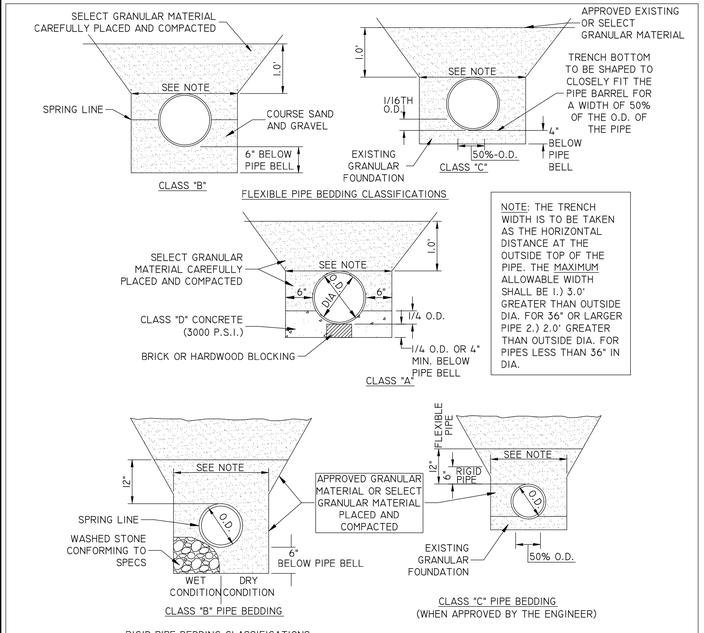


DIA. OF PIPE SERVED BY CLEANOUT	MIN. DIA. OF CLEANOUT EXTENSION	MIN. DIA. OF CLEANOUT OPENING
INCHES	INCHES	INCHES
4	4	3 1/2
5	5	4
6	6	5
8+	6	6

4 / SP6 SANITARY & STORM SEWER CLEANOUT CLEANOUT
NOT TO SCALE

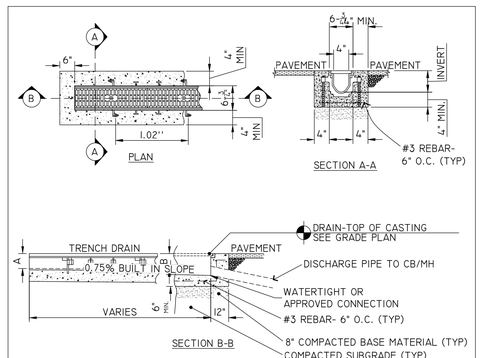


5 / SP6 SANITARY MANHOLE
NOT TO SCALE

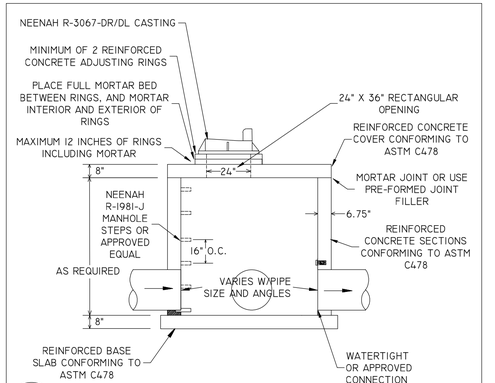


ALTERNATE: WHERE THE ABOVE CONDITIONS ARE NOT SATISFIED, THE CONTRACTOR SHALL PLACE 4" OF GRANULAR BEDDING BENEATH THE PIPE AND EXTEND UP THE SIDE A DISTANCE OF 1/16TH THE O.D. OF THE PIPE

9 / SP6 PIPE BEDDING CLASSIFICATIONS DETAIL
NOT TO SCALE



10 / SP6 Z 886 TRENCH DRAIN DETAIL
NOT TO SCALE



11 / SP6 STORM SEWER INLET WITHOUT SUMP DETAIL
NOT TO SCALE

KWIK TRIP STORES

KWIK STAR STORES

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EMAIL: MAIL@REIENGINEERING.COM

NO SCALE

SITE PLAN DETAILS

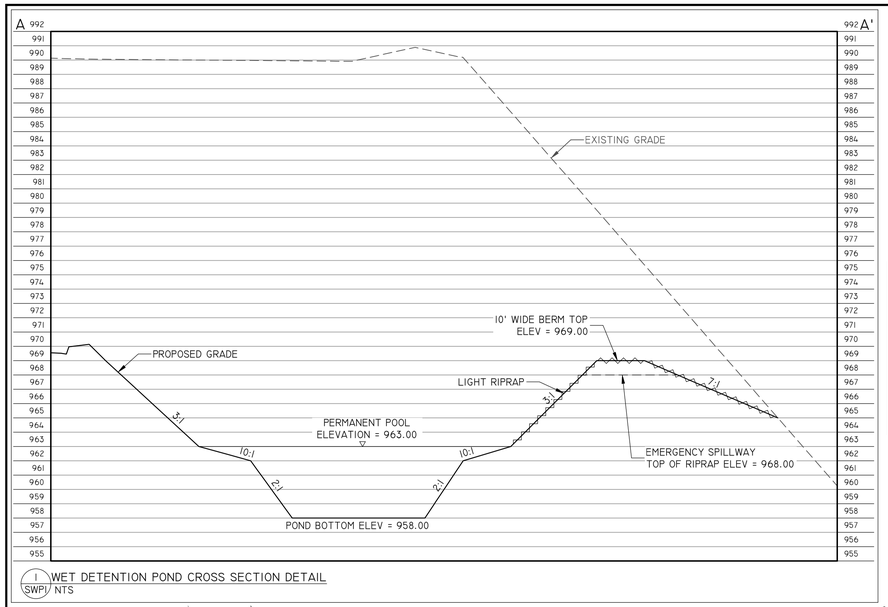
CONVENIENCE STORE #1283

STH 83 AND W. CAPITOL DRIVE
HARTLAND, WI

#	DATE	DESCRIPTION
1		

DRAWN BY NAP
SCALE NOT TO SCALE
PROJ. NO. 10827
DATE 8/17/23 - REVIEW DOCUMENTS
SHEET SP6

DRAWING FILE: Q:\10800 - 10899\10827 - KWIK TRIP #1283 - HARTLAND\DRAWING\PLANS\10827-SP5-6-SITE DETAILS.DWG LAYOUT: SP6
PLOTTED: Aug 17, 2023 - 5:02PM PLOTTED BY: DAN



1 SWPI WET DETENTION POND CROSS SECTION DETAIL
NTS

PROJECT DATA

PROJECT START DATE	APRIL 2024
PROJECT COMPLETION DATE	OCT 2024

SITE AREA DATA

PRE-CONSTRUCTION IMPERVIOUS AREA	0 SF
POST-CONSTRUCTION IMPERVIOUS AREA	105,272 SF
APPROX. AREA OF LAND DISTURBANCE	215,025 SF

SITE RUNOFF COEFFICIENT

PRE-CONSTRUCTION	61
POST-CONSTRUCTION	82

SOIL DATA

SURFACE SOIL	TOPSOIL
SUB-SURFACE SOIL	GRAVELLY
DEPTH OF GROUND WATER	UNKNOWN
DOWN-STREAM TRIBUTARY	PINE LAKE

ESTIMATED PRELIMINARY EROSION CONTROL QUANTITIES
(ACTUAL QUANTITIES SUBJECT TO CHANGE)

ITEM	QUANTITY
ROCK CONSTRUCTION ENTRANCE	400 SQ.YD.
INLET PROTECTION	10
EROSION CONTROL BLANKET	4,530 SQ.YD.
RIP RAP	5 CU. YD.
SILT FENCE	1,130 L.F.
DITCH CHECK	AS NEEDED
BIO ROLL/EROSION LOG	AS NEEDED

NOTE: FOR MAINTENANCE PURPOSES CONTRACTOR SHALL PROVIDE ALL SUFFICIENT QUANTITIES FOR REPAIR AND REPLACEMENT OF EROSION CONTROL DEVICES THROUGHOUT ALL PHASES OF THE PROJECTS CONSTRUCTION.

OKEYED NOTESO

1. TEMPORARY ROCK CONSTRUCTION ENTRANCE/EXIT. SEE DETAIL A/SWP3.

2. INSTALL SILT FENCE. SEE DETAIL D/SWP3.

3. PROVIDE INLET PROTECTION. REFER TO SWP2 FOR ACCEPTABLE PRODUCTS.

4. INSTALL LIGHT RIPRAP ON TYPE R GEOTEXTILE FABRIC. SEE DETAIL B/SWP3.

5. WET POND WITH TYPE A LINER TO SERVE AS SEDIMENT TRAP DURING CONSTRUCTION. SEE DETAILS A & B/SWP4.
SEDIMENT TRAP DETAILS
- TRAP BOTTOM ELEV. = 4.5' BELOW WEIR ELEV OR DEEPER
- TRAP TOP ELEV. = 969.00
- 6-FT WIDE WEIR ELEV. = 968.00

6. CONSTRUCT EMERGENCY OVERFLOW WEIR, WITH LIGHT RIPRAP ON TYPE R GEOTEXTILE FABRIC. SEE DETAIL 6/SP6.

SUGGESTED CONSTRUCTION SEQUENCE
- PROVIDE CONSTRUCTION ACCESS
- INSTALL SILT FENCE
- INSTALL INLET PROTECTION ON EXISTING STORM STRUCTURES
- SAWCUT AND REMOVE PAVEMENT, STRIP TOPSOIL, REMOVALS
- ROUGH GRADING
- INSTALL DIVERSIONS AND SEDIMENT TRAP
- CONSTRUCT BUILDING
- SITE UTILITY INSTALLATION
- INSTALL INLET AND CULVERT PROTECTION ON NEW STORM STRUCTURES
- FINISH GRADING
- CONSTRUCT BASE COURSE AND PAVEMENT
- INSTALL LAWN/ LANDSCAPE
- FLUSH STORM SEWER
- REMOVE EROSION CONTROL MEASURES ONLY AFTER ALL PAVEMENTS HAVE BEEN INSTALLED AND ALL SOILS HAVE BEEN STABILIZED

NOTES:

(A) CONTRACTOR SHALL ABIDE BY THE WDNR CONSERVATION PRACTICE STANDARDS FOR INSTALLATION AND MAINTENANCE OF EROSION CONTROL. REFER TO SWP4 FOR TECHNICAL STANDARDS EMPLOYED.

(B) CONTRACTOR SHALL PROVIDE CONCRETE WASHOUT AREAS ON-SITE. SEE DETAIL E/SWP4.

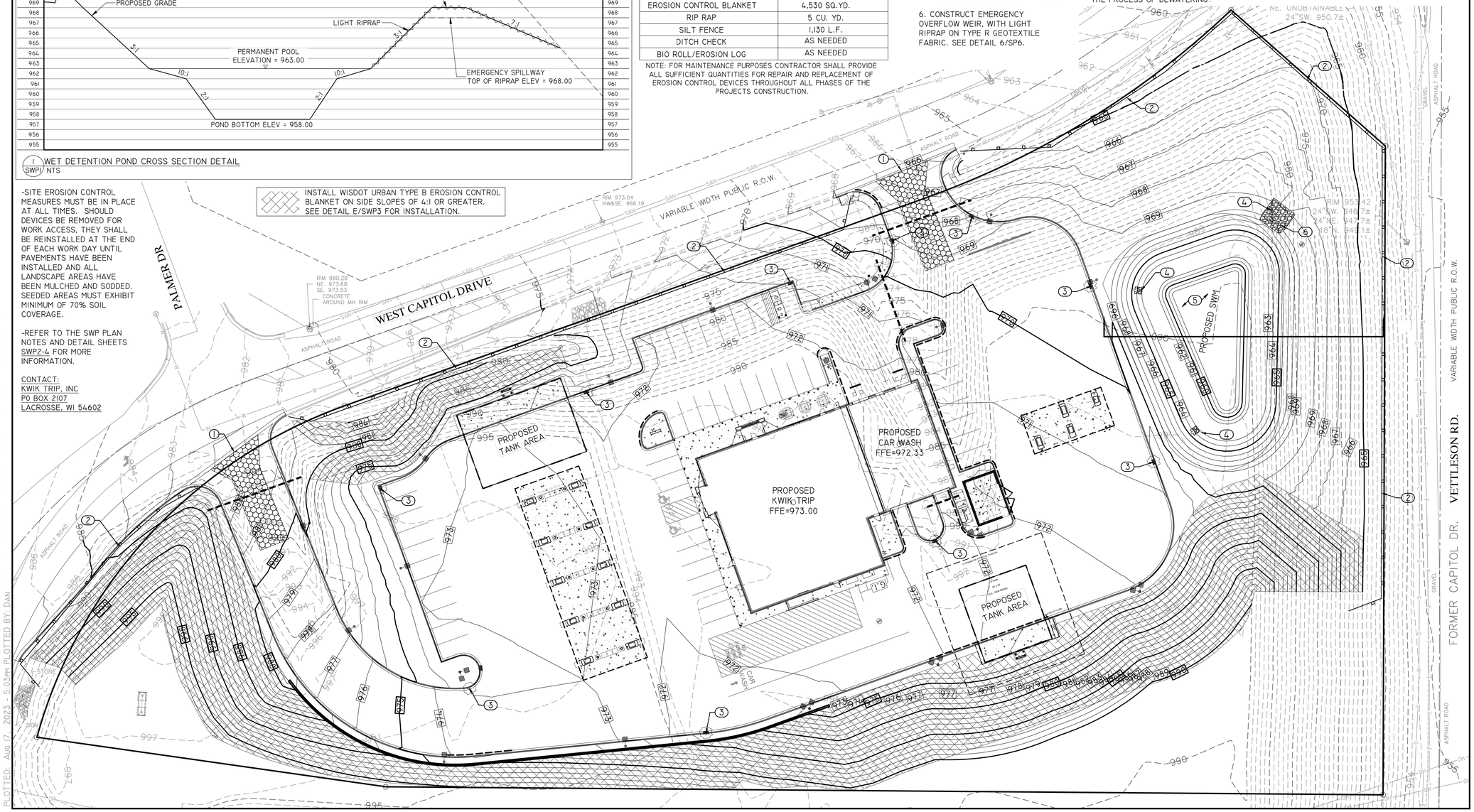
(C) DEWATERING BAGS SHALL BE READILY AVAILABLE AND SHALL BE USED AT ALL TIMES IN THE PROCESS OF DEWATERING.

INSTALL WISDOT URBAN TYPE B EROSION CONTROL BLANKET ON SIDE SLOPES OF 4:1 OR GREATER. SEE DETAIL E/SWP3 FOR INSTALLATION.

-SITE EROSION CONTROL MEASURES MUST BE IN PLACE AT ALL TIMES. SHOULD DEVICES BE REMOVED FOR WORK ACCESS, THEY SHALL BE REINSTALLED AT THE END OF EACH WORK DAY UNTIL PAVEMENTS HAVE BEEN INSTALLED AND ALL LANDSCAPE AREAS HAVE BEEN MULCHED AND SODDED. SEEDED AREAS MUST EXHIBIT MINIMUM OF 70% SOIL COVERAGE.

-REFER TO THE SWP PLAN NOTES AND DETAIL SHEETS SWP2-4 FOR MORE INFORMATION.

CONTACT:
KWIK TRIP, INC
P0 BOX 2107
LACROSSE, WI 54602



DRAWING FILE: Q:\10800 - 10899\10827 - KWIK TRIP #1283 - HARTLAND\DRAWINGS\PLANS\10827-SP7-SWPI-EC.DWG LAYOUT: SWPI
PLOTTED: Aug 17, 2023 - 5:03PM PLOTTED BY: DAN

KWIK TRIP STORES

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EMAIL: MAIL@REIENGINEERING.COM

SCALE
0 30 60

EROSION CONTROL PLAN

CONVENIENCE STORE #1283
STH 83 AND W. CAPITOL DRIVE
HARTLAND, WI

#	DATE	DESCRIPTION
1		

DRAWN BY NAP
SCALE GRAPHIC
PROJ. NO. 10827
DATE 8/17/23 - REVIEW DOCUMENTS
SHEET SWP1

STORM WATER POLLUTION PREVENTION PLAN

POLLUTION PREVENTION PLAN
ALL CONTRACTORS / SUBCONTRACTORS SHALL CONDUCT THEIR OPERATIONS IN A MANNER THAT MINIMIZES EROSION AND PREVENTS SEDIMENTS FROM LEAVING THE PROJECT SITE. THE PRIME CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLIANCE AND IMPLEMENTATION OF THE POLLUTION PREVENTION PLAN (PPP) FOR THEIR ENTIRE CONTRACT. THE RESPONSIBILITY SHALL BE FURTHER SHARED WITH SUBCONTRACTORS WHOSE WORK IS A SOURCE OF POTENTIAL POLLUTION AS DEFINED IN THE PPP.

I. SITE DESCRIPTION
THIS POLLUTION PREVENTION PLAN IS FOR THE CONSTRUCTION OF THE KWIK TRIP CONVENIENCE STORE #1283 PROJECT. THE PROJECT IS LOCATED IN SECTION 3, TOWNSHIP 7N, RANGE 18E, VILLAGE OF HARTLAND, WAUKESHA COUNTY, WISCONSIN.

THIS PPP COVERS 4.68 ACRES WITH AN ESTIMATED 4.68 ACRES BEING DISTURBED THROUGH EXCAVATION, GRADING, AND PAVING. THE PORTION OF THE PPP COVERED BY THIS CONTRACT HAS 4.68 ACRES BEING DISTURBED.

THE PROJECT IS LOCATED IN AN AREA OF HOCHEIM LOAM (HmC2), THERESA SILT LOAM (ThB). THE ESTIMATED CURVE NUMBER FOR THIS PPP AFTER CONSTRUCTION IS 82.

REFER TO PLANS: KWIK TRIP CONVENIENCE STORE #1283 FOR LOCATIONS OF TYPICAL SLOPES, DITCH GRADES, AND MAJOR STRUCTURAL AND NON-STRUCTURAL CONTROLS. A COPY OF THIS PLAN WILL BE ON FILE AT THE PROJECT ENGINEER'S OFFICE AND ON-SITE. RUNOFF FROM THIS WORK WILL OVERLAND FLOW THROUGH DETENTION POND, DITCHES, STORM SEWER TO PIKE LAKE.

THIS PROJECT IS NOT LOCATED WITHIN A 100-YEAR FLOODPLAIN.

POTENTIAL SOURCES OF POLLUTION:
SITE SOURCES OF POLLUTION GENERATED AS A RESULT OF THIS WORK RELATE TO SILTS AND SEDIMENT WHICH MAY BE TRANSPORTED AS A RESULT OF A STORM EVENT. HOWEVER, THIS PPP PROVIDES CONVEYANCE FOR OTHER (NON-PROJECT RELATED) OPERATIONS. THESE OTHER OPERATIONS HAVE STORM WATER RUNOFF, THE REGULATION OF WHICH IS BEYOND THE CONTROL OF THIS PPP. POTENTIALLY THIS RUNOFF CAN CONTAIN POLLUTANTS RELATED TO SITE-SPECIFIC LAND USES.
EXAMPLES ARE:

RURAL AGRICULTURAL ACTIVITIES:
RUNOFF FROM AGRICULTURAL LAND USE CAN POTENTIALLY CONTAIN CHEMICALS INCLUDING HERBICIDES, PESTICIDES, FUNGICIDES, AND FERTILIZERS.

CONSTRUCTION ACTIVITIES:
RUNOFF FROM CONSTRUCTION ACTIVITIES CAN POTENTIALLY CONTAIN FUELS, OILS, AND CHEMICALS FROM SPECIFIC CONSTRUCTION RELATED ACTIVITIES.

2. CONTROLS

INLET PROTECTION DEVICES SHALL BE PLACED AROUND INTAKES. SILT FENCE SHALL BE PLACED AT LOCATIONS WHERE RUNOFF CAN MOVE OFFSITE. VEGETATION IN AREAS NOT NEEDED FOR CONSTRUCTION SHALL BE PRESERVED. AS AREAS REACH THEIR FINAL GRADE, ADDITIONAL SILT FENCES, SILT BASINS, INTERCEPTING DITCHES, SOD FLUMES, LETDOWNS, BRIDGE END DRAINS, AND EARTH DIKES SHALL BE INSTALLED AS SPECIFIED IN THE PLANS AND / OR AS REQUIRED BY PROJECT ENGINEER. THIS MAY INCLUDE USING SILT FENCE AS DITCH CHECKS. TEMPORARY STABILIZING SHALL BE COMPLETED AS THE DISTURBED AREAS ARE CONSTRUCTED. IF CONSTRUCTION ACTIVITY IS NOT PLANNED TO OCCUR IN A DISTURBED AREA IMMEDIATELY, THE AREA SHALL BE STABILIZED BY TEMPORARY SEEDING OR MULCHING WITHIN 14 DAYS. OTHER STABILIZING METHODS SHALL BE USED OUTSIDE THE SEEDING PERIOD.

THIS WORK SHALL BE DONE IN ACCORDANCE WITH THE WISCONSIN TRANSPORTATION STANDARD SPECIFICATIONS. CONTRACTOR SHALL ALSO FOLLOW ALL REQUIREMENTS OF THE WAUKESHA COUNTY EROSION AND SEDIMENT CONTROL REGULATIONS.

AS THE WORK PROGRESSES, ADDITIONAL EROSION CONTROL ITEMS SUCH AS SOD FLUMES, DITCH CHECKS, ROCK OUTLET PROTECTION, AND LETDOWN STRUCTURES AND OTHER APPROPRIATE MEASURES SHALL BE INSTALLED BY THE CONTRACTOR AS DETERMINED BY THE ENGINEER AFTER FIELD INVESTIGATION. THE CONSTRUCTION WILL BE COMPLETED WITH THE ESTABLISHMENT OF PERMANENT PERENNIAL VEGETATION OF ALL DISTURBED AREAS BY THE CONTRACTOR.

3. OTHER CONTROLS

CONTRACTOR DISPOSAL OF UNUSED CONSTRUCTION MATERIALS AND CONSTRUCTION MATERIAL WASTE SHALL COMPLY WITH APPLICABLE STATE AND LOCAL WASTE DISPOSAL, SANITARY SEWER, OR SEPTIC SYSTEM REGULATIONS. IN THE EVENT OF A CONFLICT WITH OTHER GOVERNMENT LAWS, RULES, AND REGULATIONS, THE MORE RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.

MUD TRACK-OUT SHALL BE CLEANED OFF THE ROADWAY NIGHTLY AND BEFORE ANY RAINFALL EVENT. WATER MAY NOT BE USED TO CLEAN THE ROADWAY.

CONTRACTOR SHALL KEEP PERMIT, INSPECTION LOGS, SITE PLAN, AND OTHER PERMIT DATA ON SITE AT ALL TIMES. MATERIAL SHALL BE PLACED IN AN EASILY ACCESSIBLE MAILBOX THAT IS CLEARLY MARKED "SWPPP".

ALL FUELS AND OILS SHALL BE CONTAINED BY A SECONDARY CONTAINMENT BERM OR WITHIN A TRAILER.

ALL SILT FENCE AND INLET PROTECTION DEVICES AS SHOWN SHALL BE INSTALLED PRIOR TO COMMENCING CONSTRUCTION WHENEVER POSSIBLE.

A NOTICE OF DISCONTINUATION MUST BE FILED WITH THE WDNR ONCE VEGETATION HAS BEEN ESTABLISHED TO A MINIMUM COVERAGE OF 70%.

CONTRACTOR SHALL MARK ON THE INITIAL STORM WATER POLLUTION PREVENTION PLAN THE LOCATION OF STORAGE AREAS FOR FUELS AND OILS, PORTA-POTTY, DUMPSTER OR WASTE CONTAINMENT BINS, CONCRETE WAS OUT AREA, AND OTHER NECESSARY ITEMS.

ENTRANCES SHALL BE MAINTAINED TO CONTROL MUD TRACK-OUT FROM THE SITE.

THE STORMWATER POLLUTION PREVENTION PLAN SHALL BE UPDATED AS NECESSARY DURING CONSTRUCTION.

APPROVED STATE OF LOCAL PLANS:
DURING THE COURSE OF THIS CONSTRUCTION, IT IS POSSIBLE THAT SITUATIONS WILL ARISE WHERE UNKNOWN MATERIALS WILL BE ENCOUNTERED. WHEN SUCH SITUATIONS ARE ENCOUNTERED, THEY WILL BE HANDLED ACCORDING TO ALL FEDERAL, STATE, AND LOCAL REGULATIONS IN EFFECT AT THE TIME.

4. MAINTENANCE

THE CONTRACTOR IS REQUIRED TO MAINTAIN ALL TEMPORARY EROSION CONTROL MEASURES IN PROPER WORKING ORDER, INCLUDING CLEANING, REPAIRING, OR REPLACING THEM THROUGHOUT THE CONTRACT PERIOD. CLEANING OF SILT CONTROL DEVICES SHALL BEGIN WHEN THE FEATURES HAVE LOST 50% OF THEIR CAPACITY.

5. INSPECTIONS

INSPECTIONS SHALL BE MADE JOINTLY BY THE CONTRACTOR AND THE CONTRACTING AUTHORITY EVERY SEVEN CALENDAR DAYS. THE CONTRACTOR SHALL IMMEDIATELY BEGIN CORRECTIVE ACTION ON ALL DEFICIENCIES FOUND. THE FINDINGS OF THIS INSPECTION SHALL BE RECORDED IN THE PROJECT DIARY. THIS PPP MAY BE REVISED BASED ON THE FINDING OF THE INSPECTION. THE CONTRACTOR SHALL IMPLEMENT ALL REVISIONS. ALL CORRECTIVE ACTIONS SHALL BE COMPLETED WITHIN 3 CALENDAR DAYS OF THE INSPECTION.

6. NON-STORM DISCHARGES

THIS INCLUDES SUBSURFACE DRAINS (I.E. FIELD TILE, SUBDRAINS), SLOPE DRAINS, AND BRIDGE END DRAINS. THE VELOCITY OF THE DISCHARGE FROM THESE FEATURES MAY BE CONTROLLED BY THE USE OF PATIO BLOCKS, CLASS A STONE, OR EROSION STONE.

7. SEQUENCE OF CONSTRUCTION ACTIVITIES

ALL EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO COMMENCING ANY CONSTRUCTION ON-SITE. FIRST, ALL NOTED REMOVALS SHALL BE COMPLETED. SECOND, GRADING CAN COMMENCE TO BRING SOIL TO FINAL GRADE.. NEXT, INSTALLATION OF UTILITIES AND PAVING SHALL BE COMPLETED. FINALLY, THE DISTURBED AREAS SHALL BE SEEDED, FERTILIZED, AND MULCHED AS SHOWN IN THE PLANS.

OWNER CERTIFICATION:

"I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS."

NAME (PRINTED OR TYPED): _____

TITLE: _____

SIGNATURE: _____

DATE: _____

NAME OF COMPANY, IF APPLICABLE: _____

ADDRESS: _____

CITY, STATE, ZIP CODE: _____

TELEPHONE NUMBER: _____

ADDRESS OF THE SITE: _____

CONTRACTOR / SUBCONTRACTOR CERTIFICATION:

"I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE AS PART OF THIS CERTIFICATION. FURTHER, BY MY SIGNATURE, I UNDERSTAND THAT I AM BECOMING S CO-PERMITTEE, ALONG WITH THE OWNER(S) AND OTHER CONTRACTORS AND SUBCONTRACTORS SIGNING SUCH CERTIFICATIONS, TO THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES NPDES GENERAL PERMIT NO. 2 FOR "STORM WATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY FOR CONSTRUCTION ACTIVITIES" AT THE IDENTIFIED SITE. AS A CO-PERMITTEE, I UNDERSTAND THAT I, AND MY COMPANY, ARE LEGALLY REQUIRED UNDER THE CLEAN WATER ACT AND THE CODE OF WISCONSIN, TO ENSURE COMPLIANCE WITH THE TERMS AND CONDITIONS OF THE STORM WATER POLLUTION PREVENTION PLAN DEVELOPED UNDER THE NPDES PERMIT AND THE TERMS OF THE NPDES PERMIT."

NAME (PRINTED OR TYPED): _____

TITLE: _____

SIGNATURE: _____

DATE: _____

NAME OF CONTRACTING FIRM: _____

ADDRESS: _____

CITY, STATE, ZIP CODE: _____

TELEPHONE NUMBER: _____

ADDRESS OF THE SITE: _____

CONTRACTORS/SUBCONTRACTORS WHO WILL IMPLEMENT EACH EROSION CONTROL MEASURE:

SILT FENCE: CONTRACTOR (WITH ADDRESS AND TELEPHONE NUMBER)

_____

TOPSOIL BERM: CONTRACTOR (WITH ADDRESS AND TELEPHONE NUMBER)

_____

STABILIZED CONSTRUCTION ENTRANCE: CONTRACTOR (WITH ADDRESS AND TELEPHONE NUMBER)

_____

CONCRETE WASH-OUT AREA: CONTRACTOR (WITH ADDRESS AND TELEPHONE NUMBER)

_____

DUMPSTER: CONTRACTOR (WITH ADDRESS AND TELEPHONE NUMBER)

_____

PORT-A-POTTY: CONTRACTOR (WITH ADDRESS AND TELEPHONE NUMBER)

_____

INLET PROTECTION DEVICE: CONTRACTOR (WITH ADDRESS AND TELEPHONE NUMBER)

_____

KWIK TRIP™ STORES

KWIK STAR™ STORES

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EMAIL: MAIL@REIENGINEERING.COM

NO SCALE

EROSION CONTROL DETAILS

CONVENIENCE STORE #1283

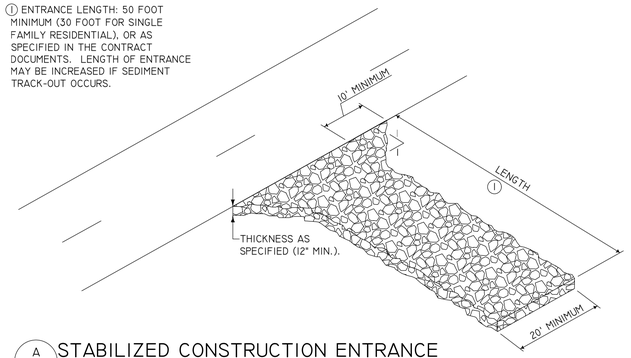
STH 83 AND W. CAPITOL DRIVE
HARTLAND, WI

#	DATE	DESCRIPTION
1		

DRAWN BY NAP XXX
SCALE GRAPHIC
PROJ. NO. 10827
DATE 8/17/23 - REVIEW DOCUMENTS
SHEET SWP2

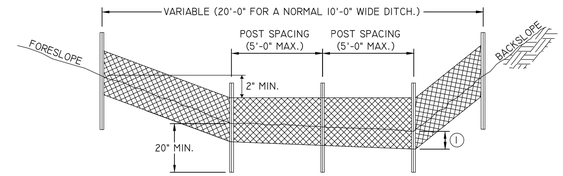
DRAWING FILE: Q:\10800 - 10899\10827 - KWIK TRIP #1283 - HARTLAND\DRAWING\PLANS\10827-SP8-SWP2-4-EC-DETAILS.DWG LAYOUT: SWP2
PLOTTED: Aug 17, 2023 - 5:03PM PLOTTED BY: DAN

(1) ENTRANCE LENGTH: 50 FOOT MINIMUM (30 FOOT FOR SINGLE FAMILY RESIDENTIAL), OR AS SPECIFIED IN THE CONTRACT DOCUMENTS. LENGTH OF ENTRANCE MAY BE INCREASED IF SEDIMENT TRACK-OUT OCCURS.

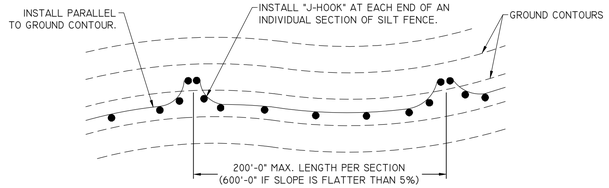


A SWP3 STABILIZED CONSTRUCTION ENTRANCE
FOR CONSTRUCTION EGRESS POINTS
NTS

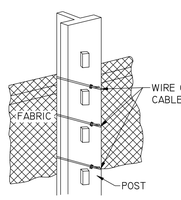
(1) INSERT 12 INCHES OF FABRIC A MINIMUM OF 6 INCHES DEEP (FABRIC MAY BE FOLDED BELOW THE GROUND LINE).



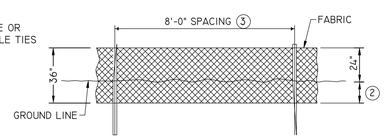
TYPICAL SILT FENCE DITCH CHECK



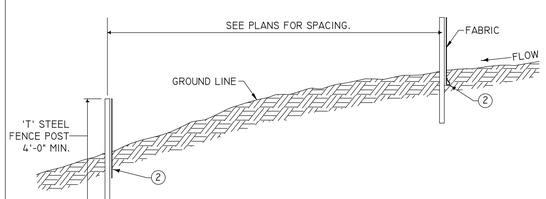
TYPICAL SILT FENCE INSTALLATION ON LONGITUDINAL SLOPES
(PLAN VIEW)



ATTACHMENT TO POST



DETAILS OF SILT FENCE ON LONGITUDINAL SLOPES

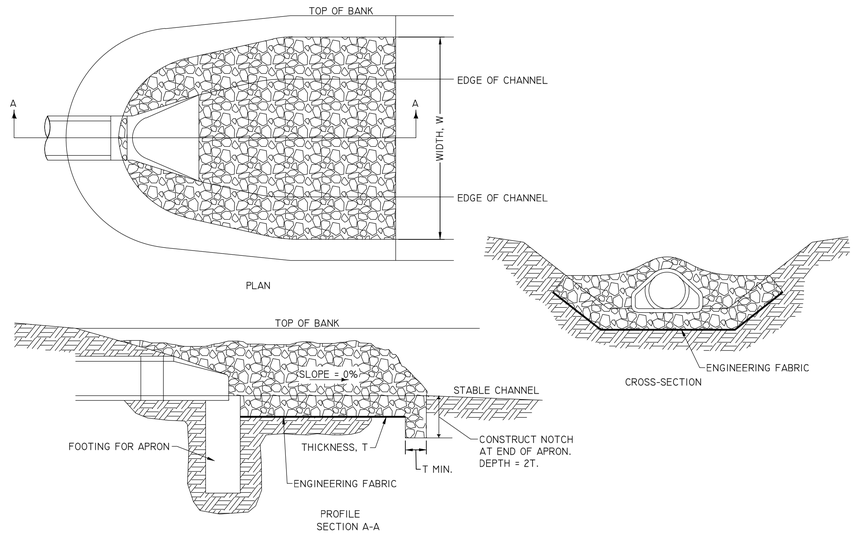


TYPICAL SILT FENCE INSTALLATION ON LONGITUDINAL SLOPES
(PROFILE VIEW)

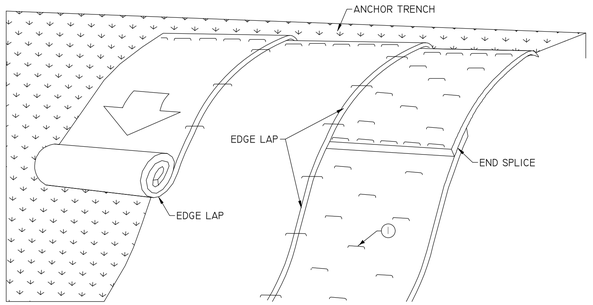
D SWP3 SILT FENCE
NTS

(2) INSERT 12 INCHES OF FABRIC A MINIMUM OF 6 INCHES DEEP (FABRIC MAY BE FOLDED BELOW THE GROUND LINE).

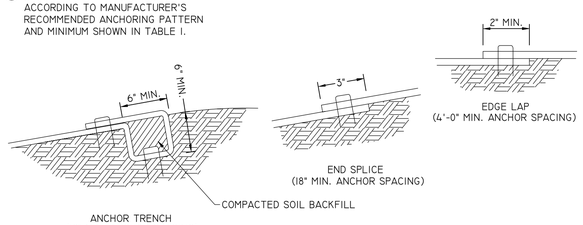
(3) REDUCE POST SPACING TO 5'-0" AT WATER CONCENTRATION AREAS, OR AS REQUIRED TO ADEQUATELY SUPPORT FENCE.



B SWP3 RIP RAP APRON FOR PIPE OUTLET INTO CHANNEL
NTS



(1) SECURE BLANKET TO GROUND ACCORDING TO MANUFACTURER'S RECOMMENDED ANCHORING PATTERN AND MINIMUM SHOWN IN TABLE I.

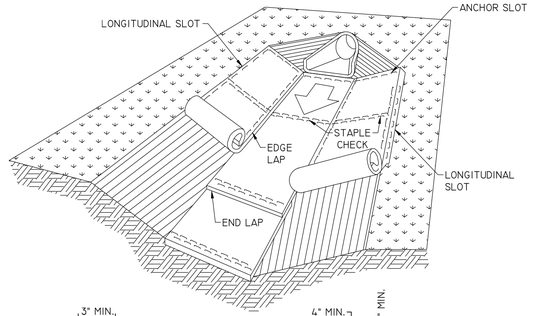


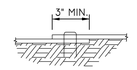
ANCHOR TRENCH
(12" MIN. ANCHOR SPACING)

END SPLICE
(18" MIN. ANCHOR SPACING)

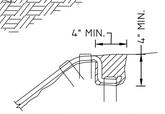
TABLE I

MAX. SLOPE	MIN. ANCHORS
≤3:1	1.5/YD²
2:1	2/YD²
1:1	2.5/YD²

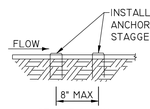




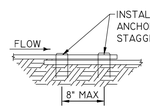
EDGE LAP
(4'-0" MAX. ANCHOR SPACING)



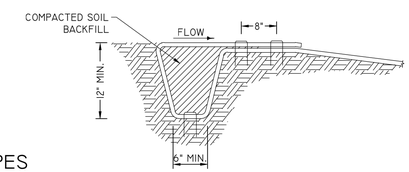
LONGITUDINAL SLOT
(3'-0" MAX. ANCHOR SPACING)



STAPLE CHECK



END LAP



ANCHOR SLOT
(1'-0" MAX. ANCHOR SPACING)

E SWP3 ROLLED EROSION CONTROL (RECP) INSTALLATION ON SLOPES
NTS

ALL EROSION CONTROL MEASURES TO BE INSTALLED AND MAINTAINED PER WDNR STANDARDS
HTTP://DNR.WI.GOV/ORG/WATER/WM/NPS/STORMWATER/TECHSTDS.HTM

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EMAIL: MAIL@REIENGINEERING.COM

NO SCALE

EROSION CONTROL DETAILS

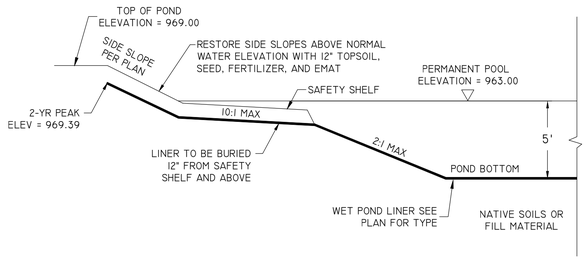
CONVENIENCE STORE #1283

STH 83 AND W. CAPITOL DRIVE
HARTLAND, WI

#	DATE	DESCRIPTION
1		

DRAWN BY	NAP XXX
SCALE	GRAPHIC
PROJ. NO.	10827
DATE	8/17/23 - REVIEW DOCUMENTS
SHEET	SWP3

DRAWING FILE: Q:\10800 - 10899\10827 - KWIK TRIP #1283 - HARTLAND\DRAWING\PLANS\10827-SP8-SWP2-4-EC-DETAILS.DWG LAYOUT: SWP3
PLOTTED: Aug 17, 2023 - 5:04PM PLOTTED BY: DAN



GENERAL POND LINER SPECIFICATIONS

(REFER TO APPENDIX D OF WDNR TECHNICAL STANDARD 1001 FOR DETAILED SPECIFICATIONS)

*1. TYPE A LINER (ANY OF THE FOLLOWING)
- CLAY LINER: MINIMUM THICKNESS OF 2 FEET WITH AN IN-PLACE HYDRAULIC CONDUCTIVITY OF 1 X 10 $^{-7}$ CM/SEC OR LESS.
- HDPE: MINIMUM THICKNESS OF 60 MIL.
- GCL: GEOSYNTHETIC CLAY LINER PER NRCS SPECIFICATIONS OUTLINED IN APPENDIX D.

TYPE B LINER (ANY OF THE FOLLOWING)
- CLAY LINER: MINIMUM THICKNESS OF 2 FEET WITH AN IN-PLACE HYDRAULIC CONDUCTIVITY OF 1 X 10 $^{-6}$ CM/SEC OR LESS.
- HDPE: MINIMUM THICKNESS OF 40 MIL.
- PPL: MINIMUM THICKNESS OF 30 MIL.

TYPE C LINER (ANY OF THE FOLLOWING)
- SILT/CLAY LINER: MINIMUM THICKNESS OF 2 FEET
- HDPE: ANY THICKNESS
- PPL: MINIMUM THICKNESS OF 20 MIL
- PVC: MINIMUM THICKNESS OF 30 MIL
- EPDM: MINIMUM THICKNESS OF 45 MIL

NOTE:
1. SHOULD THE CONTRACTOR ENCOUNTER SEASONAL OR PERCHED GROUNDWATER DURING CONSTRUCTION OF THE POND AND IT'S LINER, CONTACT ENGINEER FOR UNDERDRAIN RECOMMENDATIONS.

2. MANUFACTURED LINERS SHALL BE PROVIDED WITH AIR-RELEASE VENTS TO PREVENT FLOATING.

3. CONTRACTOR TO PROVIDE POND LINER DOCUMENTATION TO OWNER PRIOR TO FINAL ACCEPTANCE.

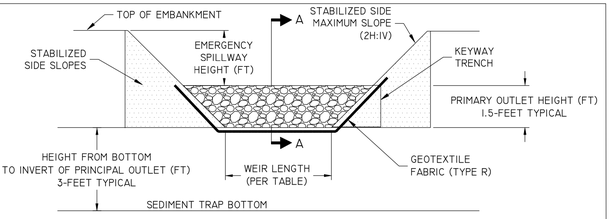
A SWP4 WET POND LINER
NTS

NOTES:
1. SIDE SLOPES AND FACES OF EARTHEN EMBANKMENT AROUND OUTLET SHALL BE ARMORED WITH RIPRAP OR STABILIZED WITH EROSION MAT SUFFICIENT TO HANDLE FLOWS FROM THE 10-YEAR STORM.

2. STONE (SHORT DURATION): 3-6" WELL GRADED ANGULAR CLEAR STONE.

3. STONE (6+ MONTHS): COMBINATION OF LIGHT RIPRAP WITH 12"-THICK LAYER OF 1" ANGULAR CLEAR STONE.

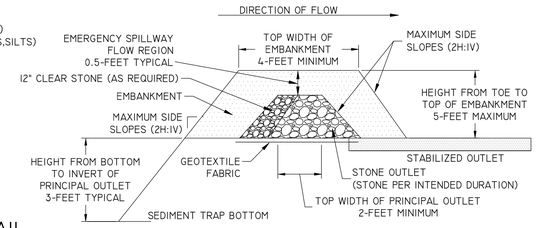
4. REFER TO WDNR TECH STD 1063 FOR ADDITIONAL INFORMATION.



CROSS-SECTION VIEW OF PRINCIPAL OUTLET

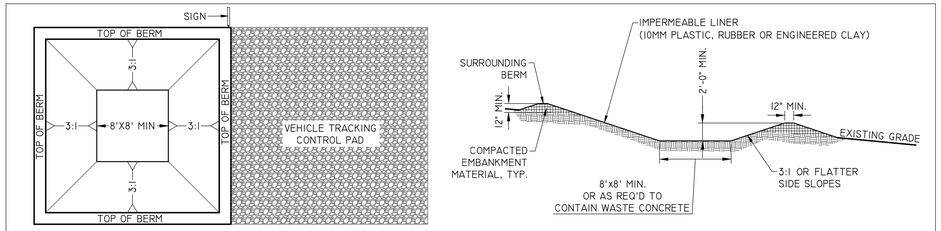
* AS = 625 X ADR (COARSE GRAINED SOILS + SANDS)
AS = 1560 X ADR (MEDIUM GRAINED SOILS + LOAMS,SILTS)
AS = 5300 X ADR (FINE GRAINED SOILS + CLAYS)

ADR (OC)	WEIR LENGTH (FT)
1	4
2	6
3	8
4	10
5	12



VIEW A-A OF PRINCIPAL OUTLET

B SWP4 SEDIMENT TRAP DETAIL
NTS



CONCRETE WASHOUT AREA INSTALLATION NOTES
1. SEE EROSION CONTROL PLAN FOR LOCATIONS OF CONCRETE WASHOUT AREA(S). TO BE PLACED A MIN. OF 50' FROM DRAINAGEWAYS, BODIES OF WATER, AND INLETS.)
2. THE CONCRETE WASHOUT AREA(S) SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
3. VEHICLE TRACKING CONTROL PAD IS REQ'D AT THE ACCESS POINT(S).
4. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA(S), AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT AREAS TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
5. EXCAVATED MATERIAL SHALL BE UTILIZED IN PERIMETER BERM CONSTRUCTION.

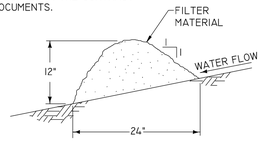
CONCRETE WASHOUT AREA MAINTENANCE NOTES
6. THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE
7. AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM SITE AND DISPOSED OF AT AN APPROVED WASTE SITE.
8. WHEN CONCRETE WASHOUT AREA(S) IS REMOVED, THE DISTURBED AREA SHALL BE STABILIZED PER SITE EROSION CONTROL MEASURES.
9. INSPECT WEEKLY AND DURING AND AFTER ALL STORM EVENTS. CLEAN-OUT OR COVER WASHOUT AREA PRIOR TO PREDICTED STORM EVENTS TO PREVENT OVER-FLOW.

E SWP4 CONCRETE WASHOUT AREA
NTS

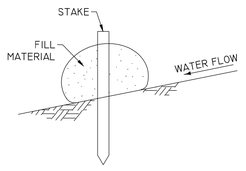
BERM SHOWN IS TYPICAL FOR SLOPES FLATTER THAN 3:1. FOR STEEPER SLOPES, INCREASE BERM SIZE AS DIRECTED BY THE ENGINEER.

PLACE BERM IN UNCOMPACTED WINDROW PERPENDICULAR TO THE SLOPE AT LOCATIONS SPECIFIED IN THE CONTRACT DOCUMENTS.

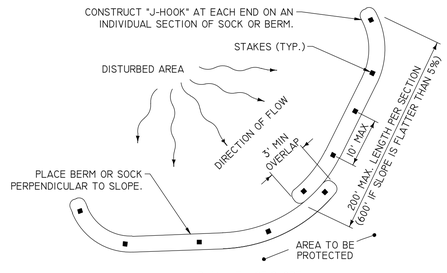
FILTER SOCK DIAMETER AS SPECIFIED IN THE CONTRACT DOCUMENTS.



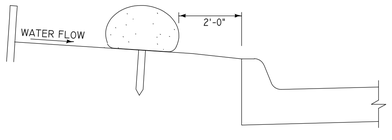
FILTER BERM



FILTER SOCK



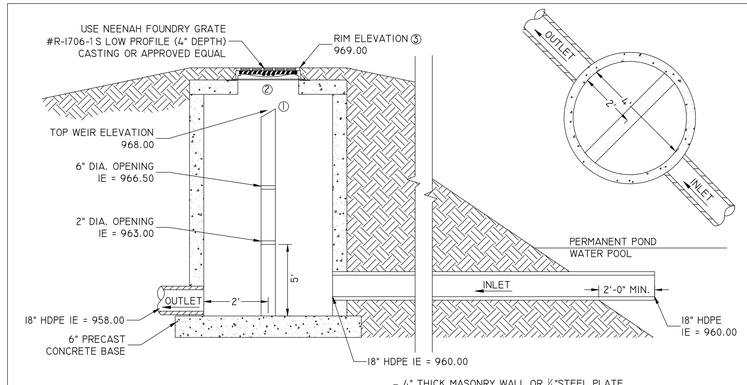
PLAN VIEW OF SLOPE
(FOR SEDIMENT AND SLOPE CONTROL)



SECTION VIEW AT STREET
(FOR PERIMETER CONTROL ALONG STREET)

TYPICAL PLACEMENT OF BERM OR SOCK

C SWP4 FILTER BERM AND FILTER SOCK
NTS



F SWP4 OUTLET CONTROL STRUCTURE
NTS

① 4" THICK MASONRY WALL OR ¼"STEEL PLATE. GROUT OR SEAL ALONG SIDES OF MANHOLE
② FORM OPENING IN TOP SLAB TO FIT CASTING
③ ADJUST GRADING AT THE OUTLET STRUCTURE TO COVER CASTING TO THE PROPOSED RIM ELEVATION

KWIK TRIP STORES

KWIK STAR STORES

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EMAIL: MAIL@REIENGINEERING.COM

NO SCALE

EROSION CONTROL DETAILS

CONVENIENCE STORE #1283

STH 83 AND W. CAPITOL DRIVE
HARTLAND, WI

#	DATE	DESCRIPTION
1		

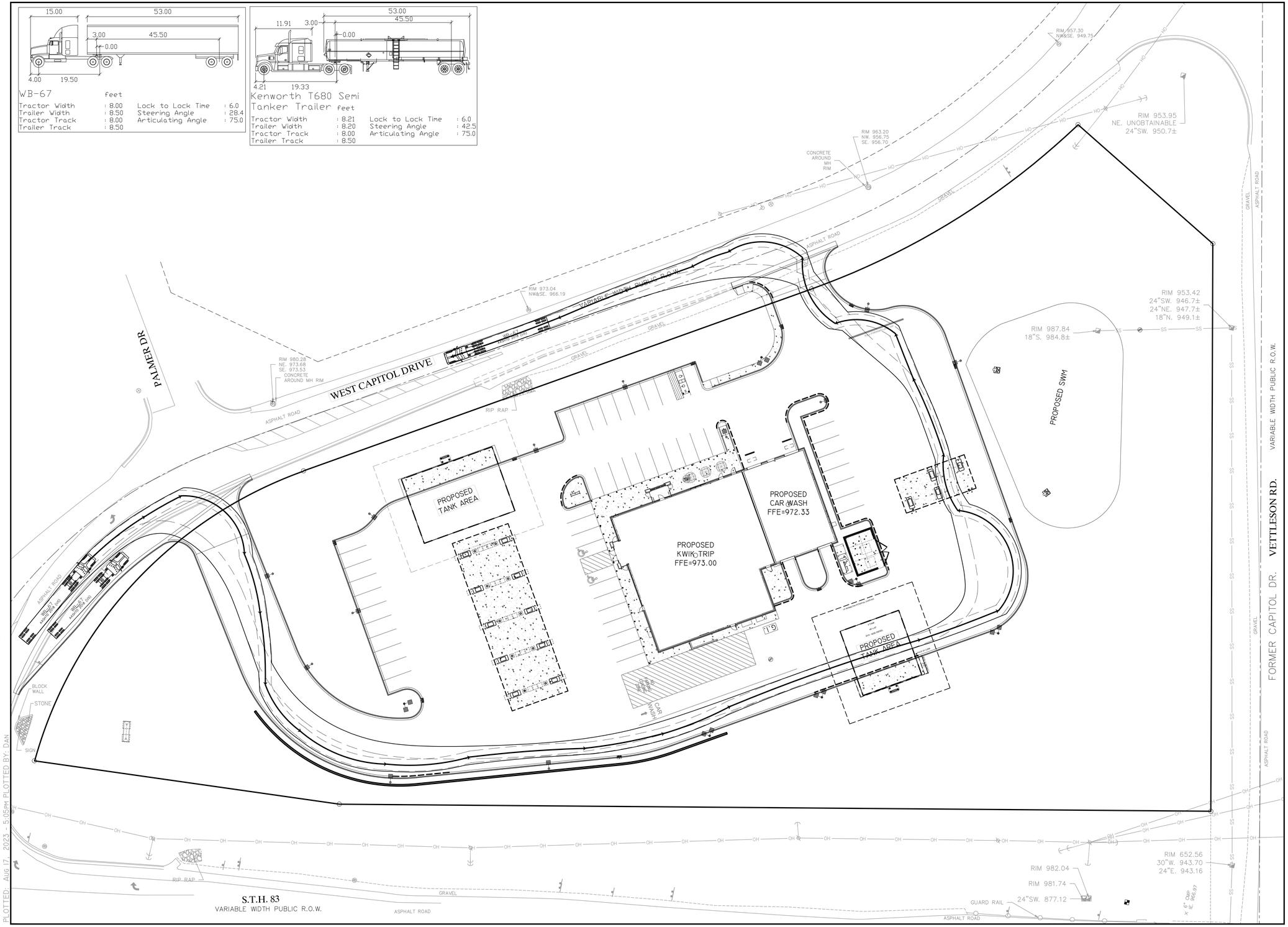
DRAWN BY NAP XXX
SCALE GRAPHIC
PROJ. NO. 10827
DATE 8/17/23 - REVIEW DOCUMENTS
SHEET SWP4

WB-67 feet

Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
Tractor Track	: 8.00	Articulating Angle	: 75.0
Trailer Track	: 8.50		

Kenworth T680 Semi Tanker Trailer feet

Tractor Width	: 8.21	Lock to Lock Time	: 6.0
Trailer Width	: 8.20	Steering Angle	: 42.5
Tractor Track	: 8.00	Articulating Angle	: 75.0
Trailer Track	: 8.50		



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SCALE
0 30 60

TRUCK CIRCULATION

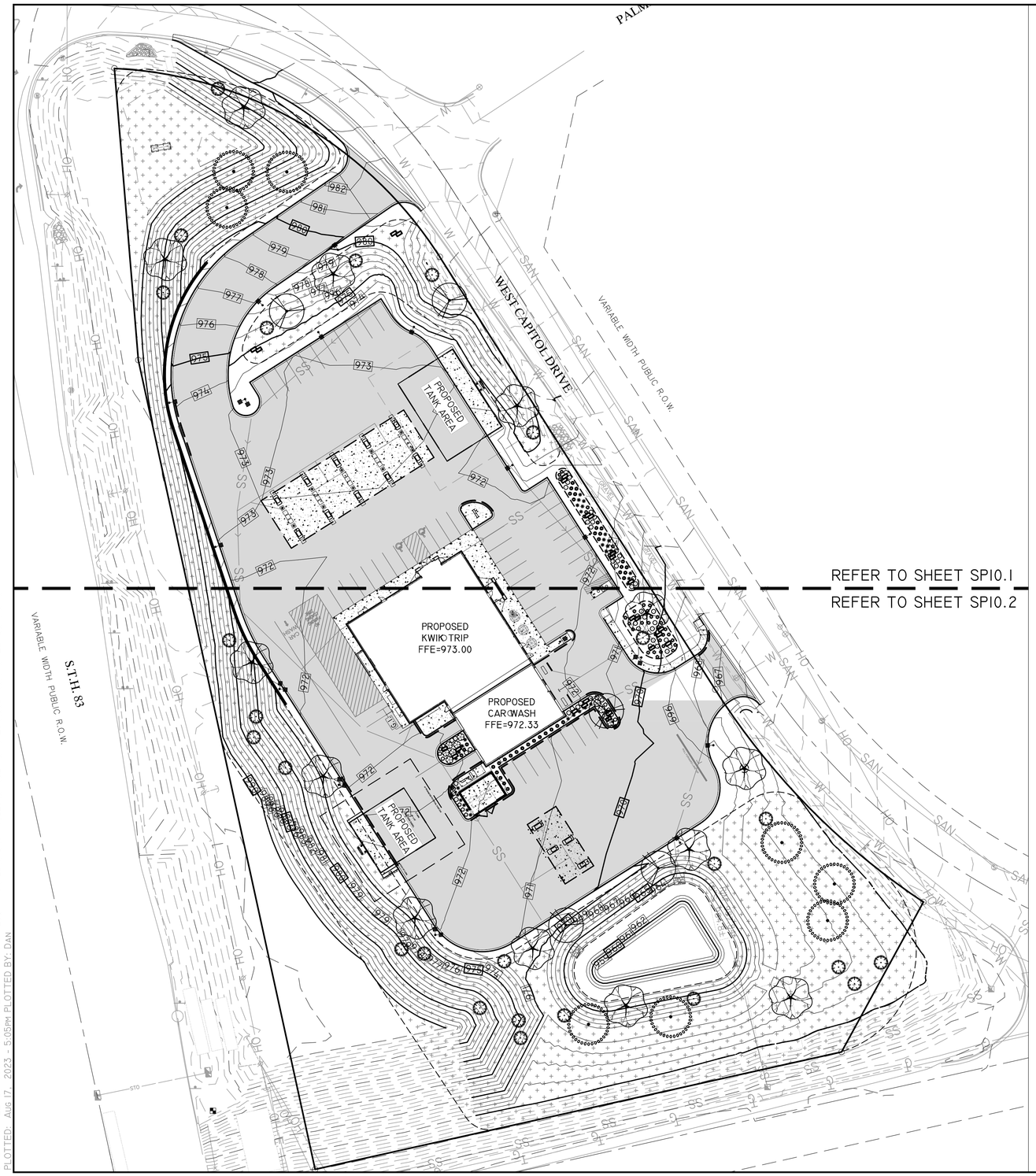
CONVENIENCE STORE #1283

STH 83 AND W. CAPITOL DRIVE
HARTLAND, WI

#	DATE	DESCRIPTION
1		

DRAWN BY NAP
SCALE GRAPHIC
PROJ. NO. 10827
DATE 8/17/23 - REVIEW DOCUMENTS
SHEET SP

DRAWING FILE: Q:\10800 - 10899\10827 - KWIK TRIP #1283 - HARTLAND\DRAWING\PLANS\10827-SP9-TRUCK CIRCULATION.DWG LAYOUT: SP
PLOTTED: Aug 17, 2023 - 5:05pm PLOTTED BY: DAN



GENERAL NOTES:

(A) LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR LOCATING & VERIFYING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION, AND IS RESPONSIBLE FOR ANY DAMAGE TO THEM DURING CONSTRUCTION.

(B) CALL DIGGERS HOTLINE @ 811 OR 1-800-242-8511 AT LEAST 5 WORKING DAYS PRIOR TO DEMOLITION, EXCAVATION OR ANY CONSTRUCTION ACTIVITY.

(C) ALL PLANT MATERIAL SHALL BE GUARANTEED ONE (1) FULL YEAR UPON TOTAL COMPLETION OF PROJECT AND ACCEPTANCE BY OWNER, WITH A ONE TIME REPLACEMENT WARRANTY UPON REQUEST BY OWNER. WARRANTY EXPIRES AFTER FIRST FULL YEAR FOLLOWING PROJECT COMPLETION.

(D) LANDSCAPE CONTRACTOR SHALL VERIFY MINIMUM 6" TOPSOIL DEPTH FOR ALL AREAS TO BE SEEDED/SODDED THROUGHOUT PROJECT SITE. CONTRACTOR IS REQUIRED TO CORRECT ANY DEFICIENCIES PRIOR TO SEED/SOD. TOPSOIL SHALL BE CLEAN AND FREE OF STONES, WEEDS AND OTHER UNDESIRABLE DEBRIS.

(E) LANDSCAPE CONTRACTOR SHALL VERIFY MINIMUM 12" PLANTING SOIL DEPTH FOR ALL PROPOSED PLANTING BED AREAS THROUGHOUT THE PROJECT SITE. CONTRACTOR IS REQUIRED TO CORRECT ANY DEFICIENCIES PRIOR TO PLANT INSTALLATION. PLANTING SOIL & AREA SHALL BE CLEAN AND FREE OF STONES, WEEDS, CONCRETE WASTE AND OTHER UNDESIRABLE DEBRIS.

(F) LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR REPAIRING TOPSOIL AND SEEDING OR SODDING ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITY, INCLUDING ALL R.O.W. AND ADJACENT PROPERTIES.

(G) CONTRACTOR SHALL CLEAN ALL PAVEMENT AREAS AFTER LANDSCAPE CONSTRUCTION ACTIVITIES ARE COMPLETE AND APPROVED BY OWNER. *THIS TO BE DONE DAILY AS DEEMED NECESSARY BY MUNICIPALITY.

PLANT SCHEDULE

DECIDUOUS TREES	COMMON NAME	BOTANICAL NAME	SIZE	CONT.	QTY
	Fall Fiesta® Sugar Maple	Acer saccharum 'Bailsta'	1.5" Cal.	B&B	5
	Swamp White Oak	Quercus bicolor	1.5" Cal.	B&B	13
	Red Oak	Quercus rubra	1.5" Cal.	B&B	8
EVERGREEN TREES	COMMON NAME	BOTANICAL NAME	SIZE	CONT.	QTY
	White Spruce	Picea glauca	3` Ht.	Pot	25
EVERGREEN SHRUBS	COMMON NAME	BOTANICAL NAME	SIZE	CONT.	QTY
	Kallay Compact Pfitzer Juniper	Juniperus chinensis 'Kallays Compact'	3 gal.	Pot	10
PERENNIALS	COMMON NAME	BOTANICAL NAME	SIZE	CONT.	QTY
	Karl Foerster Feather Reed Grass	Calamagrostis x acutiflora 'Karl Foerster'	1 gal.	Pot	30
	Pale Purple Coneflower	Echinacea pallida	1 gal.	Pot	47
	Shenandoah Switch Grass	Panicum virgatum 'Shenandoah'	1 gal.	Pot	38
	Goldsturm Coneflower	Rudbeckia fulgida sullivantii 'Goldsturm'	1 gal.	Pot	11
	Prairie Dropseed	Sporobolus heterolepis	1 gal.	Pot	34

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N

SCALE
0 40 80

OVERALL LANDSCAPE PLAN

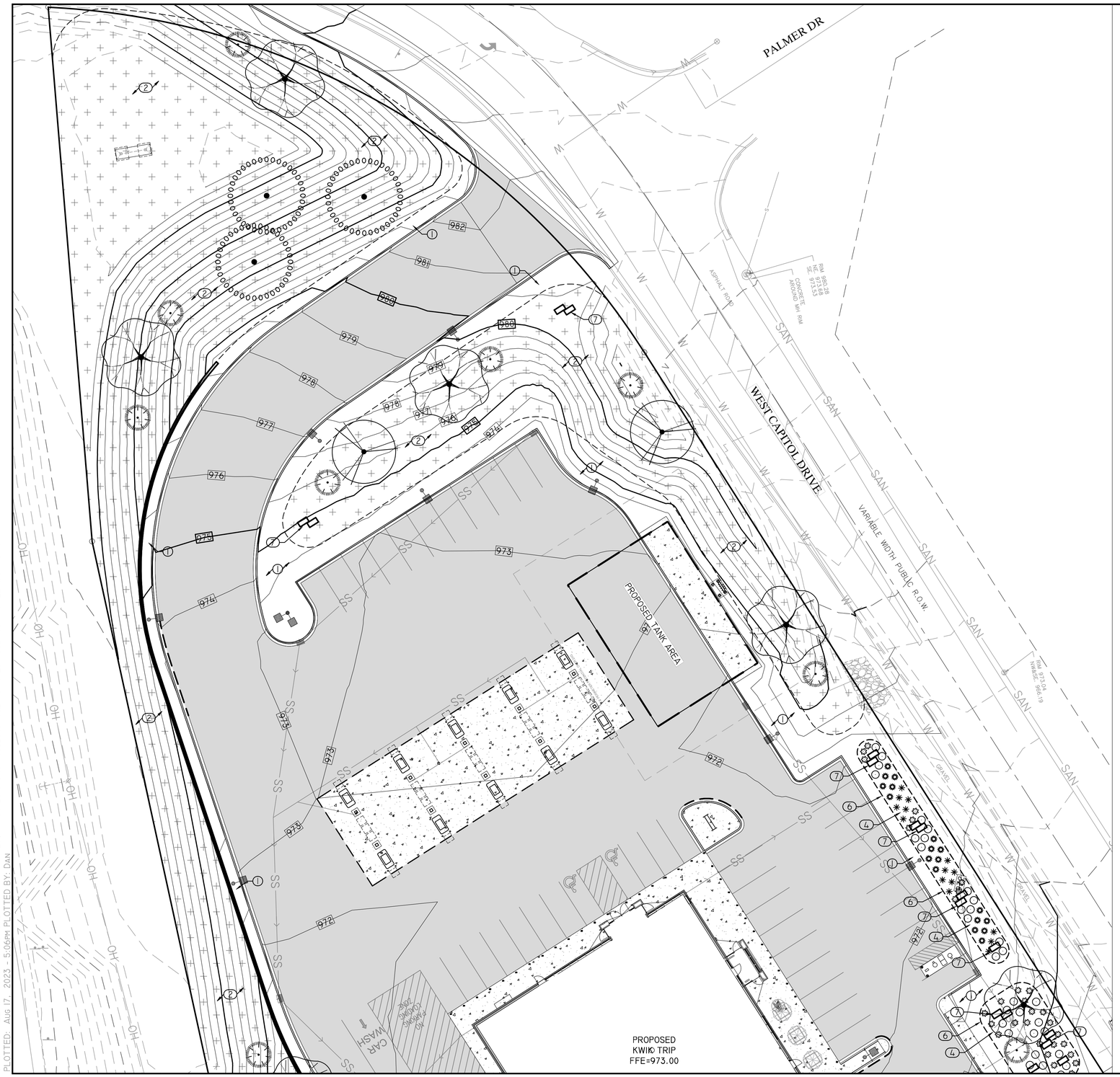
CONVENIENCE STORE #1283

STH 83 AND W. CAPITOL DRIVE
HARTLAND, WI

#	DATE	DESCRIPTION
1		

DRAWN BY NAP
SCALE GRAPHIC
PROJ. NO. 10827
DATE 8/17/23 - REVIEW DOCUMENTS
SHEET SP10

DRAWING FILE: Q:\10800 - 10899\10827 - KWIK TRIP #1283 - HARTLAND\DRAWING\PLANS\10827-SP10-LANDSCAPING.DWG LAYOUT: SP10
PLOTTED: Aug 17, 2023 - 5:05PM PLOTTED BY: DAN



KEYED NOTES

1. SOD, *ALL AREAS NOTED ON PLAN & ALL DISTURBED AREAS DUE TO CONSTRUCTION ACTIVITY.

2. AGRECOL, SHORTGRASS PRAIRIE FOR DRY SOILS, APPLY GLYPHOSATE HERBICIDE TO AREA WHEN MAJORITY OF WEEDS ARE 2"-3" TALL. WAIT 10 DAYS THEN FINELY TILL THE SOIL ONLY 1"-2" DOWN AND PLANT IMMEDIATELY BY HAND BROADCASTING AT A RATE OF 11 LBS/ACRE. RAKE OR DRAG AREA LIGHTLY, COVERING THE SEED WITH ABOUT $\frac{1}{4}$" TO $\frac{1}{2}$" OF SOIL. ROLL AREA FIRMLY AFTER RAKING. MULCH PRAIRIE SEEDED AREAS LESS THAN 4:1 SLOPE WITH 1" OF WEED FREE STRAW MULCH. APPLY WISDOT NET-FREE CLASS 1, URBAN TYPE B EROSION MAT ON SLOPING AREAS STEEPER THAN 4:1. *REFER TO AGRECOL'S "NATIVE SEEDING INSTRUCTIONS" ON THEIR WEBSITE FOR DETAILED INSTRUCTIONS/GUIDELINES FOR SUCCESSFUL SEED ESTABLISHMENT AND MANAGEMENT. (LINK BELOW)

   HTTPS://WWW.AGRECOL.COM/NATIVE-SEEDING-INSTRUCTIONS_EP_44.HTML

3. 6' DIAMETER WOOD MULCH TREE RING, 3"-4" DEPTH, DARK BROWN COLOR, *ALL TREES PLANTED WITHIN SOD AREAS.

4. SHREDDED HARDWOOD MULCH, 3"-4" DEPTH, DARK BROWN COLOR.

5. DECORATIVE STONE MULCH, 3"-4" ROUND COBBLES, 4"-5" DEPTH, WITH COMMERCIAL GRADE WEED BARRIER FABRIC UNDERLAYMENT.

6. SHOVEL CUT EDGE, 4"-5" DEPTH CLEAN CUT EDGE AROUND PLANTING BEDS WITHIN SOD AREAS.

7. ACCENT BOULDERS, (48" X 18" X 18") LIMESTONE BLOCKS/CUBES, PLAN SYMBOL:

PLANT SCHEDULE

DECIDUOUS TREES	COMMON NAME	BOTANICAL NAME
	Fall Fiesta® Sugar Maple	Acer saccharum 'Bailsta'
	Swamp White Oak	Quercus bicolor
	Red Oak	Quercus rubra
EVERGREEN TREES	**COMMON NAME**	**BOTANICAL NAME**
	White Spruce	Picea glauca
EVERGREEN SHRUBS	**COMMON NAME**	**BOTANICAL NAME**
	Kallay Compact Pfitzer Juniper	Juniperus chinensis 'Kallays Compact'
PERENNIALS	**COMMON NAME**	**BOTANICAL NAME**
	Karl Foerster Feather Reed Grass	Calamagrostis x acutiflora 'Karl Foerster'
	Pale Purple Coneflower	Echinacea pallida
	Shenandoah Switch Grass	Panicum virgatum 'Shenandoah'
	Goldsturm Coneflower	Rudbeckia fulgida sullivantii 'Goldsturm'
	Prairie Dropseed	Sporobolus heterolepis

REFER TO SHEET SP10.3 FOR COMPLETE PLANT SCHEDULE, NOTES AND SPECIFICATIONS.

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KWIK STAR STORES

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LANDSCAPE PLAN NORTH

CONVENIENCE STORE #1283
STH 83 AND W. CAPITOL DRIVE
HARTLAND, WI

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DRAWN BY NAP
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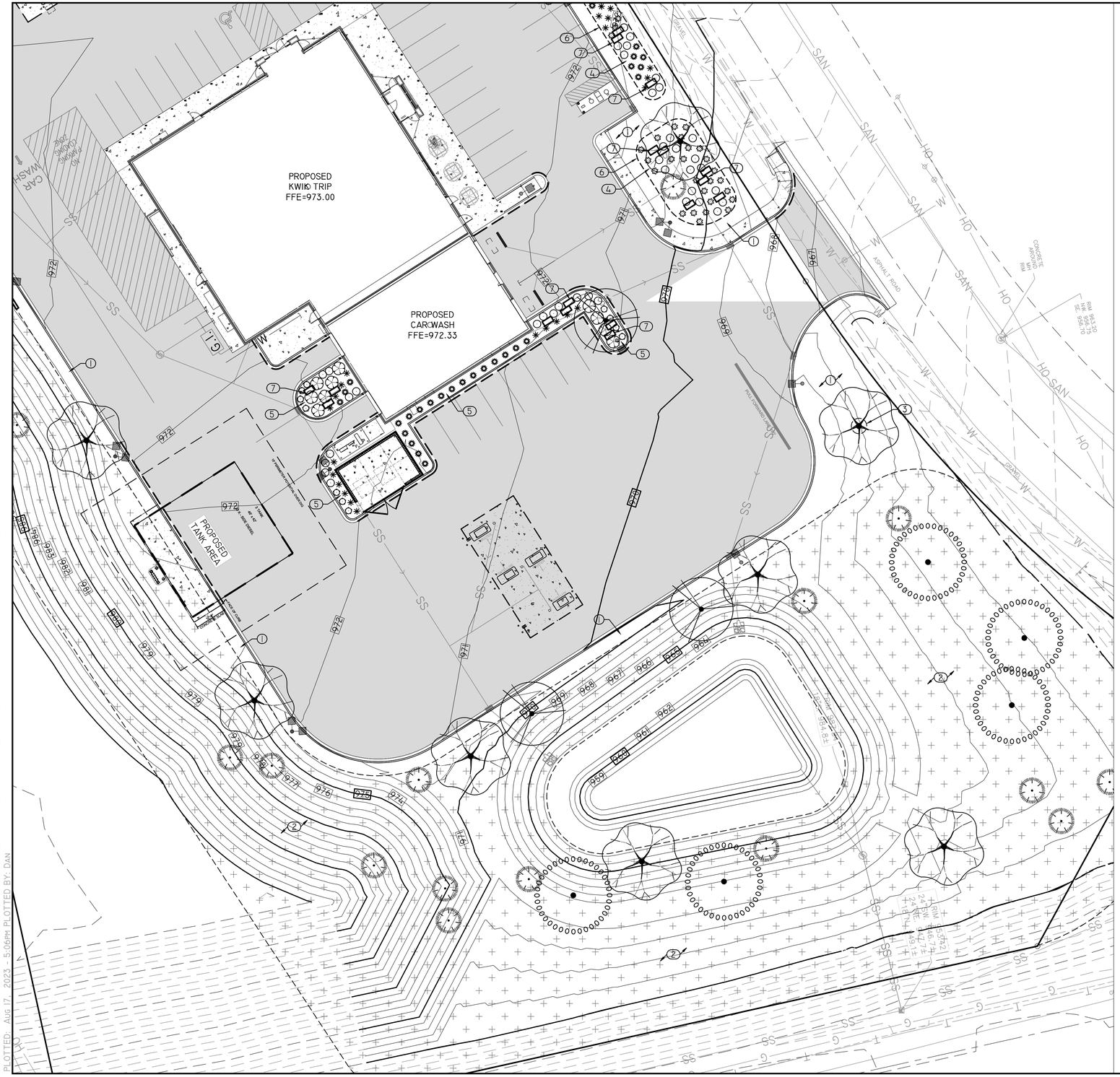

KEYED NOTES

1. SOD, *ALL AREAS NOTED ON PLAN & ALL DISTURBED AREAS DUE TO CONSTRUCTION ACTIVITY.

2. AGRECOL, SHORTGRASS PRAIRIE FOR DRY SOILS, APPLY GLYPHOSATE HERBICIDE TO AREA WHEN MAJORITY OF WEEDS ARE 2"-3" TALL. WAIT 10 DAYS THEN FINELY TILL THE SOIL ONLY 1"-2" DOWN AND PLANT IMMEDIATELY BY HAND BROADCASTING AT A RATE OF 11 LBS/ACRE. RAKE OR DRAG AREA LIGHTLY, COVERING THE SEED WITH ABOUT $\frac{1}{4}$" TO $\frac{1}{2}$" OF SOIL. ROLL AREA FIRMLY AFTER RAKING. MULCH PRAIRIE SEEDED AREAS LESS THAN 4:1 SLOPE WITH 1" OF WEED FREE STRAW MULCH. APPLY WISDOT NET-FREE CLASS 1, URBAN TYPE B EROSION MAT ON SLOPING AREAS STEEPER THAN 4:1. *REFER TO AGRECOL'S "NATIVE SEEDING INSTRUCTIONS" ON THEIR WEBSITE FOR DETAILED INSTRUCTIONS/GUIDELINES FOR SUCCESSFUL SEED ESTABLISHMENT AND MANAGEMENT. (LINK BELOW)

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PERENNIALS	**COMMON NAME**	**BOTANICAL NAME**
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	Pale Purple Coneflower	Echinacea pallida
	Shenandoah Switch Grass	Panicum virgatum 'Shenandoah'
	Goldsturm Coneflower	Rudbeckia fulgida sullivantii 'Goldsturm'
	Prairie Dropseed	Sporobolus heterolepis

REFER TO SHEET SP10.3 FOR COMPLETE PLANT SCHEDULE, NOTES AND SPECIFICATIONS.

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LANDSCAPE PLAN SOUTH

CONVENIENCE STORE #1283

STH 83 AND W. CAPITOL DRIVE
HARTLAND, WI

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DRAWN BY NAP
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PLOTTED: Aug 17, 2023 - 5:06PM PLOTTED BY: DAN

GENERAL NOTES:

(A) LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR LOCATING & VERIFYING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION, AND IS RESPONSIBLE FOR ANY DAMAGE TO THEM DURING CONSTRUCTION.

(B) CALL DIGGERS HOTLINE @ 811 OR 1-800-242-8511 AT LEAST 5 WORKING DAYS PRIOR TO DEMOLITION, EXCAVATION OR ANY CONSTRUCTION ACTIVITY.

(C) ALL PLANT MATERIAL SHALL BE GUARANTEED ONE (1) FULL YEAR UPON TOTAL COMPLETION OF PROJECT AND ACCEPTANCE BY OWNER, WITH A ONE TIME REPLACEMENT WARRANTY UPON REQUEST BY OWNER. WARRANTY EXPIRES AFTER FIRST FULL YEAR FOLLOWING PROJECT COMPLETION.

(D) LANDSCAPE CONTRACTOR SHALL VERIFY MINIMUM 6" TOPSOIL DEPTH FOR ALL AREAS TO BE SEEDED/SODDED THROUGHOUT PROJECT SITE. CONTRACTOR IS REQUIRED TO CORRECT ANY DEFICIENCIES PRIOR TO SEED/SOD. TOPSOIL SHALL BE CLEAN AND FREE OF STONES, WEEDS AND OTHER UNDESIRABLE DEBRIS.

(E) LANDSCAPE CONTRACTOR SHALL VERIFY MINIMUM 12" PLANTING SOIL DEPTH FOR ALL PROPOSED PLANTING BED AREAS THROUGHOUT THE PROJECT SITE. CONTRACTOR IS REQUIRED TO CORRECT ANY DEFICIENCIES PRIOR TO PLANT INSTALLATION. PLANTING SOIL & AREA SHALL BE CLEAN AND FREE OF STONES, WEEDS, CONCRETE WASTE AND OTHER UNDESIRABLE DEBRIS.

(F) LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR REPAIRING TOPSOIL AND SEEDING OR SODDING ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITY, INCLUDING ALL R.O.W. AND ADJACENT PROPERTIES.

(G) CONTRACTOR SHALL CLEAN ALL PAVEMENT AREAS AFTER LANDSCAPE CONSTRUCTION ACTIVITIES ARE COMPLETE AND APPROVED BY OWNER. *THIS TO BE DONE DAILY AS DEEMED NECESSARY BY MUNICIPALITY.

KEYED NOTES

1. SOD, *ALL AREAS NOTED ON PLAN & ALL DISTURBED AREAS DUE TO CONSTRUCTION ACTIVITY.

2. (90,000 SF TOTAL) AGRECOL, SHORTGRASS PRAIRIE FOR DRY SOILS, APPLY GLYPHOSATE HERBICIDE TO AREA WHEN MAJORITY OF WEEDS ARE 2"-3" TALL. WAIT 10 DAYS THEN FINELY TILL THE SOIL ONLY 1"-2" DOWN AND PLANT IMMEDIATELY BY HAND BROADCASTING AT A RATE OF 11 LBS/ACRE. RAKE OR DRAG AREA LIGHTLY, COVERING THE SEED WITH ABOUT ¼" TO ½" OF SOIL. ROLL AREA FIRMLY AFTER RAKING. MULCH PRAIRIE SEEDED AREAS LESS THAN 4:1 SLOPE WITH 1" OF WEED FREE STRAW MULCH. APPLY WISDOT NET-FREE CLASS 1, URBAN TYPE B EROSION MAT ON SLOPING AREAS STEEPER THAN 4:1. *REFER TO AGRECOL'S "NATIVE SEEDING INSTRUCTIONS" ON THEIR WEBSITE FOR DETAILED INSTRUCTIONS/GUIDELINES FOR SUCCESSFUL SEED ESTABLISHMENT AND MANAGEMENT. (LINK BELOW)

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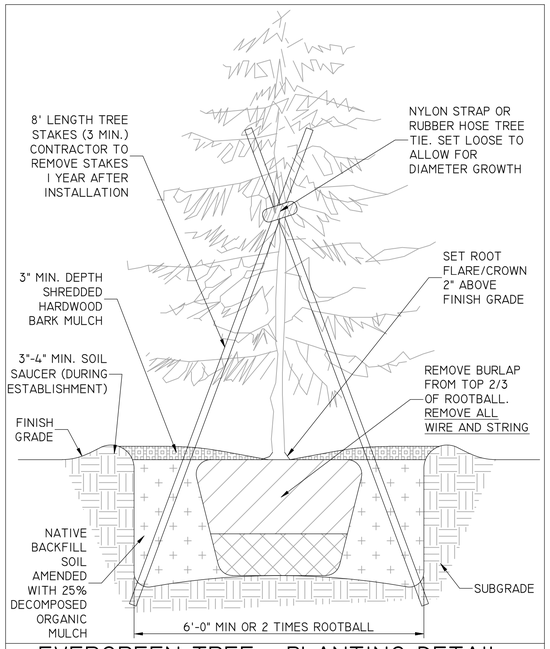
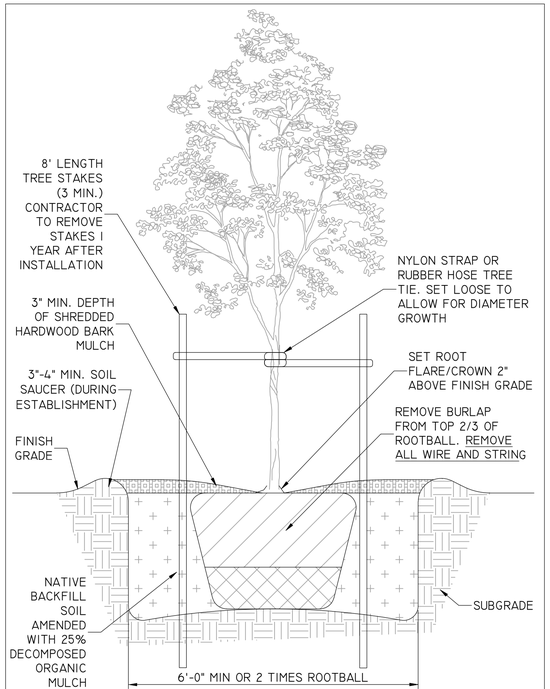
7. (25 EA TOTAL) ACCENT BOULDERS, (48" X 18" X 18") LIMESTONE BLOCKS/CUBES, PLAN SYMBOL: ▭

PLANT SCHEDULE

DECIDUOUS TREES	COMMON NAME	BOTANICAL NAME	SIZE	CONT.	QTY
	Fall Fiesta® Sugar Maple	Acer saccharum 'Bailsta'	1.5" Cal.	B&B	5
	Swamp White Oak	Quercus bicolor	1.5" Cal.	B&B	13
	Red Oak	Quercus rubra	1.5" Cal.	B&B	8
EVERGREEN TREES	**COMMON NAME**	**BOTANICAL NAME**	**SIZE**	**CONT.**	**QTY**
	White Spruce	Picea glauca	3` Ht.	Pot	25
EVERGREEN SHRUBS	**COMMON NAME**	**BOTANICAL NAME**	**SIZE**	**CONT.**	**QTY**
	Kallay Compact Pfitzer Juniper	Juniperus chinensis 'Kallays Compact'	3 gal.	Pot	10
PERENNIALS	**COMMON NAME**	**BOTANICAL NAME**	**SIZE**	**CONT.**	**QTY**
	Karl Foerster Feather Reed Grass	Calamagrostis x acutiflora 'Karl Foerster'	1 gal.	Pot	30
	Pale Purple Coneflower	Echinacea pallida	1 gal.	Pot	47
	Shenandoah Switch Grass	Panicum virgatum 'Shenandoah'	1 gal.	Pot	38
	Goldsturm Coneflower	Rudbeckia fulgida sullivantii 'Goldsturm'	1 gal.	Pot	11
	Prairie Dropseed	Sporobolus heterolepis	1 gal.	Pot	34



EVERGREEN TREE - PLANTING DETAIL



DECIDUOUS TREE - PLANTING DETAIL

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LANDSCAPE NOTES, DETAILS & SPECIFICATIONS

CONVENIENCE STORE #1283

STH 83 AND W. CAPITOL DRIVE
HARTLAND, WI

#	DATE	DESCRIPTION
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DRAWN BY NAP
SCALE GRAPHIC
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SHEET SP10.3

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PLOTTED: AUG 17, 2023 - 5:06PM PLOTTED BY: DAN

LOT LIGHT ELEVATION DETAIL

NOT TO SCALE

FIXTURE SYMBOLS:

- LED LIGHT MOUNTED UNDER FUEL CANOPIES
- LED STRIP LIGHT MOUNTED IN GABLE
- RECESSED LED DOWNLIGHT
- POLE MOUNTED LED FIXTURE
- CAMERA

FIXTURE TYPES:

D20 - RECESSED LED DOWNLIGHT
GOTHAM EVO-35/30-8AR-WD-120-TRW

S7E - LED STRIP LIGHT MOUNTED IN GABLE LITHONIA
TZL1N-L96-10000LM-FST-MVOLT

CF - LSI LIGHTING: SCV-LED-23L-SCFT-UNV-DIM-50-WHT MOUNTED UNDER GAS CANOPY MOUNT FIXTURES WITH FORWARD THROW OPTIC AIMING IN DIRECTION OF ARROW.

CS - LSI LIGHTING: SCV-LED-15L-SC-UNV-DIM-50-WHT MOUNTED UNDER GAS CANOPY

CFBK - LSI LIGHTING: SCV-LED-23L-SCFT-UNV-DIM-50-BLK MOUNTED UNDER DIESEL CANOPY MOUNT FIXTURES WITH FORWARD THROW OPTIC AIMING IN DIRECTION OF ARROW.

P13 - LSI LIGHTING: MRS-LED-18L-SIL-3-UNV-50-70CRI-WHT

P13L - LSI LIGHTING: MRS-LED-18L-SIL-3-UNV-50-70CRI-WHT-IL

P1F - LSI LIGHTING: MRS-LED-18L-SIL-FT-UNV-50-70CRI-WHT

P1FL - LSI LIGHTING: MRS-LED-18L-SIL-FT-UNV-50-70CRI-WHT-IL

NOTE:

1. FOOTCANDLE LEVELS SHOWN ON THIS PLAN ARE CALCULATED AT GRADE LEVEL.

KEYED NOTES:

1. COORDINATE LOCATION AND MOUNTING HEIGHT OF SECURITY CAMERA WITH OWNER.
2. CONTRACTOR SHALL POLE MOUNT FIXTURE 2'-0" FROM BACK OF CURB TO EDGE OF POLE BASE.
3. CONTRACTOR SHALL POLE MOUNT FIXTURE 12'-0" FROM THE OVER DIG OF UNDERGROUND FUEL TANK TO EDGE OF POLE BASE.
4. CONTRACTOR SHALL POLE MOUNT FIXTURE 1'-0" FROM BACK OF SIDEWALK TO EDGE OF POLE BASE.
5. CONTRACTOR SHALL POLE MOUNT FIXTURE 9'-0" FROM BACK OF CURB TO EDGE OF POLE BASE.

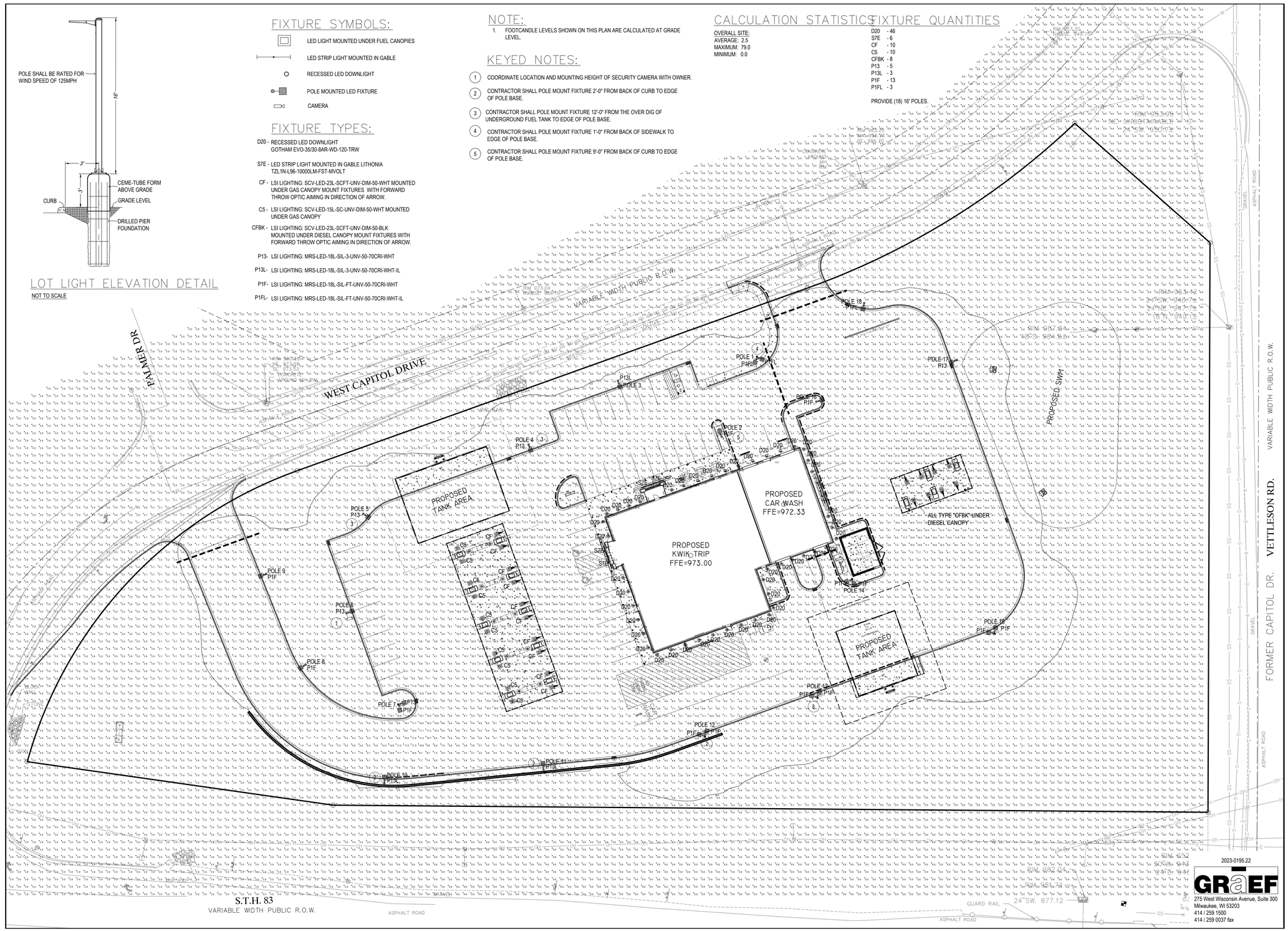
CALCULATION STATISTICS:

OVERALL SITE:
AVERAGE: 2.5
MAXIMUM: 79.0
MINIMUM: 0.0

FIXTURE QUANTITIES

D20 - 46
S7E - 6
CF - 10
CS - 10
CFBK - 8
P13 - 5
P13L - 3
P1F - 13
P1FL - 3

PROVIDE (18) 16' POLES.



2023-0195.22

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PHOTOMETRIC SITE PLAN

CONVENIENCE STORE #1283

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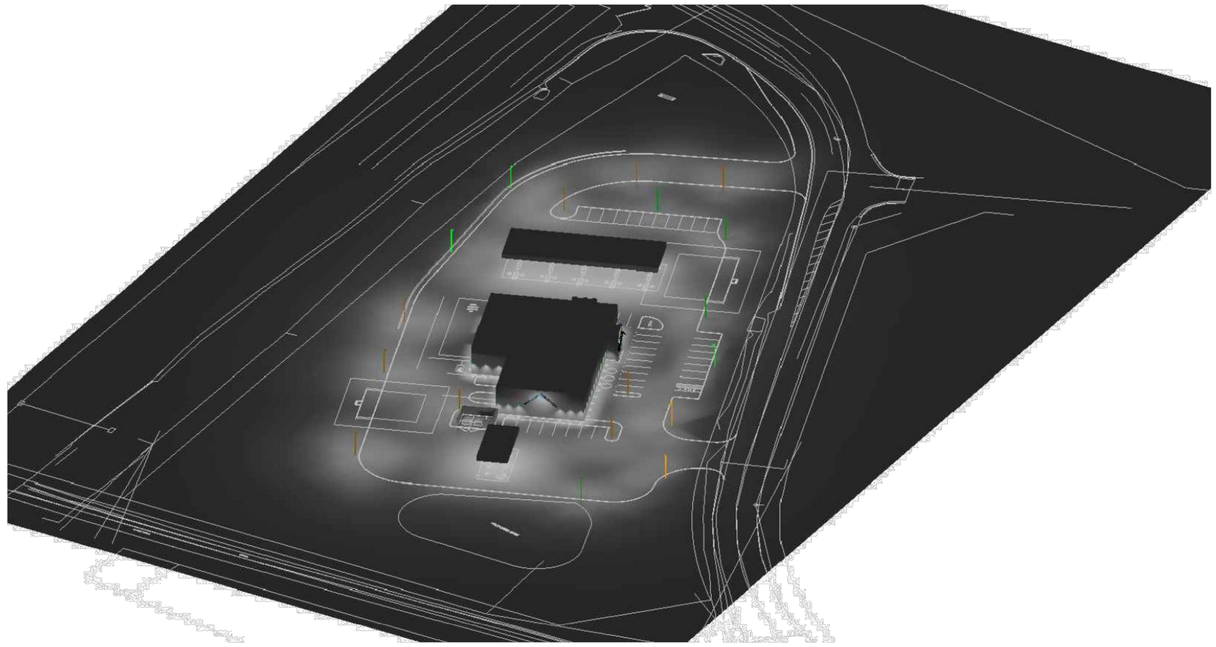

PHOTOMETRIC RENDERING PLAN
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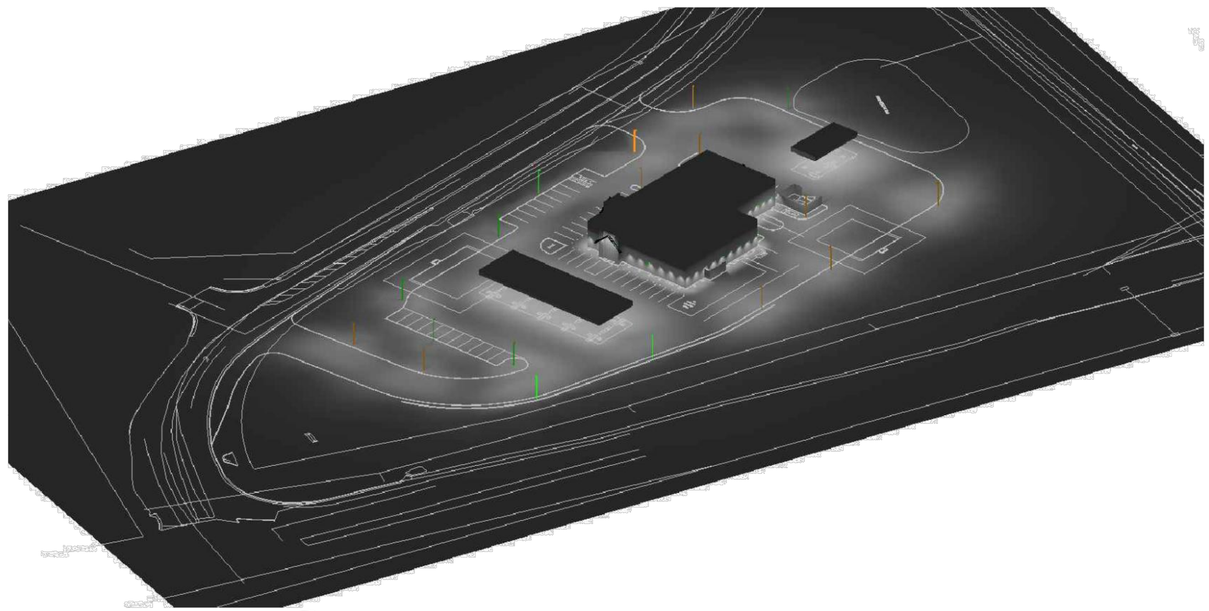

PHOTOMETRIC RENDERING PLAN
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