PLAN COMMISSION STAFF REPORT

To:	Members of the Plan Commission
From:	Tom Vander Woude, Planning Director
Meeting Date:	September 14, 2021
Agenda Item:	PC Docket No. 21-009 PC Docket No. 21-010 PC Docket No. 21-011
Application:	**PC 21-009 Subdivision – Preliminary Plat** **PC 21-010 Development Plan Approval** **PC 21-011 Subdivision – Final Plat**
Hearing:	**PUBLIC HEARING**
Summary:	Parth Patel requesting approval of a 1 lot subdivision and a development plan to construct a 3-unit commercial building including a Smoothie King at 8130-8138 Calumet Avenue.

Applicant:	Parth Patel
Property Address:	8130-8138 Calumet Avenue
Current Zoning:	CD-4.A General Urban Character District
Adjacent Zoning:	North: CD-4.A South: CN Railroad East: CD-4.A West: CD-3.R2
Action Requested:	Approval of Preliminary Plat, Final Plat, and Development Plan
Additional Actions Required:	Findings of Fact
Staff Recommendation:	**Approval with conditions**

Attachments:

1. Smoothie King, Munster, IN Site Plan set prepared by Landmark Engineering LLC dated 07.23.2021

2. Smoothie King Retail Building Site Plan and Elevations prepared by Domenella presentation set prepared Domenella Architects, Ltd. dated 08.30.2021
3. Sign renderings prepared by Atlantic Sign Company dated 09.02.2021
4. Photometric plan prepared by PG Enlighten dated 07.23.2021
5. Light fixture specification sheets
6. Light pole specification sheets
7. 8130-8138 Calumet Avenue Consolidation plat of subdivision prepared by Landmark Engineering LLC dated 07.19.2021

BACKGROUND

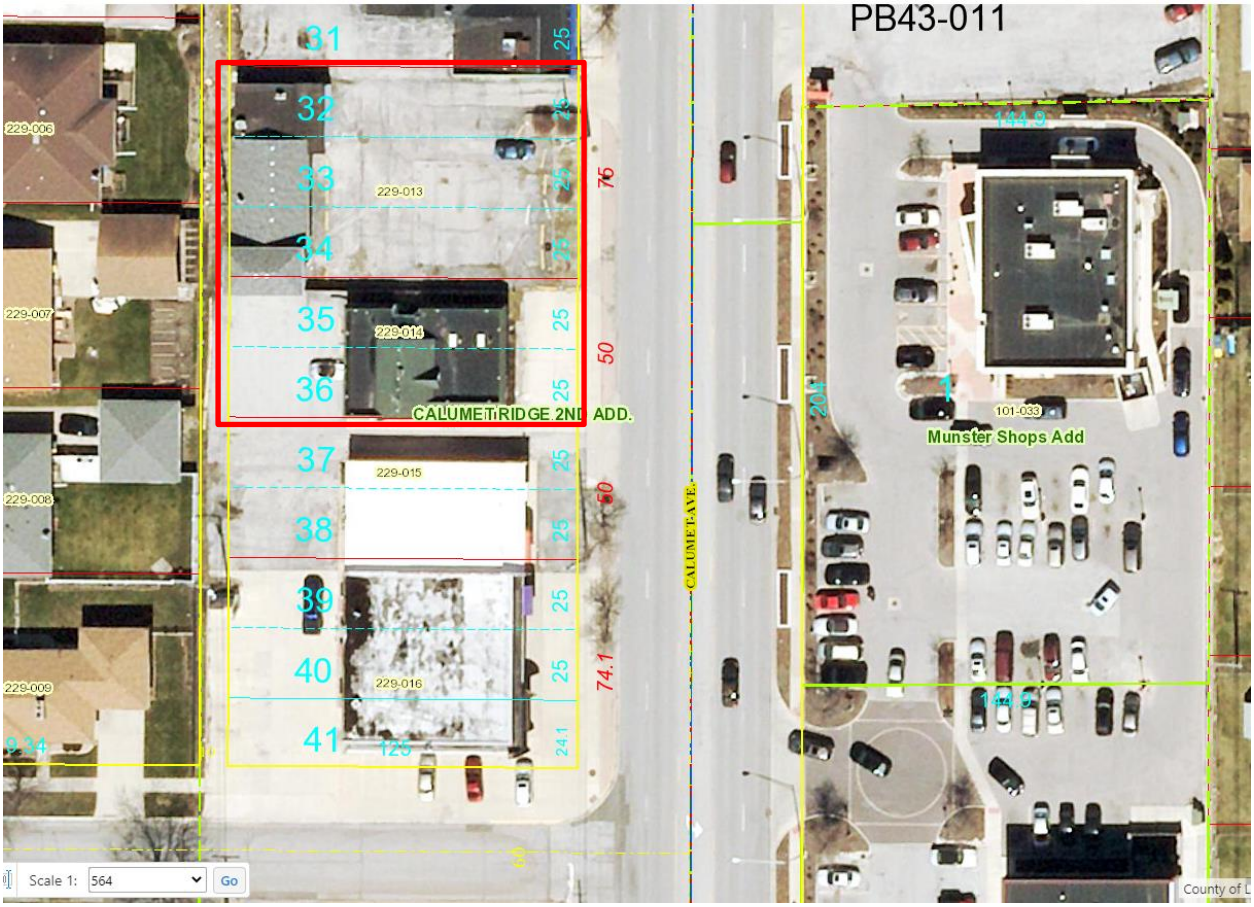


Figure 1 Subject property outlined in red

Parth Patel is seeking has presented plans to redevelop the property at 8130 and 8138 Calumet Avenue with a 3,630 square foot, 3-unit commercial building including a Smoothie King in the south tenant space and a parking lot with 27 stalls. The two parcels currently each contain a vacant commercial building. Mr. Patel is seeking to demolish the buildings and reconstruct the entire site.

To construct the proposed commercial building, the applicant is requesting two actions:

1. A subdivision consolidating the two lots into a single lot
2. Approval of a development plan for the proposed commercial building

Both actions require a public hearing. Because the only public improvements are installation of street trees, upon approval of the preliminary plat, the final plat can be approved without a public hearing. Site, engineering, landscaping, and architectural plans have been provided with the application.

Analysis

The Munster 2010 Comprehensive Plan contains the following relevant recommendations for the Calumet corridor.

RECOMMENDATION: Consolidate curb cuts as much as possible for all sites along the road and provide shared access points for adjacent properties.

PROPOSAL: The proposed project includes a full access drive which is shared with the parcel to the south; a ten foot alley at the rear of the property will be left clear for cross-access.

RECOMMENDATION: Encourage existing developments and require new development proposals to provide cross access easements.

PROPOSAL: The proposed project includes a full access drive which is shared with the parcel to the south; a ten foot alley at the rear of the property will be left clear for cross-access.

RECOMMENDATION: New buildings should be placed along the street with parking to the rear or the side. Parking, access drives or drive-through areas should not be allowed between the building the and the street.

PROPOSAL: The parking is located to the side and rear of the building

Staff has reviewed the relevant zoning and subdivision standards and finds that proposed site plan meets the standards for setbacks, landscaping, architecture and building materials, as well as parking, provided that the variance request is approved, or the uses are limited to a single restaurant.

Staff notes that proposed signs have been included in this package, but signs are approved administratively by the Community Development Department upon submittal of a separate sign permit.

Staff notes the following items that need to be corrected:

- A 3’-3.5’ high ornamental fence must be installed coplanar to the façade of the building to screen the parking lot to the south of the building.
- The proposed parkway trees must be changed to a smaller type suitable for planting beneath overhead wires.

MOTION

The Plan Commission may wish to consider the following motions:

Upon the conditions that

1. A 3’-3.5’ high ornamental fence must be installed coplanar to the façade of the building to screen the parking lot to the south of the building.

And,

2. The proposed parkway trees must be changed to a smaller type suitable for planting beneath overhead wires.

Motion to approve PC Docket 21-009, approving the preliminary plat for a one lot subdivision consolidating 8130-8138 Calumet Avenue.

Motion to approve PC Docket 21-010, approving a development plan for a commercial building at 8130-8138 Calumet Avenue.

Motion to approve PC Docket 21-011, approving a final plat for a one lot subdivision consolidating 8130-8138 Calumet Avenue.

SMOOTHIE KING, MUNSTER, IN
SITE PLAN

LOTS 32 TO 36, BOTH INCLUSIVE, IN CALUMET RIDGE 2ND ADDITION TO MUNSTER, INDIANA, ACCORDING TO THE PLAT THEREOF RECORDED JUNE 24, 1926, IN PLAT BOOK 20, PAGE 14, IN THE OFFICE OF THE RECORDER OF LAKE COUNTY, INDIANA.

PROPERTY ADDRESS

8130-8138 CALUMET AVENUE

MUNSTER, IN

LAKE COUNTY
TAX PARCEL NUMBERS

45-06-24-229-013.000-027 (LOTS 32-34)
45-06-24-229-014.000-027 (LOTS 35-36)

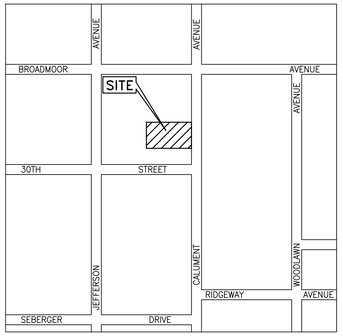
WARNING
IN ILLINOIS
(OUTSIDE CHICAGO)
CALL JULIE TOLL FREE
1-800-892-0123
CALL BEFORE YOU DIG

LEGEND

	EXISTING	PROPOSED
OVERHEAD TRANSMISSION LINE	OTL	OTL
STORM SEWER	>>	))
SANITARY SEWER	>	)
METAL FENCE	□	□
CHAIN LINK FENCE	X	X
SANITARY MANHOLE	⊛	⊛
MANHOLE	○	●
CATCH BASIN	⊘	◒
INLET	⊏	◐
FLARED END SECTION	⊂	◖
FIRE HYDRANT	⋈	⋈
WATER VALVE	⋈	⋈
LIGHT POLE	○-○	○-○
WATER MANHOLE	⊛	⊛
TELCO PEDESTAL	⊙	⊙
BOLLARD	●	●
AT&T HANDHOLE	⊕	⊕
TRANSFORMER	⊡	⊡
UTILITY POLE	○	○
SOIL BORING	✥	✥
TOP OF FOUNDATION	T/F: 700.00	T/F: 700.00
SPOT ELEVATION	+ 670.20	+ 670.20

CB 1 / 594.50 / 590.00 — STRUCTURE / RIM ELEVATION / INVERT ELEVATION — SMH 1 / 594.50 / 590.00
STORM SEWER SANITARY

INDEX



VICINITY MAP

SURVEYOR: LANDMARK ENGINEERING LLC
MARK H. LANDSTROM, INPLS
7808 W. 103RD STREET
PALOS HILLS, ILLINOIS 60465-1529
(708) 599-3737

ENGINEER: LANDMARK ENGINEERING LLC
MARK H. LANDSTROM, INPLS
7808 W. 103RD STREET
PALOS HILLS, ILLINOIS 60465-1529
(708) 599-3737

DEVELOPER: PARTH PATEL
12821 S. DIVISION ST.
BUE ISLAND, IL 60406
(708) 299-8427

MARK H. LANDSTROM REGISTERED NO. 19900560 STATE OF INDIANA PROFESSIONAL ENGINEER

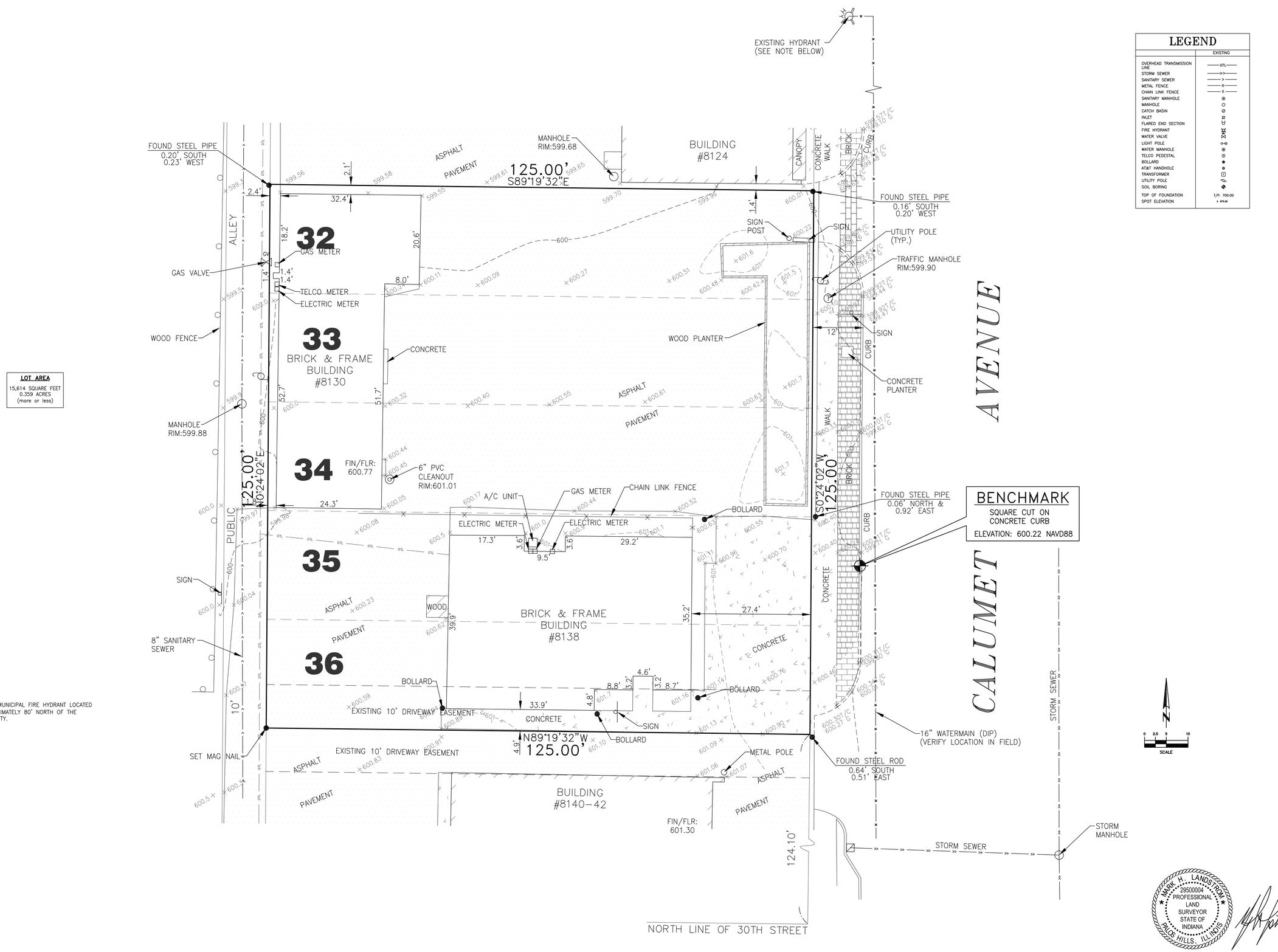
REVISIONS	DATE	REV. BY
ISSUED FOR TOWN REVIEW	7/23/21	T.G.

LANDMARK
ENGINEERING LLC
DESIGN FIRM REGISTRATION NO. 184-005577-0010
7808 WEST 103RD STREET
PALOS HILLS, ILLINOIS 60465-1529
Phone: (708) 599-3737
Fax: (708) 599-2291

SMOOTHIE KING, MUNSTER, IN
8130-38 CALUMET AVENUE, MUNSTER, IN
COVER SHEET

DRAWN BY: T.G.
DESIGNED BY: B.H.
CHECKED BY: M.L.

SHEET
C0.0
21-01-038



LOT AREA
15,614 SQUARE FEET
0.359 ACRES
(more or less)

NOTE: MUNICIPAL FIRE HYDRANT LOCATED APPROXIMATELY 80' NORTH OF THE PROPERTY.

LEGEND

	EXISTING
OVERHEAD TRANSMISSION LINE	OTL
STORM SEWER	STM
SANITARY SEWER	SAN
METAL FENCE	MF
CHAIN LINK FENCE	X
SANITARY MANHOLE	
MANHOLE	
CATCH BASIN	
INLET	
FLARED END SECTION	
FIRE HYDRANT	
WATER VALVE	
LIGHT POLE	
WATER MANHOLE	
TELCO PEDESTAL	
BOLLARD	
AT&T HANDHOLE	
TRANSFORMER	
UTILITY POLE	
SOIL BORING	
TOP OF FOUNDATION	T/F: 700.00
SPOT ELEVATION	x 670.20

REVISIONS	DATE	REV. BY
ISSUED FOR TOWN REVIEW	7/23/21	T.G.

LANDMARK
ENGINEERING LLC
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7808 WEST 103RD STREET
PALOS HILLS, ILLINOIS 60465-1529
Phone: (708) 599-3737
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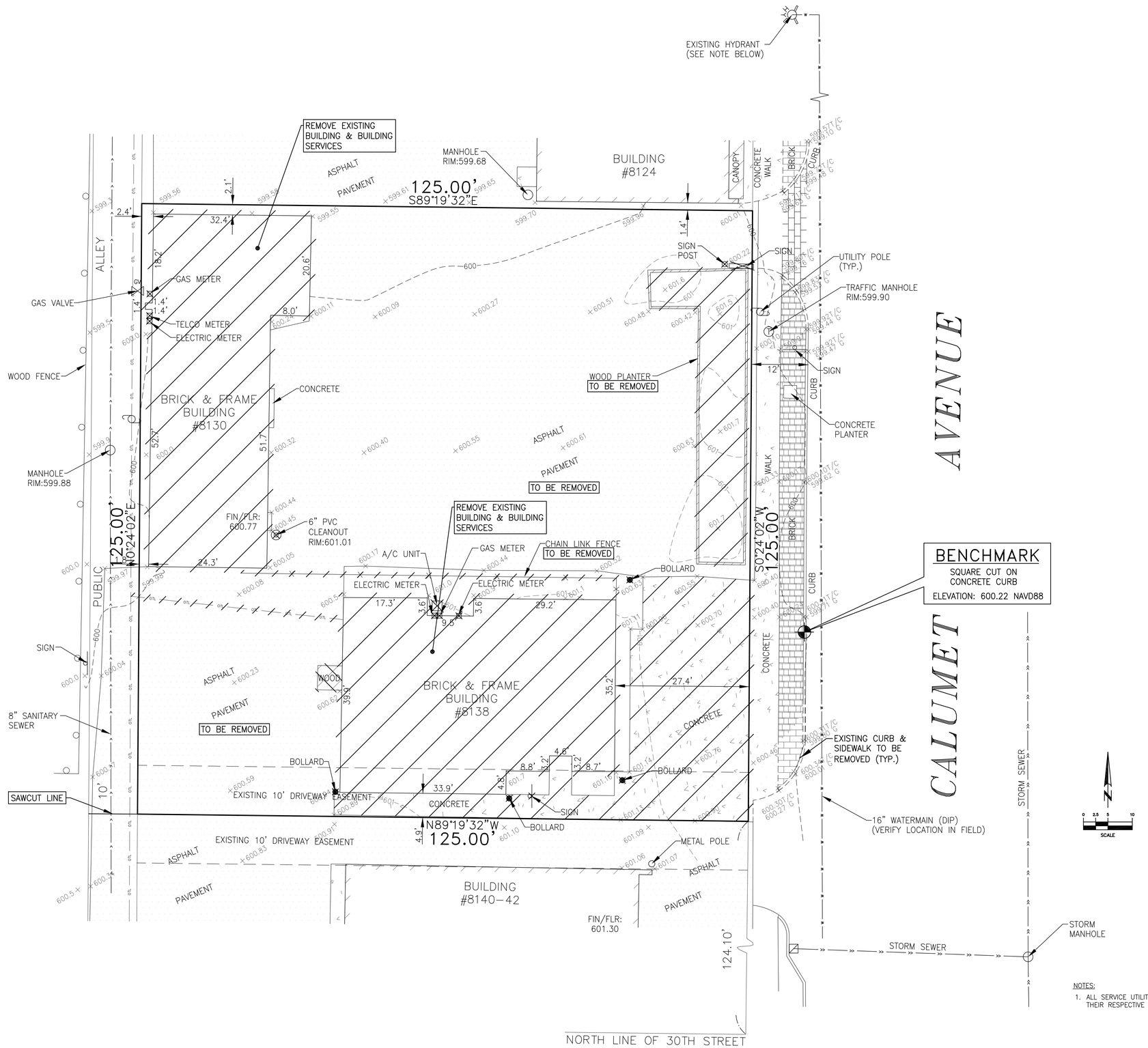
SMOOTHIE KING, MUNSTER, IN
8130-38 CALUMET AVENUE, MUNSTER, IN
EXISTING TOPOGRAPHIC SURVEY

DRAWN BY: T.G.
DESIGNED BY: B.H.
CHECKED BY: M.L.

SHEET
C1.0
21-01-038

MARK H. LANDSTROM
29500004
PROFESSIONAL
LAND
SURVEYOR
STATE OF
INDIANA
PALOS HILLS, ILLINOIS



NOTES:

1. ALL SERVICE UTILITIES TO BE REMOVED & SEALED AT THEIR RESPECTIVE MAINS PER TOWN REQUIREMENTS

DATE	REVISIONS	REV. BY
7/23/21	ISSUED FOR TOWN REVIEW	T.G.

LANDMARK
ENGINEERING LLC
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7808 WEST 103RD STREET
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Phone: (708) 599-3737
Fax: (708) 599-2291

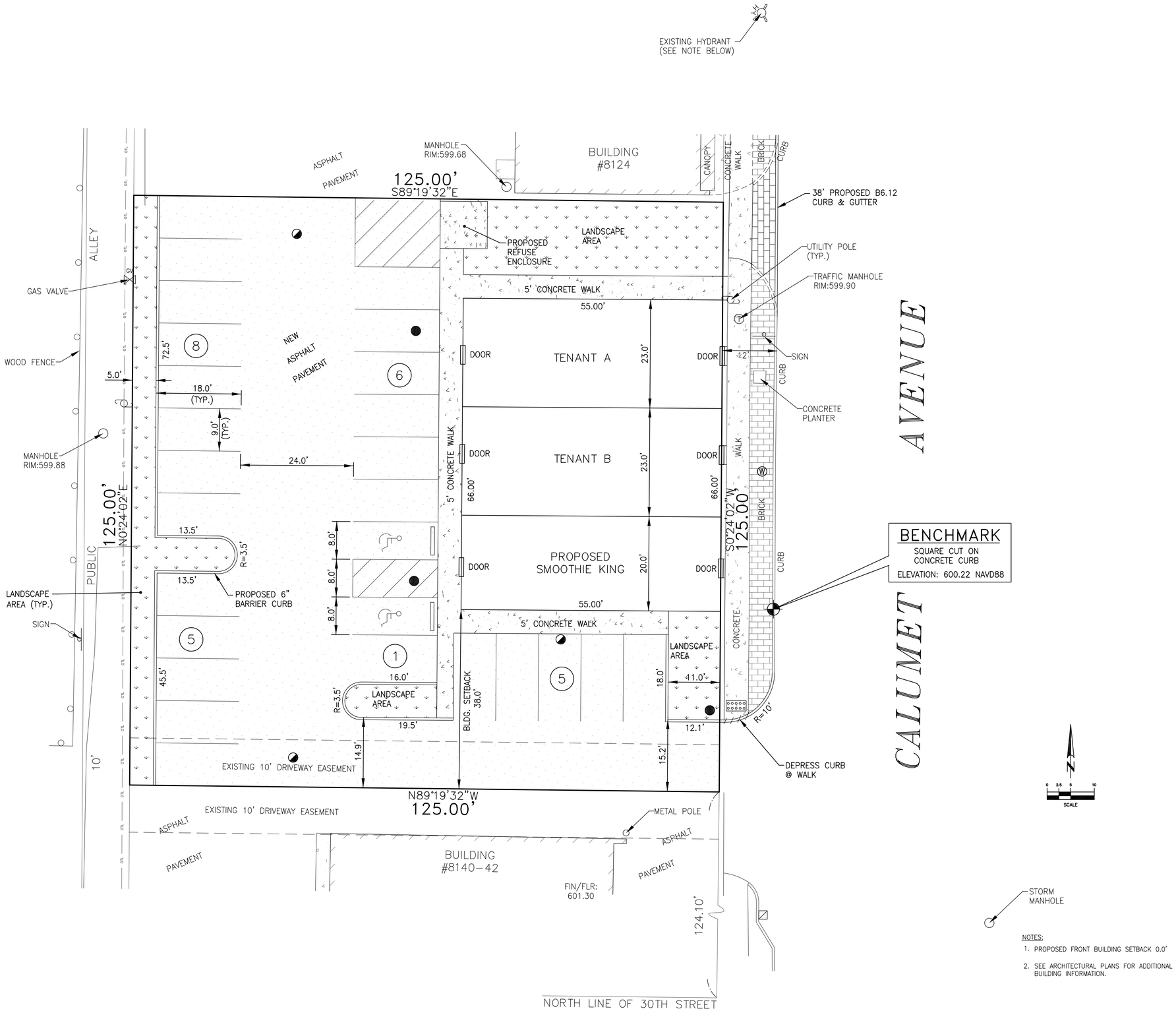
SMOOTHIE KING, MUNSTER, IN

8130-38 CALUMET AVENUE, MUNSTER, IN

DEMOLITION PLAN

DRAWN BY: T.G.
DESIGNED BY: B.H.
CHECKED BY: M.L.

SHEET
C2.0
21-01-038



LOT AREA
15,614 SQUARE FEET
0.359 ACRES
(more or less)

SEATING DATA
2.5 SEATS PER PARKING SPACE
2.5 X 27 = 67.5 SEATS

PARKING DATA
STANDARD STALLS = 25
ADA STALLS = 2
TOTAL STALLS = 27

NOTES:
1. PROPOSED FRONT BUILDING SETBACK 0.0'
2. SEE ARCHITECTURAL PLANS FOR ADDITIONAL BUILDING INFORMATION.

REV. BY	DATE	REVISIONS
T.G.	7/23/21	ISSUED FOR TOWN REVIEW

LANDMARK
ENGINEERING LLC
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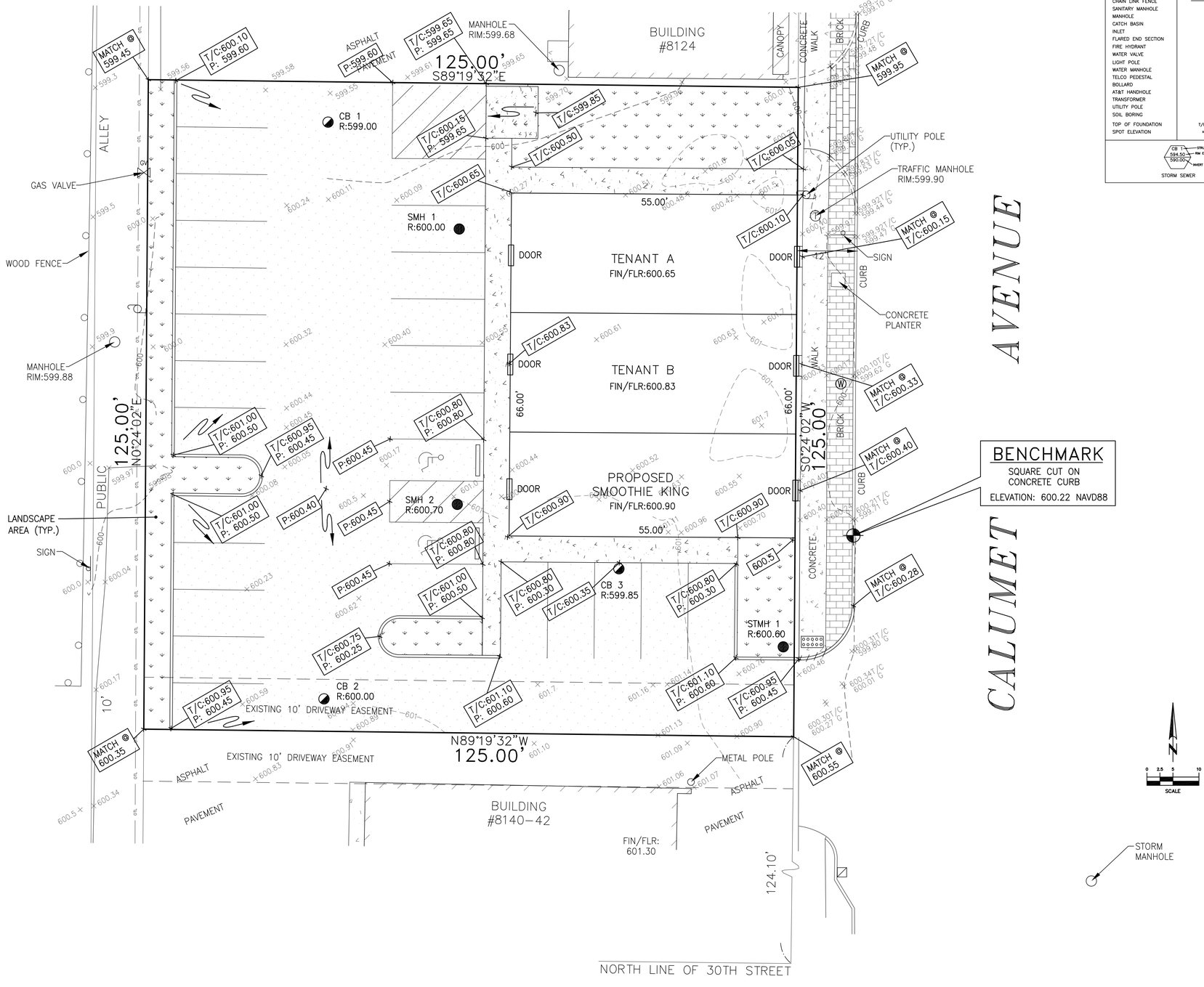
7808 WEST 103RD STREET
PALOS HILLS, ILLINOIS 60465-1529
Phone: (708) 599-3737
Fax: (708) 599-2291

SMOOTHIE KING, MUNSTER, IN
8130-38 CALUMET AVENUE, MUNSTER, IN
GEOMETRY PLAN

DRAWN BY: T.G.
DESIGNED BY: B.H.
CHECKED BY: M.L.

SHEET
C3.0
21-01-038



LEGEND

	EXISTING	PROPOSED
OVERHEAD TRANSMISSION LINE	OTL	OTL
STORM SEWER		
SANITARY SEWER		
METAL FENCE		
CHAIN LINK FENCE		
SANITARY MANHOLE		
MANHOLE		
CATCH BASIN		
INLET		
FLARED END SECTION		
FIRE HYDRANT		
WATER VALVE		
LIGHT POLE		
WATER MANHOLE		
TELCO PEDESTAL		
BOLLARD		
AT&T HANDHOLE		
TRANSFORMER		
UTILITY POLE		
SOIL BORING		
TOP OF FOUNDATION	T/F: 700.00	T/F: 700.00
SPOT ELEVATION	x 670.20	x 670.20

CB 1: 594.50 / 590.00 — STRUCTURE / RIM ELEVATION / INVERT ELEVATION — SMH 1: 594.50 / 590.00

STORM SEWER — SANITARY

LOT AREA
15,614 SQUARE FEET
0.359 ACRES
(more or less)

NOTE: MUNICIPAL FIRE HYDRANT LOCATED APPROXIMATELY 80' NORTH OF THE PROPERTY.

DATE	REVISIONS	REV. BY
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7808 WEST 103RD STREET
PALOS HILLS, ILLINOIS 60465-1529
Phone: (708) 599-3737
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SMOOTHIE KING, MUNSTER, IN
8130-38 CALUMET AVENUE, MUNSTER, IN
GRADING PLAN

DRAWN BY: T.G.
DESIGNED BY: B.H.
CHECKED BY: M.L.

SHEET
C4.0
21-01-038

UTILITY CROSSING DATA

① BOTTOM OF STORM: 596.44
TOP OF SANITARY: 594.72
PIPE CLEARANCE: 1.72'

LOT AREA

15,614 SQUARE FEET
0.359 ACRES
(more or less)

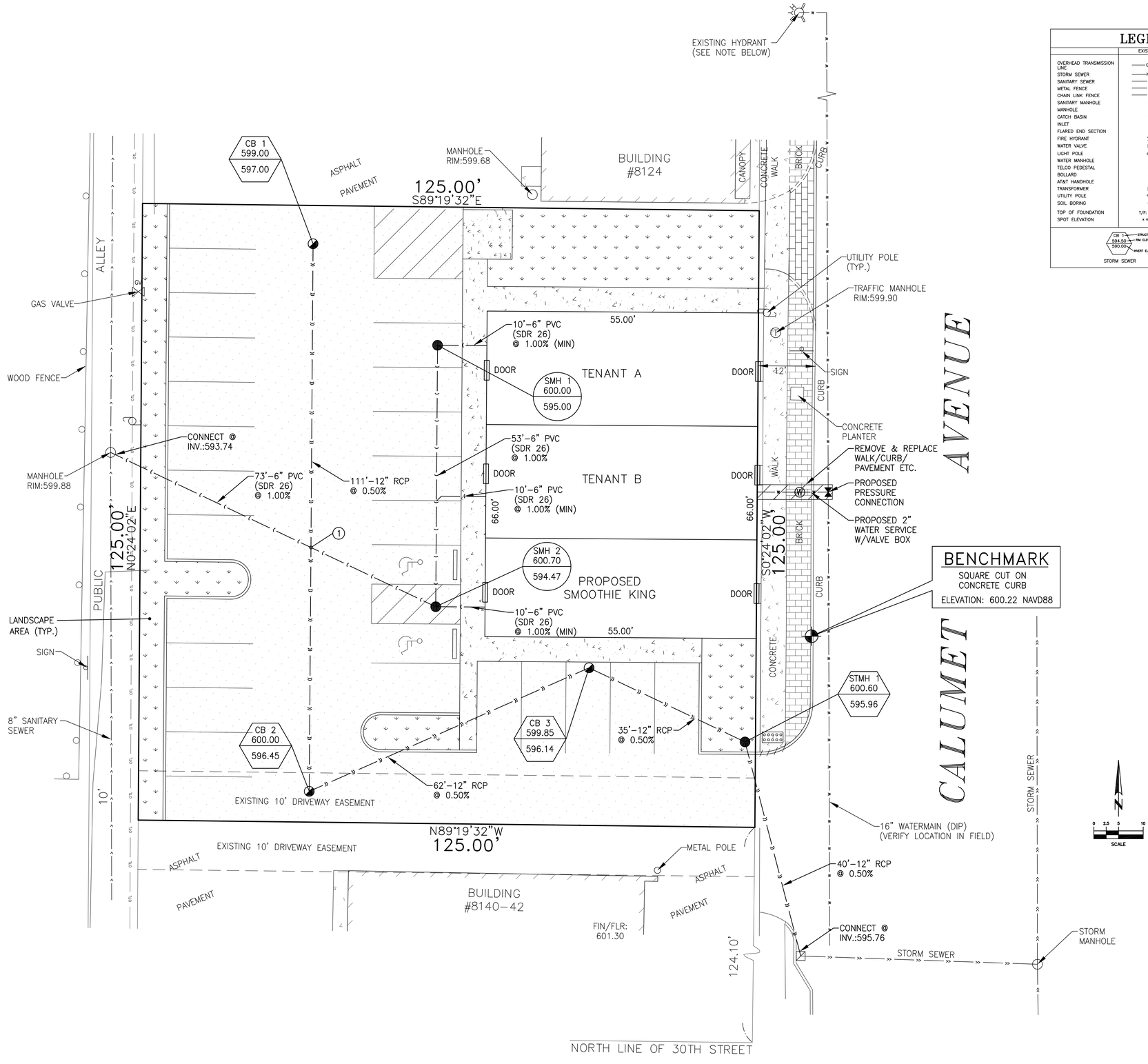
SEATING DATA

2.5 SEATS PER PARKING SPACE
2.5 X 27 = 67.5 SEATS

PARKING DATA

STANDARD STALLS = 25
ADA STALLS = 2
TOTAL STALLS = 27

NOTE: MUNICIPAL FIRE HYDRANT LOCATED APPROXIMATELY 80' NORTH OF THE PROPERTY.



LEGEND

	EXISTING	PROPOSED
OVERHEAD TRANSMISSION LINE	OTL	OTL
STORM SEWER		
SANITARY SEWER		
METAL FENCE		
CHAIN LINK FENCE		
SANITARY MANHOLE		
MANHOLE		
CATCH BASIN		
INLET		
FLARED END SECTION		
FIRE HYDRANT		
WATER VALVE		
LIGHT POLE		
WATER MANHOLE		
TELCO PEDESTAL		
BOLLARD		
AT&T HANDHOLE		
TRANSFORMER		
UTILITY POLE		
SOIL BORING		
TOP OF FOUNDATION	T/F: 700.00	T/F: 700.00
SPOT ELEVATION	x 670.20	x 670.20

CB 1 (STRUCTURE) 594.50 (RIM ELEVATION) 590.00 (INVERT ELEVATION) — STORM SEWER
SMH 1 (STRUCTURE) 594.50 (RIM ELEVATION) 590.00 (INVERT ELEVATION) — SANITARY

REV. BY	DATE	REVISIONS
T.G.	7/23/21	ISSUED FOR TOWN REVIEW

LANDMARK ENGINEERING LLC
DESIGN FIRM REGISTRATION NO. 184-005577-0010
7808 WEST 103RD STREET
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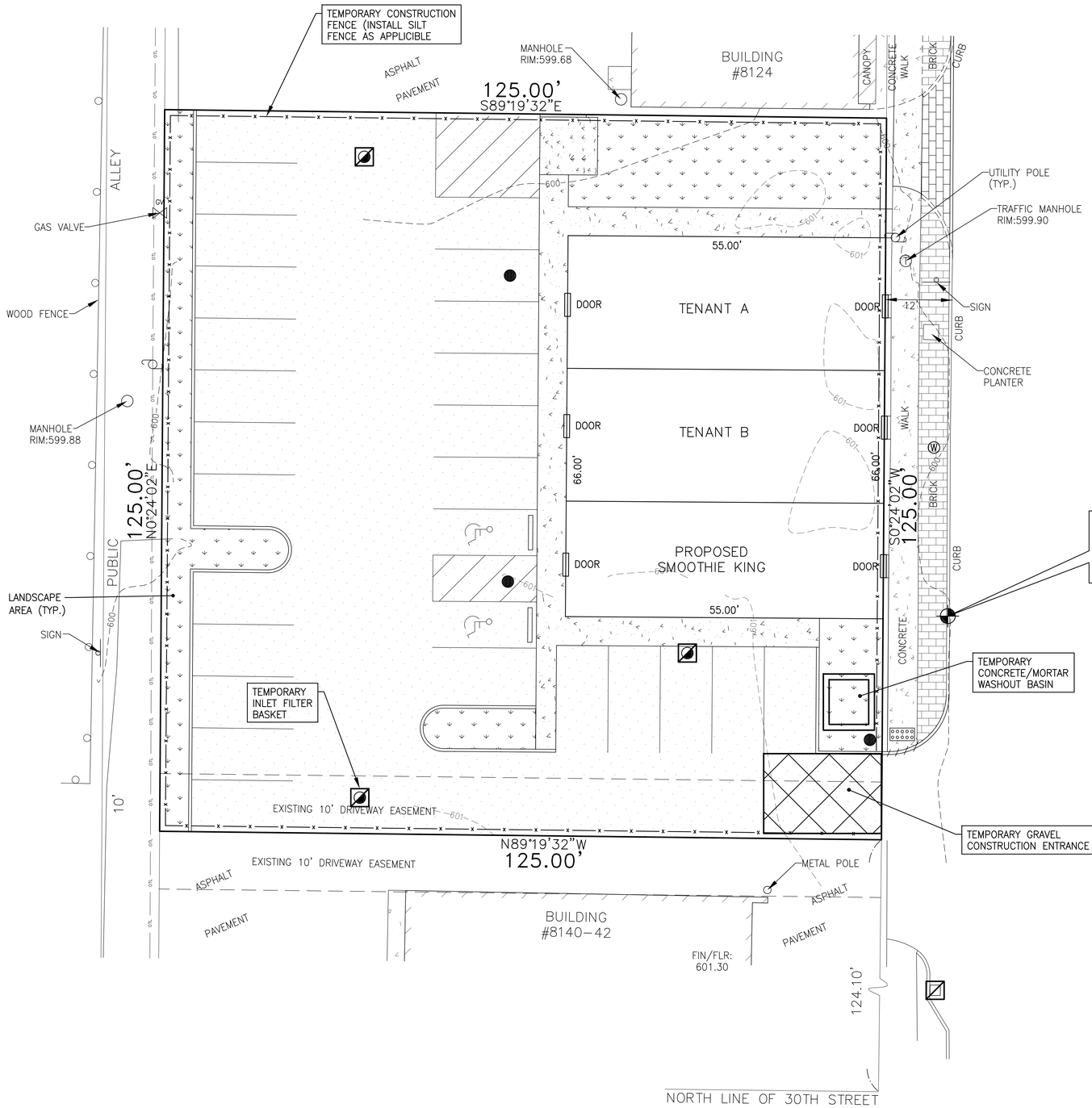
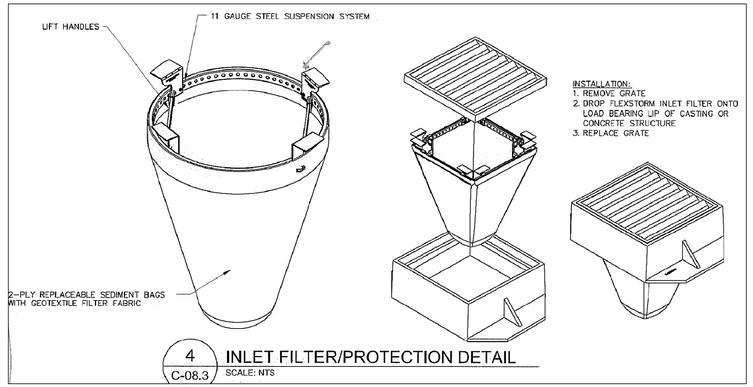
SMOOTHIE KING, MUNSTER, IN
8130-38 CALUMET AVENUE, MUNSTER, IN
UTILITY PLAN

DRAWN BY: T.G.
DESIGNED BY: B.H.
CHECKED BY: M.L.

SHEET
C5.0
21-01-038





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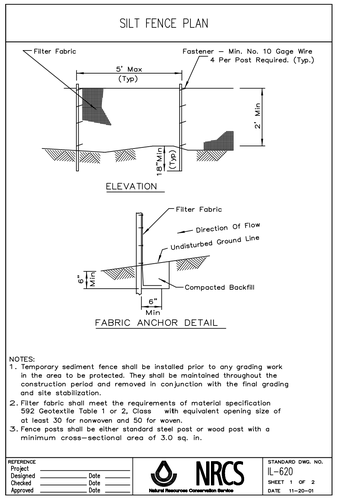

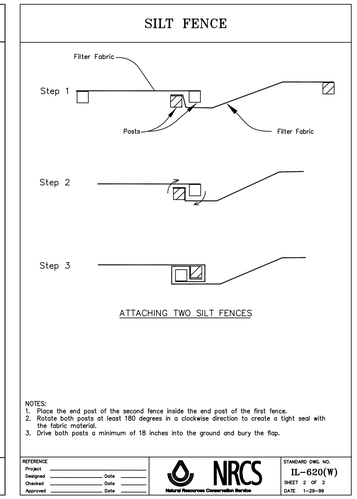

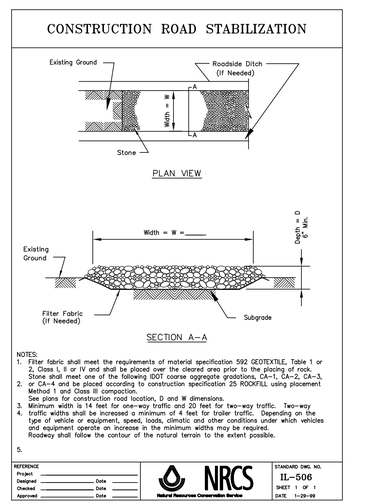

REV. BY	DATE	REVISIONS
T.G.	7/23/21	ISSUED FOR TOWN REVIEW

LANDMARK ENGINEERING LLC
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7808 WEST 103RD STREET
PALOS HILLS, ILLINOIS 60465
Phone: (708) 599-3737
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SMOOTHIE KING, MUNSTER, IN
8130-38 CALUMET AVENUE, MUNSTER, IN
SOIL EROSION & SEDIMENT CONTROL PLAN

DRAWN BY: T.G.
DESIGNED BY: B.H.
CHECKED BY: M.L.

SHEET
C6.0
21-01-038

EARTHWORK SPECIFICATIONS:

1. SCOPE OF WORK

1.A. EXTENT: THE WORK REQUIRED UNDER THIS SECTION CONSISTS OF ALL EXCAVATING, FILLING, ROUGH GRADING AND REIATED ITEMS NECESSARY TO COMPLETE THE WORK INDICATED ON THE DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS.

1.A.1. IN GENERAL THE ITEMS OF WORK TO BE PERFORMED UNDER TIHIS SECTION SHALL INCLUDE CLEARING AND GRUBBING, REMOVAL OF TREES AND STUMPS (WHERE REQUIRED), PROTECTION OF TREES TO REMAIN, STRIPPING AND STORAGE OF TOPSOIL, FILL, COMPACTION AND ROUGH GRADING OF ENTIRE SITE AS INDICATED ON THE DRAWINGS.

1.A.2. EXCAVATED MATERIAL THAT IS SUITABLE MAY BE USED FOR FILLS. ALL UNSUITABLE MATERIALS AND ALL SURPLUS EXCAVATED MATERIAL NOT REQUIRED SHALL BE REMOVED FROM THE SITE. THE LOCATION OF DUMP AND LENGTH OF HAUL SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

1.A.3. PROVIDE AND PIACE ANY ADDITIONAL FILL MATERIAL FROM OFF THE SITE AS MAY BE NECESSARY TO PRODUCE THE GRADES REQUIRED. FILL OBTAINED FROM OFF SITE SHALL BE OF KIND AND QUALITY AS SPECIFIED TO FILLS HEREIN AND THE SOURCE APPROVED BY THE ENGINEER AND OWNER.

1.A.4. THE CONTRACTOR SHALL ACCEPT THE SITE AS HE FINDS IT AND SHALL REMOVE ALL TRASH, RUBBISH AND DEBRIS FROM THE SITE PRIOR TO STARTING EXCAVATION.

1.B. WORK INCLUDED: THE FOLLOWING ITEMS OF REIATED WORK ARE SPECIFIED AND INCLUDED IN OTHER SECTIONS OF THESE SPECIFICATIONS.

1.B.1. EXCAVATION, GRADING AND BACKFILLING FOR UTILITY LINES.
1.B.2. STORM DRAINAGE SYSTEMS.
1.B.3. SANITARY SEWER SYSTEMS.
1.B.4. WATER SUPPLY SYSTEMS.
1.B.5. DRIVES AND PAVING.

2. BENCHMARKS

2.A. MAINTAIN CAREFULLY ALL BENCHMARKS, MONUMENTS AND OTHER REFERENCE POINTS, IF DISTURBED OR DESTROYED REPIACE AS DIRECTED BY ENGINEER.

3. PROTECTION OF TREES

3.A. GENERAL PROTECTION: THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF TOPS, TRUNKS AND ROOTS OF EXISTING TREES ON THE PROJECT SITE THAT ARE TO REMAIN. EXISTING TREES SUBJECT TO CONSTRUCTION DAMAGE SHALL BE BOXED, FENCED OR OTHERWISE PROTECTED BEFORE ANY WORK IS STARTED, DO NOT STOCKPILE WITHIN BRANCH SPREAD. REMOVE INTERFERING BRANCHES WITHOUT INJURY TO TRUNKS AND COVER SCARS WITH TREE PAINT.

4. REMOVAL OF TREES

4.A. REMOVE ALL TREES AND STUMPS FROM AREA TO BE OCCUPIED BY ROAD AND SURFACED AREA. REMOVAL OF TREES OUTSIDE THESE AREAS SHALL ONLY BE DONE AS NOTED ON DRAWINGS OR APPROVED BY OWNER.

4.B. All BRUSH, STUMPS, WOOD AND OTHER REFUSE FROM THE TREES SHALL BE REMOVED FROM SITE OR BURNED WITH PROPER PERMITS (WHERE APPLICABLE).

5. STRIPPING OF TOPSOIL

5.A. REMOVE TOPSOIL TO A DEPTH OF 6 INCHES (OR MORE IF REQUIRED) FROM THE AREAS TO BE OCCUPIED BY ROADS, WALKS, BUILDINGS, AND PARKING AREAS. PILE AND STORE TOPSOIL AT A LOCATION WHERE IT WILL NOT INTERFERE WITH CONSTRUCTION OPERATIONS. TOPSOIL SHALL BE REASONABLY FREE FROM SUBSOIL, DEBRIS AND STONES.

6. SITE GRADING

6.A. GRADES: DO ALL CUTTING, FILLING, COMPACTING OF FILLS AND ROUGH GRADING REQUIRED TO BRING ENTIRE PROJECT AREA TO SUBGRADE AS SHOWN ON THE DRAWINGS. UNDERCUT OPEN AREAS 4 INCHES FOR TOPSOIL.

6.B. ROUGH GRADING: THE TOLERANCE FOR PAVED AREAS SHALL NOT EXCEED 0.10 FEET ABOVE ESTABLISHED SUBGRADE. ALL OTHER AREAS SHALL NOT EXCEED 0.1 0 FEET PLUS OR MINUS THE ESTABLISHED GRADE. PROVIDE ROUNDING AT TOP AND BOTTOM OF BANKS AND OTHER BREAKS IN GRADE. ALL OPEN AREAS SHALL BE GRADED A MINIMUM OF 0.5% AND A MAXIMUM OF 3:1 SLOPE.

6.C. SUBGRADE SHALL BE PROOFROLLED WITH SUITABLE EQUIPMENT AND ALL SPONGY AND OTHERWISE UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL.

6.D. SUBGRADE FOR STREETS AND PAVED AREAS SHALL BE COMPACTED TO 95% OF MODIFIED PROCTOR.

6.E. SEE PROJECT MANUAL AND SOILS REPORT FOR REQUIREMENTS REGARDING UNDERCUTTING AND SUBGRADE PREPARATION FOR PAVEMENT.

6.F. ALL FILL MATERIAL SHALL BE FORMED FROM SOIL FREE OF DELETERIOUS MATERIAL. PRIOR TO PLACEMENT OF FILL, A SAMPLE OF THE PROPOSED MATERIAL SHALL BE SUBMITTED TO THE SOILS ENGINEER FOR APPROVAL. THE FILL MATERIAL SHALL BE PLACED IN LAYERS NOT TO EXCEED 8" IN LOOSE THICKNESS AND SHALL BE SPREAD AND COMPACTED AT THE PROPER MOISTURE CONTENT.

6.G. ALL FILL MATERIAL IN AREAS OUTSIDE OF BUILDING AND PAVEMENT AREAS SHALL BE COMPACTED LIGHTLY WITH EACH LIFT AND PROTECTED FORM EROSION. AREAS OF BUILDING CONSTRUCTION SHALL HAVE SUITABLE FILL MATERIAL PLACED AND COMPACTED IN ACCORDANCE WITH THE SOILS ENGINEER'S REPORT (MINIMUM 95% MODIFIED PROCTOR).

7. DISPOSITION OF UTILITIES

7.A. RULES AND REGULATIONS GOVERNING THE RESPECTIVE UTILITIES SHALL BE OBSERVED IN EXECUTING ALL WORK UNDER THIS SECTION.

7.B. IT SHALL BE THE RESPONSIBILITY OF EACH CONTRACTOR TO VERIFY ALL EXISTING UTILITIES AND CONDITIONS PERTAINING TO HIS PHASE OF THE WORK. IT SHALL ALSO BE THE CONTRACTORS RESPONSIBILITY TO CONTACT THE OWNERS OF THE VARIOUS UTILITIES BEFORE WORK IS STARTED. THE CONTRACTOR SHALL NOTIFY IN WRITING THE OWNERS OR THE ENGINEERS OF ANY CHANGES, ERRORS OR OMISSIONS FOUND ON THESE PLANS OR IN THE FIELD BEFORE WORK IS STARTED OR RESUMES.

7.C. WHERE ACTIVE UTILITIES ARE ENCOUNTERED BUT NOT SHOWN ON THE DRAWINGS, THE ENGINEER SHALL BE ADVISED BEFORE WORK IS CONTINUED.

7.D. INACTIVE AND ABANDONED UTILITIES ENCOUNTERED IN EXCAVATING AND GRADING OPERATIONS SHALL BE REPORTED TO THE ENGINEER. THEY SHALL BE REMOVED, PLUGGED OR CAPPED AS DIRECTED BY THE ENGINEER.

8. SEEDING PREPARATION

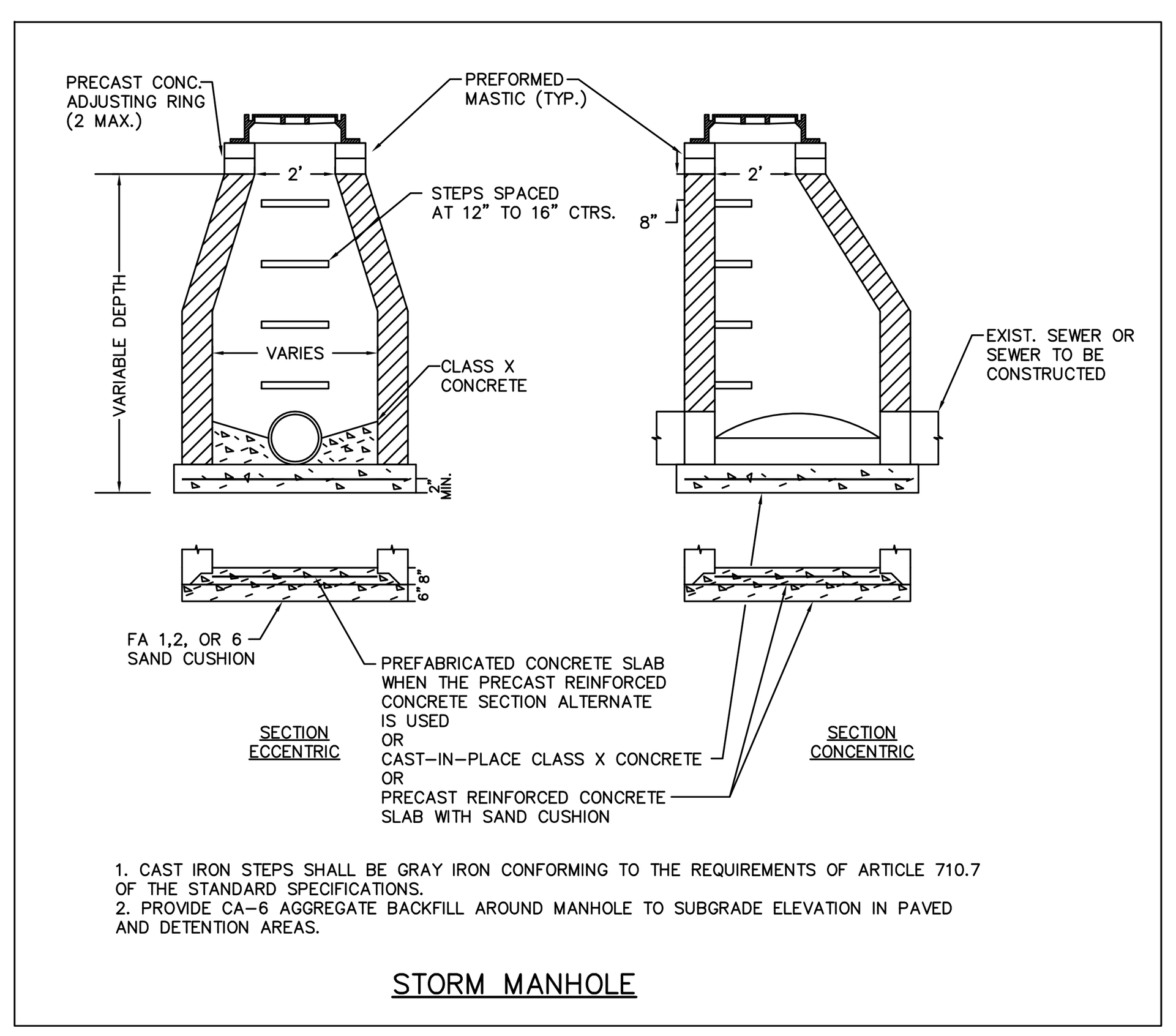
8.A. SOLVE ANY SURFACE OR SUBSURFACE DRAINAGE PROBLEMS AND CONSTRUCT PERMANENT EROSION CONTROL STRUCTURES.

8.B. REMOVE ALL ROCKS. ROOTS OR OTHER MATERIALS THAT MAY INTERFERE WITH SEEDBED PREPARATION.

8.C. PERFORM THE MAJOR FILLING SHAPING AND SMOOTHING OF GULLIED OR SEVERELY ERODED AREAS.

GENERAL NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING, OR VERIFYING THAT ALL PERMITS AND APPROVALS ARE OBTAINED FROM THE RESPECTIVE TOWN, COUNTY, AND STATE AGENCIES PRIOR TO STARTING CONSTRUCTION.
2. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES IN THE VICINITY OF THE CONSTRUCTION AREA PRIOR TO STARTING CONSTRUCTION
3. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO NOTIFY AND COORDINATE CONSTRUCTION WITH ALL RESPECTIVE UTILITIES.
4. ALL QUANTITIES GIVEN ON THESE PRINTS, VERBALLY OR IN THE SCOPE OF WORK SECTION ARE ESTIMATES AND SHALL BE CONFIRMED BY THE BIDDING CONTRACTORS.
5. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION {OSHA) STANDARDS FOR EXCAVATIONS; FINAL RULE 29 CFR PART 19–26, SUBPART ftP" APPLIES TO ALL EXCAVATIONS EXCEEDING FIVE (5) FEET IN DEPTH.
6. 6) IN ADDITION, EXCAVATION EXCEEDING TWENTY {20) FEET IN DEPTH REQUIRE THE DESIGN OF A TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER
7. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER AND CONTRACTOR TO MAINTAIN QUALITY CONTROL THROUGHOUT THIS PROJECT.
8. TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION TO CONFORM TO APPLICABLE LOCAL STANDARDS.
9. THE ENGINEER AND/OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS AND METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.
10. ANY FIELD TILES ENCOUNTERED DURING EXCAVATION SHALL BE REPAIRED AND CONNECTED TO NEW STORM SEWERS AND POSITIVE DRAINAGE PRESERVED.
11. IT SHALL BE THE RESPONSIBIUTY OF THE DEVELOPER THAT ALL LANDSCAPE REQUIREMENTS ARE MET AND CONFORM TO APPLICABLE LOCAL STANDARDS.
12. THE SITE DOES NOT LIE IN A SPECIAL FLOOD HAZARD AREA AS ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY– NATIONAL FLOOD INSURANCE PROGRAM, WHEN PLOTIED BY SCALE ON FLOOD INSURANCE RATE MAP #18089C0109E, DATED JANUARY 18, 2012.
13. BEARINGS, DIMENSIONS AND EASEMENTS ARE SHOWN FOR REFERENCE ONLY. SEE RECORD SURVEYS & PLAT FOR EXACT INFORMATION.
14. THIS SITE DOES NOT CONTAIN ANY WETLANDS AT SHOWN ON THE U.S. DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE: MUNSTER INDIANA, NATIONAL WETLANDS INVENTORY MAP DATED 1990.



STORM MANHOLE

EROSION CONTROL SPECIFICATIONS:

1. THIS PLAN IS DESIGNED AS AN ATTEMPT TO PREVENT ANY AND ALL SEDIMENT FROM LEAVING THE CONSTRUCTION SITE BY WAY OF EROSION. IF EROSION OF SEDIMENT FROM THE SITE IS TAKING PLACE, THE CONTRACTOR AND/OR OWNER SHALL TAKE PREVENTATIVE ACTION IMMEDIATELY. THE ENGINEER SHAILL BE CONSULTED IN THE EVENT THIS HAPPENS.
2. TEMPORARY SEEDING IS TO BE APPLIED TO ANY GRADED AREA THAT WILL REMAIN UNALTERED FOR AN EXTENDED PERIOD OF TIME.
3. PERMANENT SEEDING IS TO BE APPLIED IMMEDIATELY TO AREAS THAT HAVE ACHIEVED FINAL AND FINISHED GRADE.
4. PRESERVE EXISTING VEGETATION ON THE SITE WHENEVER AND WHEREVER POSSIBLE TO PREVENT TOPSOIL EROSION.
5. ALL SEDIMENT CAPTURING MEASURES SHALL BE IMPLEMENTED PRIOR TO THE DISTURBANCE OF THE CONSTRUCTION AREA THEY ARE INTENDED TO SERVICE.
6. ALL EROSION CONTROL MEASURES PROPOSED ARE TO BE PROPERLY MAINTAINED TO CONTINUE THEIR EFFECTIVENESS.
7. IF GRADING OCCURS DURING THE MONTHS OF DECEMBER, JANUARY OR FEBRUARY DORMANT SEEDING PROCEDURES SHALL BE USED.
8. DURING DRY WEATHER, KEEP LAWNS WATERED WITH SPRINKLERS OR OTHER APPROVED METHODS. RESEED ANY AREAS NOT GERMINATING OR DAMAGED AT INTERVALS AS MAY BE REQUIRED ACCORDING TO SEASONAIL CONDITION AND/OR CONSTRUCTION ACTIVITY. WATER GRASS AND EXECUTE NECESSARY WEEDING UNTIL FULL STAND OF GRASS HAS BEEN OBTAINED.
9. THE IMPLEMENTATION AND MAINTENANCE OF THE EROSION CONTROL IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER.
10. IT SHALL BE THE CONTRACTOR'S AND/OR OWNER'S RESPONSIBILITY TO MINIMIZE SEDIMENTATION (FROM ON–SITE CONSTRUCTION ACTIVITIES) FROM BEING DEPOSITED ONTO ADJACENT PROPERTIES AND RECEMNG STREAMS/DITCHES IN STRICT COMPLIANCE WITH "RULE 5" (327 IAC 15–5, CONSTRUCTION AC11VITY STORMWATER RUNOFF CONTROL). IT SHALL ALSO BE THE CONTRACTOR'S AND/OR OWNER'S RESPONSIBILITY TO OBTAIN ANY APPROVALS REQUIRED FROM THE LOCAL AUTHORITY AND TO SUBMIT A COMPLETE NOTICE OF INTENT LETTER TO THE OFFICE OF WATER MANAGEMENT, INDIAINA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT PRIOR TO ANY CONSTRUCTION ACTIVITY.

STORM SEWER SPECIFICATIONS:

1. SCOPE OF WORK

1.A. THE WORK UNDER THIS SECTION INCLUDES ALL STORM SEWERS, STORM WATER INLETS, AND RELATED ITEMS, INCLUDING EXCAVATING AND BACKFILLING, NECESSARY TO COMPLETE THE WORK SHOWN ON THE DRAWINGS.

2. MATERIALS

2.A. STORM SEWERS:

2.A.1. REINFORCED CONCRETE SEWER PIPE SHALL CONFORM TO ASTIM C–76 CLASS 3 LATEST REVISION WITH JOINTS CONFORMING TO ASTM C–443 LATEST REVISION.

2.A.2. STORM SEWERS HANCOR "HIQ" PIPE AND ADS OR APPROVED EQUAL: WITH THE FOLLOWING REQUIREMENTS:

2.A.1.a. 4 INCH THROUGH 10 INCH MEETING AASHTO M252 TYPE S. 12 INCH THROUGH 36 INCH MEETING AASHTO M294 TYPE S.

2.A.1.b. GASKETS MEETING ASTM 01056 GRADE 2A2.

2.A.1.c. FITTINGS MEETING ASSHTO M252 OR AASHTO M294. MEETING ASTM 03350 CELL CLASSIFICATION 324420C: OR ASTM 03350 TYPE III, CLASS C, CATEGORY 4, GRADE P33.

2.B. DRAINAGE STRUCTURES:

2.B.1. TO ASTM C–478 LATEST REVISION AND LATEST REVISION OF INDOT PRECAST STRUCTURE DETAILS.

2.B.2. CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOW HOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTION OR OTHER DEFECTS, THEY SHALL BE SMOOTH AND WELL CLEANED BY SHOT BLASTING OR BY SOME OTHER APPROVED METHOD. THEY SHALL BE COATED WITH ASPHALT PAINT WHICH SHALL RESULT IN A SMOOTH COATING. TOUGH AND TENACIOUS WHEN COLD, NOT TACKY OR BRITTLE. THEY SHALL BE GRAY IRON MEETING ASTM A–48 LATEST REVISION.

2.B.3. JOINTS – STRUCTURE SECTIONS SHALL BE JOINTED WITH RUBBER TYPE GASKETS, THE RUBBER TYPE GASKETS SHALL MEET ASTM C–443 LATEST REVISION.

2.C. SUBDRAINS:

2.C.1. PERFORATED PLASTIC PIPE SUBDRAINS SHALL CONFORM TO ASTM D3034, SDR 35, ASTM D2729, OR ASTM F405.

3. APPLICATION

3.A. PERMITS AND CODES: THE INTENT OF THIS SECTION OF THE SPECIFICATIONS IS THAT THE CONTRACTOR'S BID ON THE WORK COVERED HEREIN SHALL BE BASED UPON THE DRAWINGS AND SPECIFICATIONS BUT THAT THE WORK SHALL COMPLY WITH ALL, APPLICABLE CODES AN REGULATIONS AS AMENDED BY ANY WAIVERS. CONTRACTOR SHALL FURNISH ALL BONDS NECESSARY TO GET PERMITS FOR CUTS AND CONNECTIONS TO EXISTING SEWERS.

3.B. LOCAL STANDARDS: THE TERM "LOCAL STANDARDS" AS USED HEREIN MEANS THE STANDARDS OF DESIGN AND CONSTRUCTION OF THE RESPECTIVE MUNICIPAL DEPARTMENT AND/OR UTILITY COMPANY.

3.C. EXISTING IMPROVEMENTS: MAINTAIN IN OPERATING CONDITION ALL ACTIVE UTILITIES, SEWERS AND OTHER DRAINS ENCOUNTERED IN THE SEWER INSTALLATION. REPAIR TO THE SATISFACTION OF THE OWNER ANY DAMAGE TO EXISTING ACTIVE IMPROVEMENTS.

3.D. WORKMANSHIP: TO CONFORM TO ALL LOCAL, STATE AND NATIONAL CODES AND TO BE APPROVED BY ALL LOCAL AND STATE AGENCIES HAVING JURISDICTION.

3.E. TRENCHING: LAY ALL PIPE IN OPEN TRENCHES, EXCEPT WHEN THE LOCAL AUTHORITY GIVE WRITTEN PERMISSION FOR TUNNELING. OPEN THE TRENCH SUFFICIENTLY AHEAD OF PIPE LAYING TO REVEAL ANY OBSTRUCTIONS. THE WIDTH OF THE TRENCH SHALL BE THE INSIDE PIPE DIAMETER PLUS 24 INCHES FOR 12 INCHES ABOVE THE PIPE. SHEET AND BRACE TRENCH AS NECESSARY TO PROTECT WORKMEN AND ADJACENT STRUCTURES. ALL TRENCHING TO COMPLY WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION STANDARDS. KEEP TRENCHES FREE FROM WATER WHILE CONSTRUCTION IS IN PROGRESS. UNDER NO CIRCUMSTANCES LAY PIPE OR APPURTENANCES IN STANDING WATER. CONDUCT THE DISCHARGE FORM TRENCH DEWATERING TO DRAINS OR NATURAL DRAINAGE CHANNELS.

3.F. SPECIAL SUPPORTS: WHENEVER, IN THE OPINION OF THE ENGINEER, THE SOIL AT OR BELOW THE PIPE GRADE IS UNSUITABLE FOR SUPPORTING SEWERS AND APPURTENANCES SPECIFIED IN THIS SECTION, SUCH SPECIAL SUPPORT, IN ADDITION THOSE SHOWN OR SPECIFIED, SHALL BE PROVIDED AS THE ENGINEER MAY DIRECT, AND THE CONTRACT WILL BE ADJUSTED.

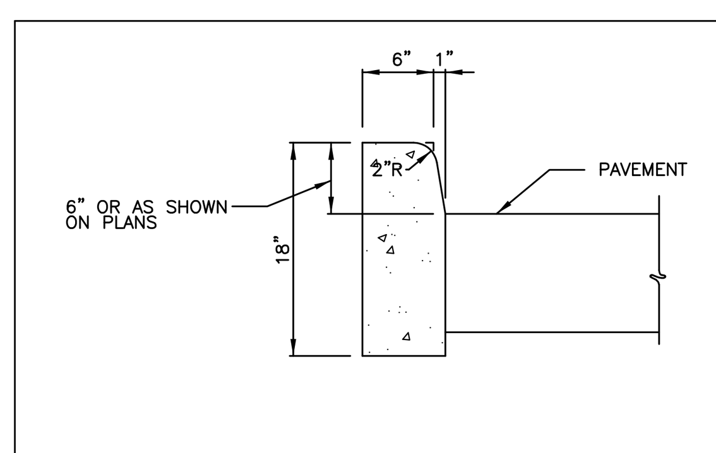
3.G. BACKFILLING

3.G.1. RCP BACKFILLING: FOR DEPTH OF AT LEAST 12 INCHES ABOVE THE TOP OF THE PIPE, BACKFILL WITH EARTH OR GRANULAR MATERIAL FREE FROM LARGE STONES, ROCK FRAGMENTS, ROOTS OR SOD. TAMP THIS BACKFILL THOROUGHLY TAKING CARE NOT TO DISTURB THE PIPE. FOR THE REMAINING TRENCH DEPTH, BACKFILL WITH EARTH OR GRAINULAR MATERIAL CONTAINING STONES OR ROCKS NOT LARGER THAN 4 INCHES. BACKFILL UNDER WALKS, PARKING AREAS, DRIVEWAYS AND STREETS SHALL BE GRANULAR MATERIAL ONLY THOROUGHLY COMPACTED BY APPROVED METHODS. TRENCHES PARALLEL TO AIND WITHIN 5 FEET OF PAVED ROADWAYS SHALL ALSO BE CONSTRUCTED WITH COMPACTED GRANULAR MATERIALS.

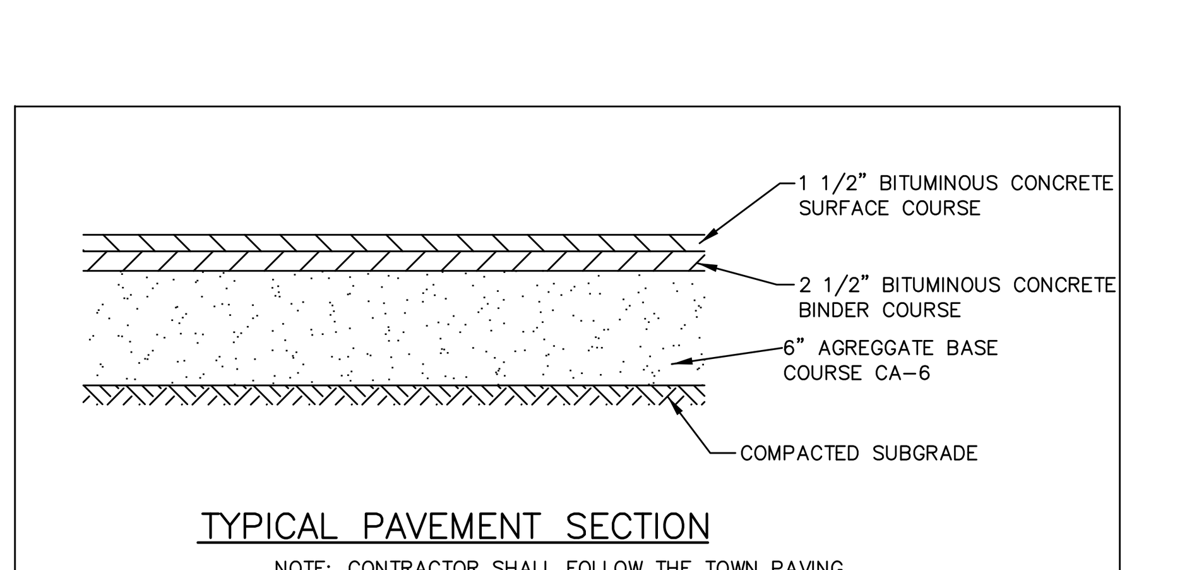
3.G.2. HOPE BACKFILLING: FOR DEPTH OF AT. LEAST 12 INCHES ABOVE THE TOP OF THE PIPE, BACKFILL WITH GRANULAR MATERIAL. COMPACT THIS BACKFILL THOROUGHLY TAKING CARE NOT TO DISTURB THE PIPE. FOR THE REMAINING TRENCH DEPTH, BACKFILL WITH EARTH OR GRANULAR MATERIAL CONTAINING STONES OR ROCKS NOT LARGER THAN 4 INCHES. BACKFILL UNDER WALKS, PARKING AREAS, DRIVEWAYS AND STREETS SHALL BE GRANULAR MATERIAL ONLY THOROUGHLY COMPACTED BY APPROVED METHODS. TRENCHES PARALLEL TO AND WITHIN 5 FEET OF PAVED ROADWAYS SHALL ALSO BE CONSTRUCTED WITH COMPACTED GRANULAR MATERIALS.

3.H. SUBDRAINS: ALL SUBDRAINS ON SITE SHALL BE OF THE SIZE AS SHOWN AND SHALL BE PLACED AS SHOWN ON THE PLANS. THEY SHALL BE CONSTRUCTED TO THE GRADES AS SHOWN ON THE PLANS

3.I. UTILITIES: IT SHALL BE THE RESPONSIBILITY OF EACH CONTRACTOR TO VERIFY ALL EXISTING UTILITIES AND CONDITIONS PERTAINING TO HIS PHASE OF THE WORK. IT SHALL ALSO, BE THE CONTRACTORS RESPONSIBILITY TO CONTACT THE OWNERS OF THE VARIOUS UTILITIES BEFORE WORK IS STARTED. THE CONTRACTOR SHALL NOTIFY IN WRITING THE OWNERS OR THE ENGINEER OF ANY CHANGES, ERRORS OR OMISSIONS FOUND ON THESE PLANS OR IN THE FIELD BEFORE WORK IS STARTED OR RESUMED.



TYPICAL BARRIER CURB



TYPICAL PAVEMENT SECTION

NOTE: CONTRACTOR SHALL FOLLOW THE TOWN PAVING REQUIREMENTS AND STANDARDS

PAVING SPECIFICATIONS:

1. SCOPE OF WORK

1.A. THE WORK REQUIRED UNDER THIS SECTION INCLUDES ALL EXTERIOR CONCRETE AND BITUMINOUS PAVING AND RELATED ITEMS NECESSARY TO COMPLETE THE WORK INDICATED ON DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS, INCLUDING BUT NOT LIMITED TO: ALL DRIVES, PARKING AREAS IN CONTRACT LIMITS CURBS AND GUTTERS SIDEWALKS AND CONCRETE SLABS, EXTERIOR STEPS

2. MATERIALS

2.A. CONCRETE: CONCRETE SHALL BE READY–MADE AND SHALL BE A MIX OF PROPORTIONED FINE AND COARSE AGGREGATES WITH PORTLAND CEMENT AND WATER. MINIMUM CEMENT CONTENT SHALL BE 6 BAGS PER CUBIC YARD OF CONCRETE AND MAXIMUM WATER CONTENT SHALL BE 5.5 U.S. GALLONS PER SACK OF CEMENT, INCLUDING MOISTURE IN THE AGGREGATE. SLUMP FOR NORMAL WEIGHT CONCRETE SHALL BE A MAXIMUM OF 4 INCHES AND A MINIMUM OF 2 INCHES. THE SLUMP OF MACHINE PLACE CONCRETE SHALL BE NO LESS THAN 1–1/4 INCHES NOR MORE THAN 3 INCHES. STANDARD TEST ASTM C0143 SHALL BE USED TO MEASURE SLUMP. MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS SHALL BE 4000 PSI. ALL EXTERIOR CONCRETE SHALL HAVE AIR ENTERTAINMENT OF 5% TO 8% BY VOLUME PER ASTM C0260. RETEMPERING OF DELIVERED CONCRETE WILL NOT BE ALLOWED. CONCRETE SHALL BE COMPOSED OF:

2.A.1. PORTLAND CEMENT: CONFORMING TO ASTM C–150, TYPE IA OR TYPE IIIA.

2.A.2. AGGREGATES: CONFORMING TO ASTM C–33.

2.A.3. WATER: SHALL BE CLEAR AND FREE FROM INJURIOUS AMOUNTS OF OILS,

2.B. WELDED STEEL WIRE FABRIC: WHERE REQUIRED FOR CONCRETE REINFORCEMENT SHALL CONFORM TO ASTM A 185.

2.C. PRE MOLDED JOINT FILLER: SHALL BE NON–EXTRUDING TYPE MEETING ASTM D–544. EXCEPT THAT PRE MOLDED JOINT FILLER USED IN CONCRETE WALK CONSTRUCTION MAY BE EITHER NON–EXTRUDING OR RESILIENT.

2.D. BITUMINOUS PAVEMENT MATERIALS: ALL MATERIALS PROPOSED FOR THE CONSTRUCTION OF BITUMINOUS PAVEMENTS SHALL COMPLY WITH THE INDIANA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS LATEST VERSION SHALL BE USED.

2.E. COMPACTED AGGREGATE SUB–BASE: SHALL BE CRUSHED STONE OR GRAVEL. CRUSHED GRAVEL SHALL BE A MINIMUM OF 35% CRUSHED MATERIAL. FINES SHALL BE LIMITED TO A MAXIMUM OF 8% OF THE TOTAL. MATERIAL SHALL BE FREE FROM AN EXCESS OF FLAT, ELONGATED, THINLY LAMINATED SOFT OR DISINTEGRATED PIECES, AND SHALL BE FREE FROM FRAGMENTS COATED WITH DIRT. COMPACTED AGGREGATE SHALL BE GRADED AS FOLLOWS: PER LATEST REVISIONS.

SIEVE SIZE	% PASSING
1–1/2"	100
1"	80–100
3/4"	79–920
1/2"	55–80
#4	35–60
#8	25–50
#30	12–30
#ZOO	5–10

3. APPLICATION

3.A. ACCORDANCE WITH EARTHWORK SECTION, TO BRING SUB GRADES, AFTER FINAL COMPACTION, TO THE REQUIRED GRADES AND SECTIONS FOR SITE IMPROVEMENT.

3.A. PREPARATION OF SUB–GRADE: REMOVE SPONGY AND OTHERWISE UNSUITABLE MATERIAL AND REPLACE WITH STABLE MATERIAL. NO TRAFFIC WILL BE ALLOWED ON PREPARED SUB–GRADE PRIOR TO PAVING.

3.C. COMPACTION OF SUB–GRADE: THE FIRST 6 INCHES BELOW THE SUB–GRADE SHALL BE COMPACTED TO AT LEAST 100% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE PROVISIONS OF AASHTO T–99. WATER SHALL BE PREVENTED FOR STANDING ON THE COMPACTED SUB–GRADE

3.D. UTILITY STRUCTURES: CHECK FOR CORRECT ELEVATION OF ALL MANHOLE COVERS, INLETS, VALVE BOXES AND SIMILAR STRUCTURES LOCATED WITHIN AREAS TO BE PAVED AND MARK, OR HAVE MADE ANY NECESSARY ADJUSTMENTS IN SUCH STRUCTURES.

3.E. PLACING CONCRETE:

3.E.1. SUBGRADE: PLACE CONCRETE ONLY ON A MOIST, COMPACTED SUBGRADE OF BASE FREE FROM LOOSE MATERIAL PLACE NO CONCRETE ON A MUDDY OR FROZEN SUBGRADE

3.E.2. FORMS: ALL FORMS SHALL BE FREE FROM WARP, TIGHT ENOUGH TO PREVENT LEAKAGE AND SUBSTANTIAL ENOUGH TO MAINTAIN THEIR SHAPE AND POSITION WITHOUT SPRINGING OR SETTING, WHEN CONCRETE IS PLACED. FORMS SHALL BE CLEAN AND SMOOTH IMMEDIATELY BEFORE PLACING CONCRETE.

3.E.1. PLACING CONCRETE: CONCRETE SHALL BE DEPOSITED SO AS TO REQUIRE AS LITTLE HANDING AS PRACTICABLE. WHEN CONCRETE IS TO BE PLACED AT AN ATMOSPHERIC TEMPERATURE OF 35 DEGREES F, OR LESS, PARAGRAPH 702.1 0 OF THE INDIANA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, LATEST REVISION SHALL BE FOLLOWED.

3.F. CONCRETE CURB:

3.F.1. EXPANSION JOINTS: SHALL BE 1/2 INCH THICK PRE MOLDED AT ENDS OF ALL RETURNS AND A MAXIMUM SPACING OF 100 FEET.

3.F.2. CONTRACTION JOINTS: UNLESS OTHERWISE PROVIDED, CONTRACTION JOINTS SHALL BE JOINTS SPACED 10 FEET ON CENTER.

3.F.3. FINISH: TAMP AND SCREED CONCRETE AS SOON AS PLACED, AND FILL ANY HONEYCOMBED PLACES, FINISH SQUARE CORNERS TO 1/4 INCH RADIUS AND OTHER CORNERS TO RADII SHOWN.

3.G. CONCRETE WALKS AND EXTERIOR STEPS:

3.G.1. SLOPES: PROVIDE 14 INCH PER FOOT CROSS SLOPE. MAKE ADJUSTMENTS IN SLOPES A WALK INTERSECTIONS AS NECESSARY TO PROVIDE PROPER DRAINAGE.

3.G.2. DIMENSIONS: WALKS AND STEPS SHALL BE ONE COURSE CONSTRUCTION AND OF WIDTHS AND DETAILS SHOWN ON THE DRAWINGS.

3.G.3. FINISH: SCREED CONCRETE AND TROWEL WITH A STEEL TROWEL TO A HARD DENSE SURFACE AFTER SURFACE WATER HAS DISAPPEARED. APPLY MEDIUM BROOM FINISH AND SCRIBE CONTROL JOINTS AT 6 FEET SPACING. PROVIDE 1/2 INCH EXPANSION JOINTS WHERE SIDEWALKS INTERSECT, AND AT A MAXIMUM SPACING OF 48 FEET BETWEEN EXPANSION JOINTS.

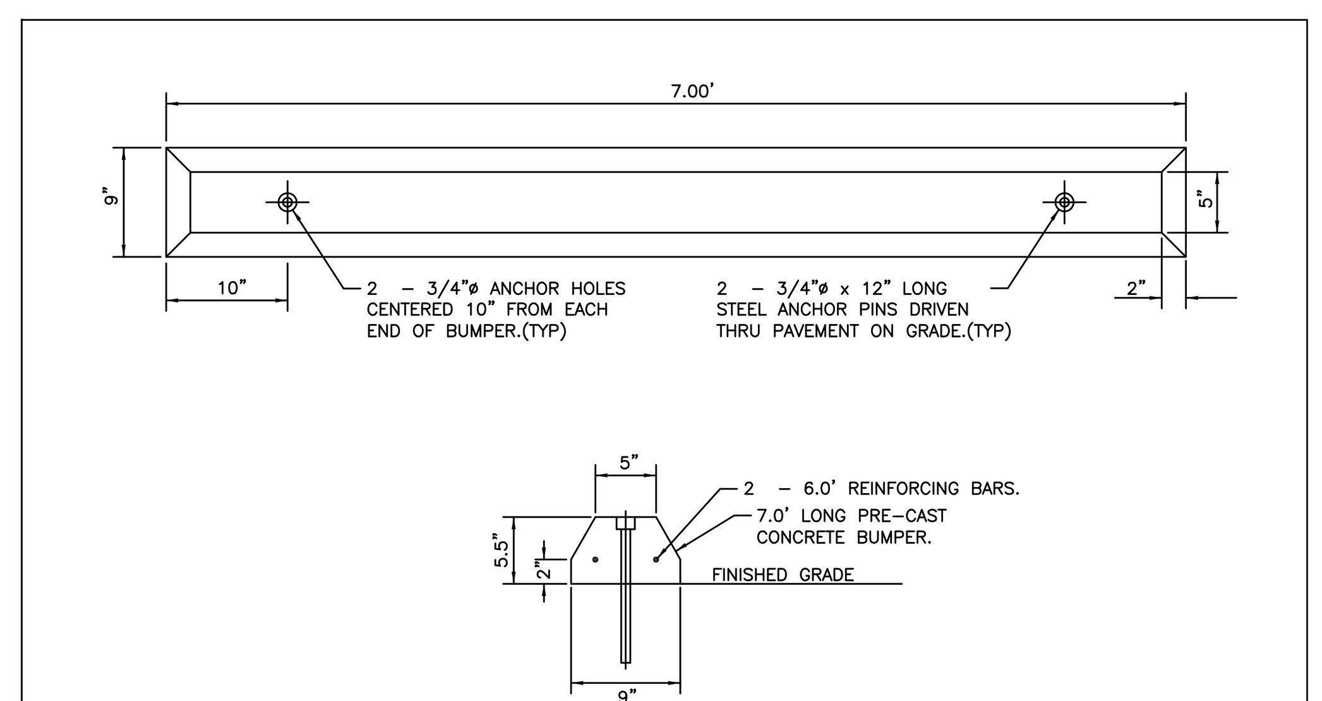
A) 1/2" PREFORMED JOINT FILLER SHALL EXTEND NO LESS THAN 1/2" BELOW FINISH SURFACE.

B) ALL EXPANSION JOINTS SHALL BC: SEALED WITH A WATERPROOF SELF LEVELING JOINT SEALANT (i.e. BASF SL 1) INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

3.H. CURING CONCRETE: EXCEPT AS OTHERWISE SPECIFIED, CURE ALL CONCRETE BY ONE OF THE METHODS DESCRIBED IN SECTION 501.17 OF THE INDIANA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, LATEST REVISION SHALL BE USED.

3.I. BITUMINOUS PAVEMENT: HOT ASPHALT CONCRETE PAVEMENT SHALL BE AS SPECIFIED IN SECTION 402 OF THE INDIANA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, LATEST REVISIONS SHALL BE USED. PAVING WILL NOT BE PERMITTED DURING UNFAVORABLE WEATHER OR WHEN THE TEMPERATURE IS 40 DEGREES F. AND FALLING.

3.J. COMPACTED AGGREGATE SUB–BASE: THE THICKNESS SHOWN ON THE DRAWINGS IS THE MINIMUM THICKNESS OF THE FULL COMPACTED SUB–BASE. COMPACTION SHALL BE ACCOMPLISHED BY ROLLING WITH A SMOOTH WHEELED ROLLER WEIGHING 8 TO 10 TONS. COMPACT TO 95% COMPACTION USING STANDARD TESTING PROCEDURES. ALONG CURBS, HEADERS AND WALLS AND AT ALL PLACES NOT ACCESSIBLE TO THE ROLLER, THE AGGREGATE MATERIAL SHALL BE TAMPED WITH MECHANICAL TAMPERS OR WITH APPROVED TAMPERS.



PRE–CAST CONCRETE PARKING BUMPER

PAVEMENT MARKING SPECIFICATIONS:

1. SUMMARY

1.A. SECTION INCLUDES

1.A.1. PAINTING AND MARKING OF PAVEMENTS.

1.B. REFERENCES

1.B.1. THE PUBLICATIONS LISTED BELOW FORM A PART OF THIS SPECIFICATION TO THE EXTENT REFERENCED. PUBLICATIONS ARE REFERENCED WITHIN THE TEXT BY THE BASIC DESIGNATION ONLY.

1.B.2. AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION (AASHTO):

1.B.1.a. AASHTO M247 – GLASS BEADS USED IN TRAFFIC PAINTS

1.B.1.b. AASHTO M248 – READY–MIXED WHITE AND YELLOW TRAFFIC PAINTS

1.B.3. ASTM INTERNATIONAL (ASTM):

1.B.3.a. ASTM 04414 – STANDARD PRACTICE FOR MEASUREMENT OF WET FILM THICKNESS BY NOTCHED GAUGES.

1.B.4. FEDERAL SPECIFICATIONS (FS):

1.B.4.a. FS A–A–2886 – PAINT. TRAFFIC, SOLVENT BASED (SUPERSEDES FS TT–P–85 AND FS TT–P–115, TYPE I)

1.B.4.b. FS TT–B–1325 – BEADS (GLASS SPHERES) RETRO–REFLECTIVE

1.B.4.c. FS TT–P–1952 – PAINT, TRAFFIC AND AIRFIELD MARKING, WATERBORNE

1.C. PROJECT CONDITIONS

1.C.1. MAINTAIN ACCESS FOR VEHICULAR AND PEDESTRIAN TRAFFIC AS REQUIRED FOR OTHER CONSTRUCTION ACTIVITIES. UTILIZE FLAGMEN, BARRICADES, WARNING SIGNS, AND WARNING LIGHTS AS REQUIRED.

1.D. QUALITY ASSURANCE

1.D.1. USE TRAINED AND EXPERIENCED PERSONNEL IN APPLYING THE PRODUCTS AND OPERATING THE EQUIPMENT REQUIRED FOR PROPERLY PERFORMED WORK.

2. PRODUCTS

2.A. MATERIALS

2.A.1. PAINT SHALL BE WATERBORNE OR SOLVENT BORNE, COLORS AS SHOWN OR SPECIFIED HEREIN. PAVEMENT MARKING PAINTS SHALL COMPLY WITH APPLICABLE STATE AND LOCAL LAWS ENACTED TO ENSURE COMPLIANCE WITH FEDERAL CLEAN AIR STANDARDS. PAINT MATERIALS SHALL CONFORM TO THE RESTRICTIONS OF THE LOCAL AIR POLLUTION CONTROL DISTRICT.

2.A.2. WATERBORNE PAINT: PAINTS SHALL CONFORM TO FS TT –P–1952.

2.A.3. SOLVENT BORNE PAINT: PAINT SHALL CONFORM TO FS A–A–2886 OR AASHTO M248. PAINT SHALL BE NON_BLEEDING, QUICK_DRYING, AND ALKYD PETROLEUM BASE PAINT SUITABLE FOR TRAFFIC_BEARING SURFACE AND BE MIXED IN ACCORDANCE WITH MANUFACTURE'S INSTRUCTIONS BEFORE APPLICATION FOR COLORS WHITE, YELLOW. BLUE, AND RED.

2.A.4. GLASS BEADS: AASHTO M 247, TYPE 1 OR FS TT–B–1325. TYPE 1, GRADATION A.

3. EXECUTION

3.A. EXAMINATION

3.A.1. EXAMINE THE WORK AREA AND CORRECT CONDITIONS DETRIMENTAL TO TIMELY AND PROPER COMPLETION OF THE WORK. DO NOT PROCEED UNTIL UNSATISFACTORY CONDITIONS ARE CORRECTED.

3.B. PREPARATION

3.B.1. SWEEP AND CLEAN SURFACE TO ELIMINATE LOOSE MATERIAL AND DUST.

3.B.2. WHERE EXISTING PAVEMENT MARKINGS ARE INDICATED ON CONSTRUCTION DRAWINGS TO BE REMOVED OR WOULD INTERFERE WITH ADHESION OF NEW PAINT, A MOTORIZED ABRASIVE DEVICE SHALL BE USED TO REMOVE THE MARKINGS. EQUIPMENT EMPLOYED SHALL NOT DAMAGE EXISTING PAVING OR CREATE SURFACES HAZARDOUS TO VEHICLE OR PEDESTRIAN TRAFFIC. WITHIN PUBLIC RIGHTS–OF–WAY, APPROPRIATE GOVERNING AUTHORITY SHALL APPROVE METHOD OF MARKING REMOVAL.

3.B.3. NEW PAVEMENT SURFACES SHALL BE ALLOWED TO CURE FOR NOT LESS THAN 30 DAYS BEFORE APPLICATION OF MARKING MATERIALS.

3.C. APPLICATION

3.C.1. APPLY TWO COATS OF SAME COLOR OF PAINT AS SPECIFIED BELOW, AT MANUFACTURER'S RECOMMENDED RATE, WITHOUT ADDITION OF THINNER, WITH MAXIMUM OF 100 SQUARE FEET PER GALLON OR AS REQUIRED TO PROVIDE A MINIMUM WET FILM THICKNESS OF 15 MILS AND DRY FILM THICKNESS OF 7 1/2 MILS PER COAT. PAINT SHALL BE APPLIED FOR A TOTAL DRY FILM THICKNESS OF 15 MILS. APPLY WITH MECHANICAL EQUIPMENT TO PRODUCE UNIFORM STRAIGHT EDGES. AT SIDEWALK CURBS AND CROSSWALKS, USE STRAIGHTEDGE TO ENSURE UNIFORM, CLEAN, AND STRAIGHT STRIPE.

3.C.2. INSTALL PAVEMENT MARKINGS ACCORDING TO MANUFACTURER'S RECOMMENDED PROCEDURES FOR THE SPECIFIED MATERIAL

3.C.3. FOLLOWING ITEMS SHALL BE PAINTED WITH COLORS NOTED BELOW:

3.C.4.a. PEDESTRIAN CROSSWALKS: WHITE

3.C.4.b. EXTERIOR SIDEWALK CURBS AND GUARD POSTS: YELLOW

3.C.4.c. FIRE LANES: RED OR PER LOCAL CODE

3.C.4.d. LANE STRIPING WHERE SEPARATING TRAFFIC MOVING IN OPPOSITE DIRECTIONS: YELLOW

3.C.4.e. LANE STRIPING WHERE SEPARATING TRAFFIC MOVING IN THE SAME DIRECTION: WHITE

3.C.4.f. ADA SYMBOLS: BLUE OR PER LOCAIL CODE

3.C.4.g. ADA PARKING SPACE MARKINGS AS SHOWN ON THE DRAWINGS.

3.C.4.h. PARKING STALL STRIPING: WHITE, UNLESS OTHERWISE NOTED ON CONSTRUCTION DRAWINGS

3.C.4. APPLY GLASS BEADS AT PEDESTRIAN CROSSWALK STRIPING AND AT LANE STRIPING AND ARROWS AT DRIVEWAYS CONNECTING TO PUBLIC STREETS. BROADCAST GLASS BEADS UNIFORMLY INTO WET MARKINGS AT A RATE OF 6 LB/GAL.

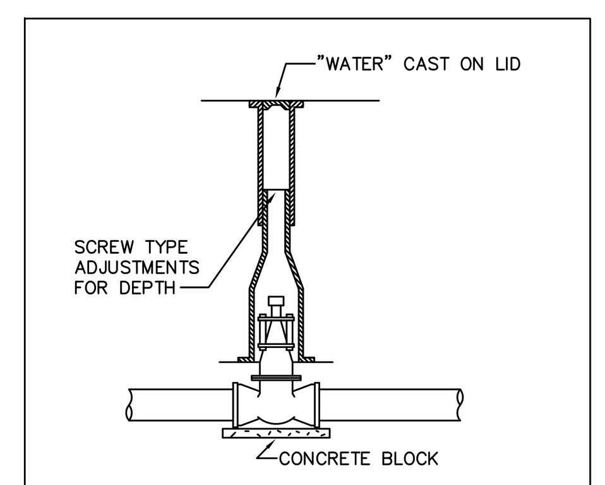
3.D. FIELD QUALITY CONTROL

3.D.1. INSPECTION: AFTER THE PAINT HAS THOROUGHLY DRIED, VISUALLY INSPECT THE ENTIRE APPLICATION AND TOUCH UP AS REQUIRED TO PROVIDE CLEAN, STRAIGHT LINES AND SURFACES THROUGHOUT.

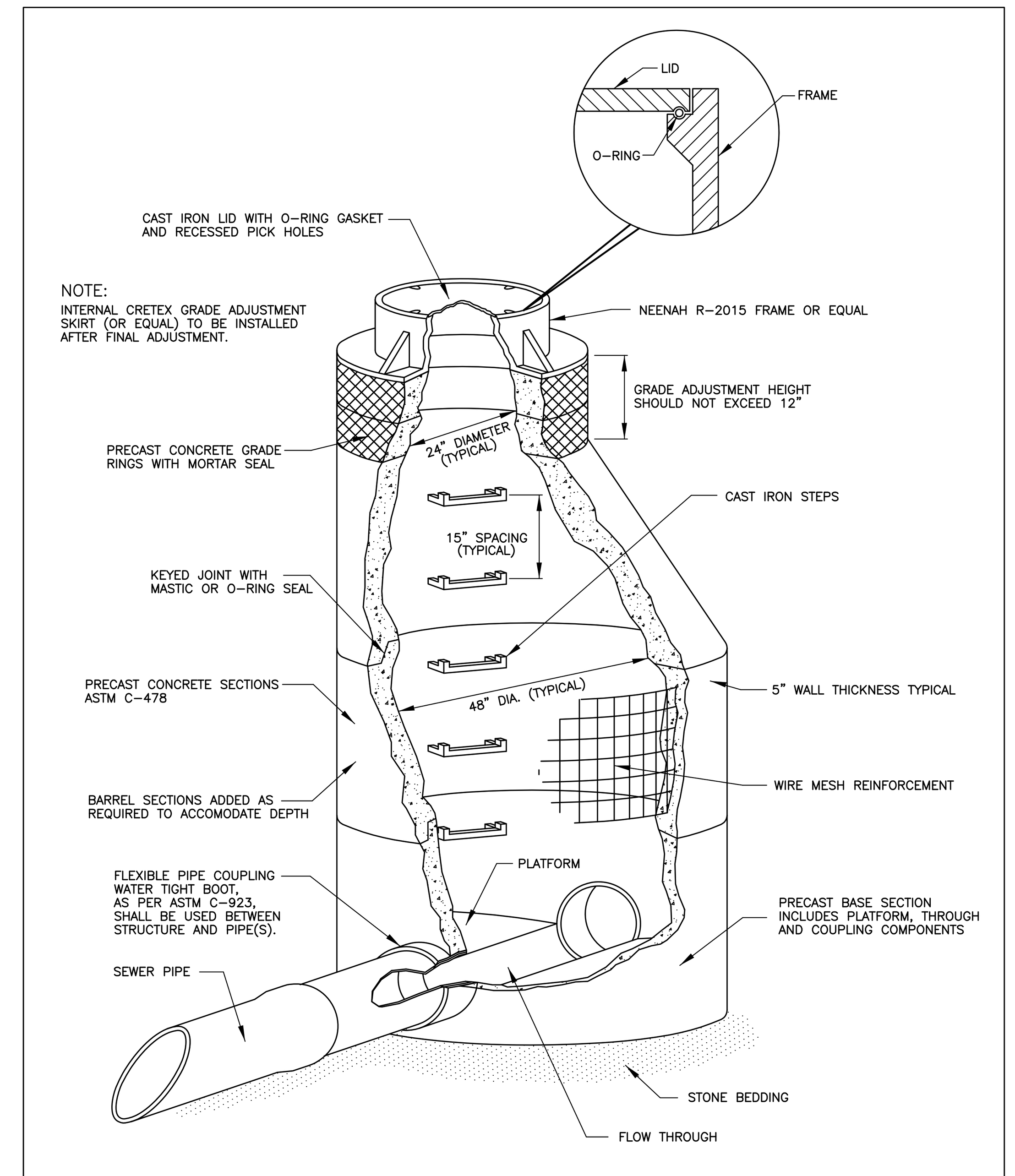
3.D.2. TESTING: TESTING OF WET FILM THICKNESS SHALL BE PERFORMED A MINIMUM OF TWO TIMES ON EACH PARKING ROW (INCLUDING STRIPED ISLANDS) AND PEDESTRIAN CROSS WALKS, AND A MINIMUM OF ONE TEST ON EACH LANE/ALIGNMENT STRIPING. AT LEAST ONE TEST SHALL BE PERFORMED AFTER REFILLING PAINT STRIPING MACHINE, CHANGING OPERATORS OF STRIPING MACHINE, AND CHANGING PAINT TYPES, BRANDS, ETC. THIS SHALL BE PERFORMED IN ADDITION TO THE TESTING STATED ABOVE. THESE TESTS SHALL BE PERFORMED ON EACH COAT APPLIED. TESTING SHALL BE PERFORMED IN ACCORDANCE WITH ASTM D4414.

3.E. CLEANING

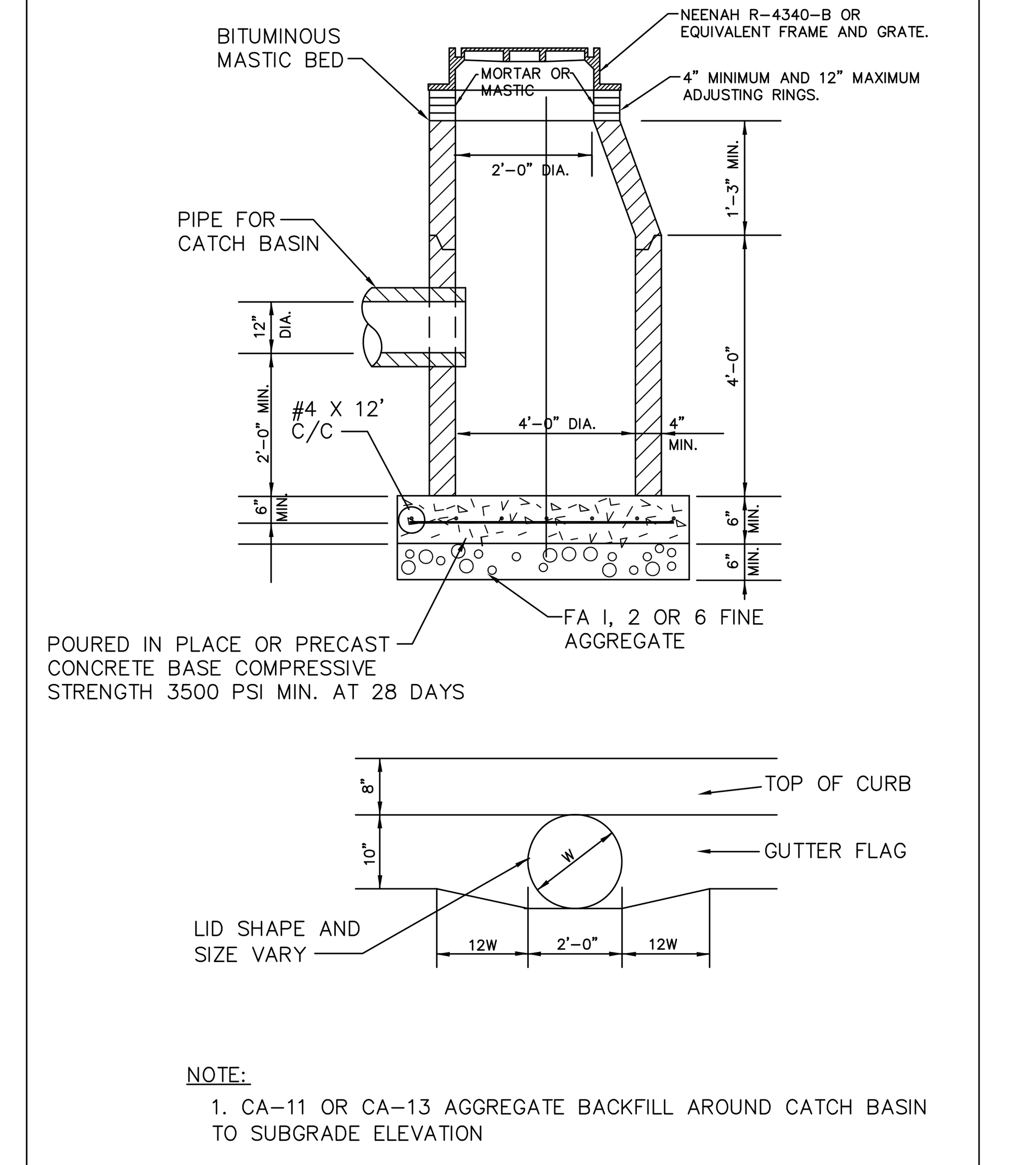
3.E.1. WASTE MATERIALS SHALL BE REMOVED AT THE END OF EACH WORKDAY. UPON COMPLETION OF THE WORK, ALL CONTAINERS AND DEBRIS SHALL BE REMOVED FROM THE SITE. PAINT SPOTS UPON ADJACENT SURFACES SHALL BE CAREFULLY REMOVED BY APPROVED PROCEDURES THAT WILL NOT DAMAGE THE SURFACES AND THE ENTIRE JOB LEFT CLEAN AND ACCEPTABLE.



VALVE BOX INSTALLATION
NOT TO SCALE



48" SANITARY MANHOLE



CATCH BASIN DETAIL

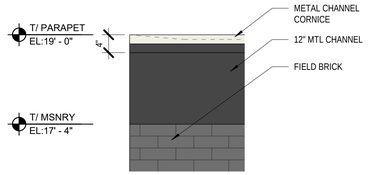
DATE	REVISIONS	REV. BY
7/23/21	ISSUED FOR TOWN REVIEW	T.G.

LANDMARK
ENGINEERING LLC
DESIGN FIRM REGISTRATION NO. 184–005577–0010
7808 WEST 103RD STREET
PALOS HILLS, ILLINOIS 60465–1529
Phone: (708) 599–3737
Fax: (708) 599–2291

SMOOTHIE KING, MUNSTER, IN
8130-38 CALUMET AVENUE, MUNSTER, IN
NOTES & DETAILS

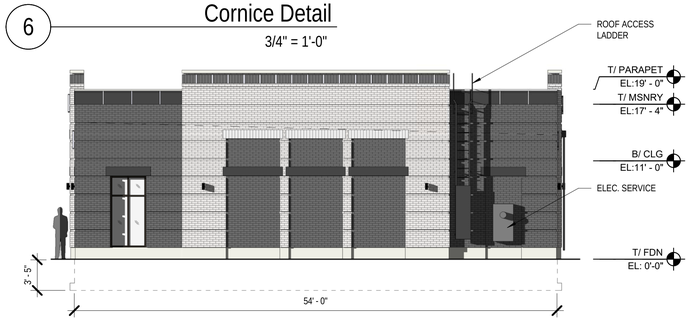
DRAWN BY: T.G.
DESIGNED BY: B.H.
CHECKED BY: M.L.

SHEET
C7.0
21–01–038



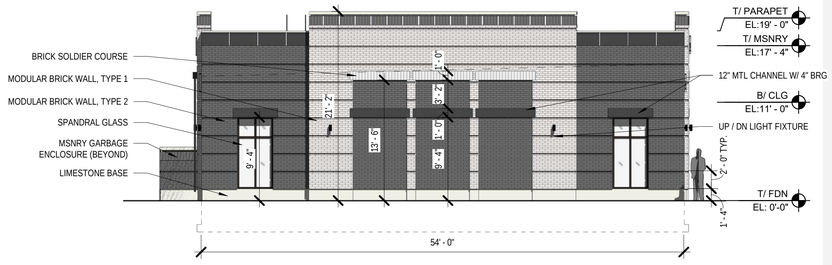
6 Cornice Detail

3/4" = 1'-0"



5 North Elevation

1/8" = 1'-0"



4 South Elevation

1/8" = 1'-0"

3 East Elevation

1/8" = 1'-0"

2 West Elevation

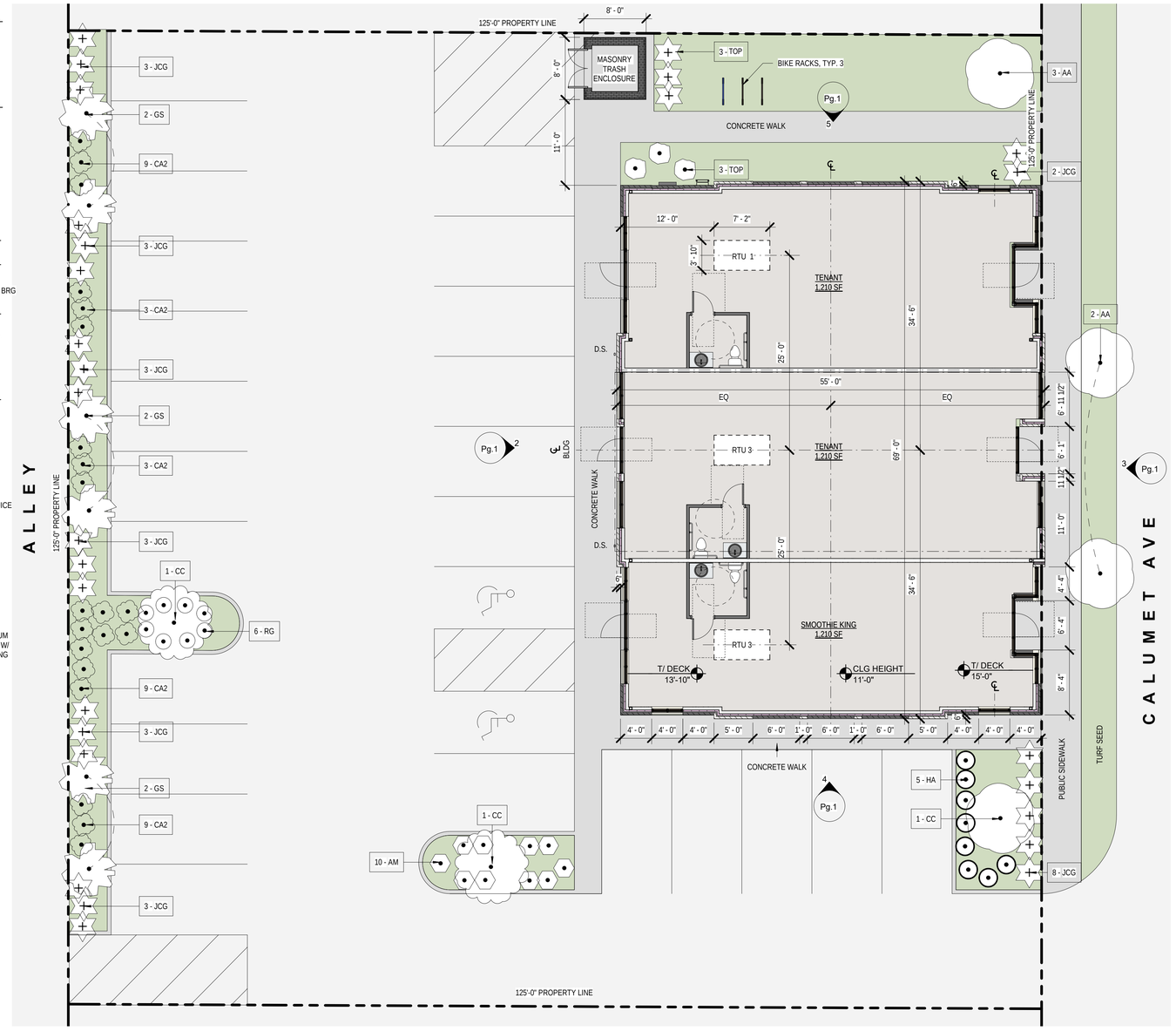
1/8" = 1'-0"

PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
	AA	3	ACER X FREEMANII 'AUTUMN FANTASY / FREEMAN MAPLE	B&B	2.5" CAL. MIN	
	CC	2	CELTIS OCCIDENTALIS 'CHICAGOLAND' / COMMON HACKBERRY	B&B	2.5" CAL. MIN	
	GS	6	GLEDITSIA TRIACANTHOS 'SKYLINE' / SKYLINE HONEY LOCUST	B&B	2.5" CAL. MIN	
	TOP	6	THUJA OCCIDENTALIS 'PYRAMIDAL' / PYRAMIDAL ARBORVITAE	B&B	2"	
EVERGREEN SHRUB	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
	JCG	25	JUNIPER CHIN. 'SEA GREEN' / SEA GREEN JUNIPER	B&B		30" HT MIN
SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	SPACING	SIZE
	AM	10	ARONIA MELANOCARPA 'MORTON' TM \ IROQUIS BEAUTY BLACK CHOKEBERRY	3 GAL	SEE PLAN	18" HT MIN
	CA2	21	CEANOTHUS AMERICANUS / NEW JERSEY TEA	3 GAL	SEE PLAN	24" HT MIN
	HA	8	HYDRANGEA ARBORESCENS 'ANNABELLE' / ANNABELLE HYDRANGEA	3 GALS	SEE PLAN	24" HT MIN
	RG	8	RHUS AROMATICA 'GRO-LOW' / GRO-LOW FRAGRANT SUMAC	3 GAL	SEE PLAN	24" HT MIN
	ST	5	SPIREAA BETULIFOLIA 'TOR' / BIRCHLEAF SPIREA	3 GAL	SEE PLAN	18" HT MIN
GROUND COVER	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
			TURF SEED			

SITE PLAN LEGEND

- DIRECTIONAL ARROWS
- BUILDING ENTRY
- SERVICE ENTRY
- SETBACK
- LANDSCAPED ISLAND



1 Site Plan

1/8" = 1'-0"

CITY OF CHICAGO DOB

dA
domenella ARCHITECTSltd.
2000 N. Racine Ave.
Suite 2290
Chicago, Illinois
60614.6756
v. 773.528.2191
f. 773.528.3510

Rev. No.	Description	Date

"I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY OR UNDER MY DIRECT SUPERVISION, AND TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, THEY CONFORM TO THE CHICAGO BUILDING CODE."

Seals and Certificates

LICENSED ARCHITECT
DANTE L. DOMENELLA
01-14589
STATE OF ILLINOIS

Issue: *Issue for Review* Date: 08/30/2021

Tenant Retail Building
New Construction
8130-38 Calumet Ave
Munster, IN 46321

Checked By: DLD
Drawn By: XAJA
Project Number 2021.05.02

Site Plan & Elevations

Pg.1

2 Perspective View

1 Perspective View

dA
domenella ARCHITECTSltd.
2000 N. Racine Ave.
Suite 2290
Chicago, Illinois
60614.6756
v. 773.528.2191
f. 773.528.3510

Rev. No.	Description	Date

"I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY OR UNDER MY DIRECT SUPERVISION, AND TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, THEY CONFORM TO THE INTERNATIONAL BUILDING CODE."

LICENSED ARCHITECT
DANTE L. DOMENELLA
01-14569
STATE OF ILLINOIS

Seals and Certificates

Checked By: DLD

Drawn By: XAJA

Project Number 2021.05.02

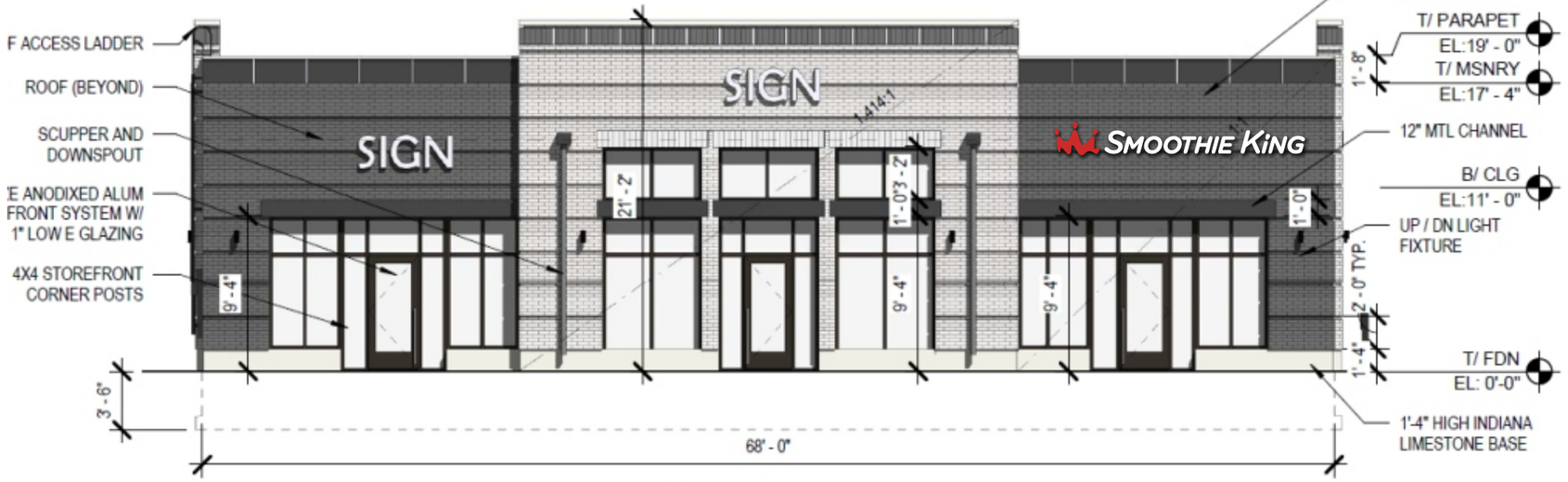
Issue: *Issue for Review* Date: 08/30/2021

Tenant Retail Building
New Construction
8130-38 Calumet Ave
Munster, IN 46321

Perspective

3 East Elevation

1/8" = 1'-0"



2 West Elevation

1/8" = 1'-0"

Atlantic Sign Company

2328 Florence Avenue
Cincinnati, OH 45206

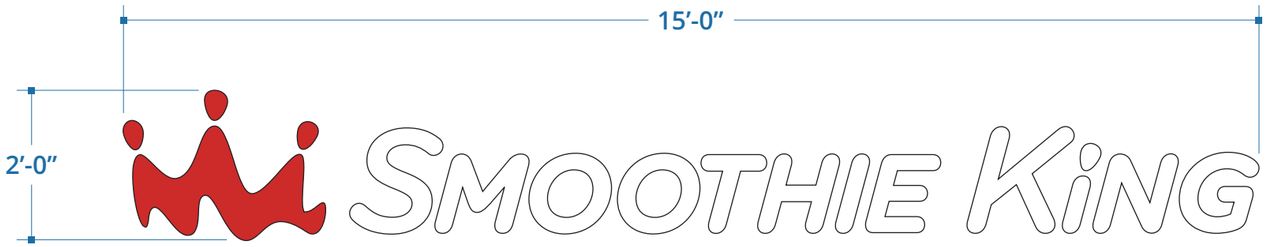
(513) 241-6775 | FAX (513) 241-5060

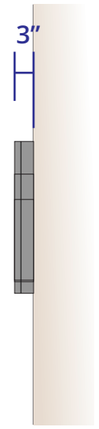
atlanticsigncompany.com

APPROVED

SIGNATURE DATE

CUSTOMER	SMOOTHIE KING - MUNSTER, IN
LOCATION	8130-38 CALUMET AVE, MUNSTER, IN, 46321
SALES REP	WILLIAM YUSKO
PROJECT MGR.	JESSICA REYNOLDS
DRAWN BY	GREG ESSERT
DATE	9-2-2021
FILE NAME:	103654_SMOOTHIE KING_MUNSTER IN_R7





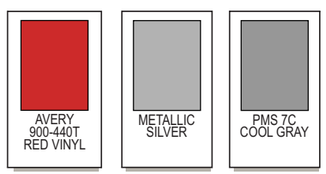
SIDE VIEW

LED ILLUMINATED CHANNEL LETTERS: 30 SQ FT - **QUANTITY 2**
1/2" SCALE

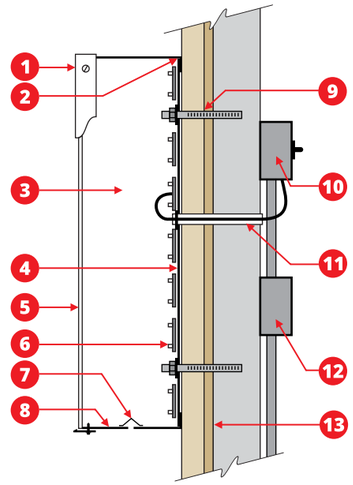
BACKS : 3MM ACM
RETURNS : .040" x 3" DEEP ALUM. RETURN - PMS COOL GRAY 7C
TRIM CAP : 1" METALLIC SILVER
FACES : .177" #7328 WHITE PLEX WITH RED OVERLAY ON CROWN
ILLUMINATION : USE WHITE LEDS & POWER SUPPLIES AS REQUIRED FOR PROPER ILLUMINATION - EXTERNAL DISCONNECT SWITCH ON "G" IN "KING"
MOUNTING: #8 X 3 1/2" WOOD SCREWS INTO WOOD BLOCKING/FRAMING FOR EIFS FACADE OR #12 X 2 1/2" TAPCONS W/ MINIMUM 2" EMBEDMENT IF GOING INTO BLOCK/BRICK W/ MIN OF 4 FASTENERS PER LETTER - SEAL ALL WALL PENETRATIONS W/ SILICONE

DISCONNECT SWITCH REQUIRED ON ALL RACEWAYS
GENERAL CONTRACTOR TO PROVIDE DEDICATED SIGN CIRCUIT TO SIGN AREA AS REQUIRED BY CODE

COLOR PALETTE



FLUSH MOUNTED - FACE LIT CHANNEL LETTERS



1. FACE TRIM-CAP
2. SILICONE SEAL - TYPICAL
3. INTERIOR PAINTED WHITE
4. .063" ALUMINUM BACK
5. 3/16" THICK ACRYLIC FACE
6. LED MODULES
7. WEEP HOLES (BAFFLES AS REQUIRED)
8. .040 ALUMINUM RETURN
9. 1/4"D. X 4" LONG ALL-THREAD WITH SILICONE ADHESIVE
10. LOW VOLTAGE LED POWER SUPPLY WITH DISCONNECT
11. METAL PASS-THRU WITH 16GA LOW VOLTAGE WIRE
12. 20 AMP/120 VOLT JUNCTION BOX BY OTHERS
13. WALL CONSTRUCTION TBD BY SURVEY

UL LISTED

Atlantic Sign Company
2328 Florence Avenue
Cincinnati, OH 45206
(513) 241-6775 | FAX (513) 241-5060
atlanticsigncompany.com

APPROVED
SIGNATURE DATE

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PROJECT MGR.	JESSICA REYNOLDS
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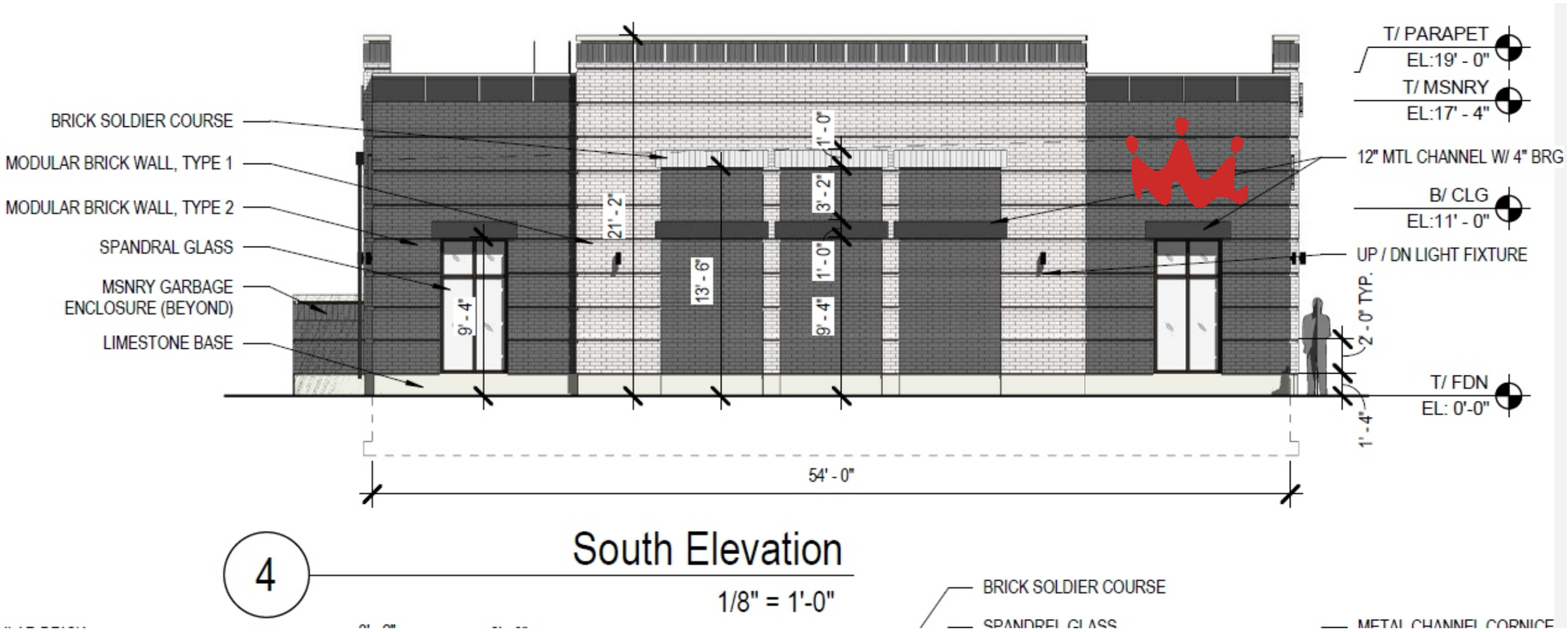
DATE	9-2-2021
FILE NAME:	103654_SMOOTHIE KING_MUNSTER IN_R7



4 South Elevation

1/8" = 1'-0"

BRICK SOLDIER COURSE

SPANDREL GLASS

METAL CHANNEL CORNICE

Atlantic Sign Company

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Cincinnati, OH 45206

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SIGNATURE DATE

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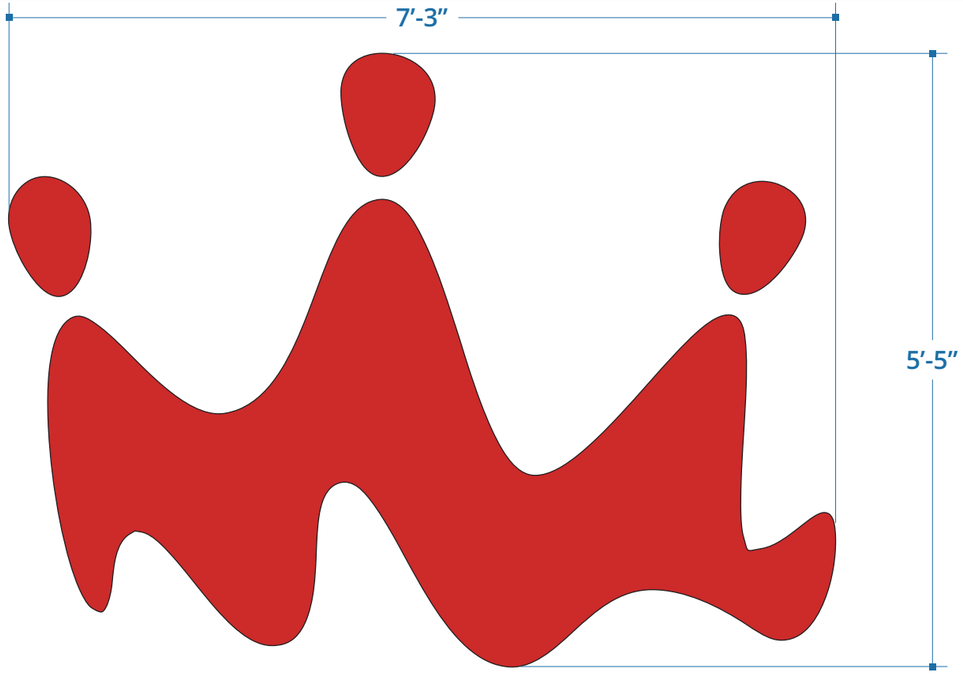
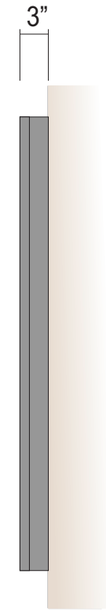




SIDE:
3/4" SCALE

ILLUMINATED CROWN LOGO: 39 SQUARE FEET • QUANTITY 1

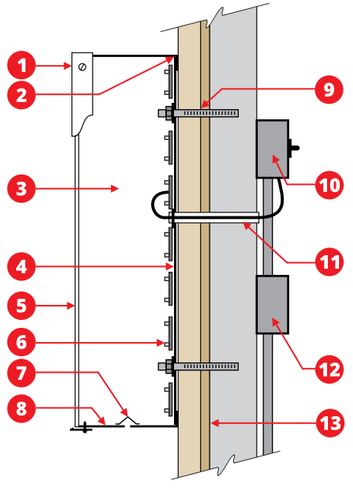
3/4" SCALE

BACKS : 3MM ACM
RETURNS : .040" x 3" DEEP ALUM. RETURN - PMS COOL GRAY 7C
TRIM CAP : 1" METALLIC SILVER
FACES : .177" #7328 WHITE PLEX WITH 1ST SURFACE VINYL **(SEE COLOR PALETTE)**
ILLUMINATION : USE WHITE LEDS & POWER SUPPLIES AS REQUIRED FOR PROPER ILLUMINATION - EXTERNAL DISCONNECT SWITCH
MOUNTING: #8 X 3 1/2" WOOD SCREWS INTO WOOD BLOCKING/FRAMING FOR EIFS FACADE OR #12 X 2 1/2" TAPCONS W/ MINIMUM 2" EMBEDMENT IF GOING INTO BLOCK/BRICK W/ MIN OF 4 FASTENERS PER UNIT - SEAL ALL WALL PENETRATIONS W/ SILICONE

COLOR PALETTE

AVERY 900-440T RED VINYL	METALLIC SILVER	PMS 7C COOL GRAY

FLUSH MOUNTED - FACE LIT CHANNEL LETTERS



1. FACE TRIM-CAP
2. SILICONE SEAL - TYPICAL
3. INTERIOR PAINTED WHITE
4. .063" ALUMINUM BACK
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6. LED MODULES
7. WEEP HOLES (BAFFLES AS REQUIRED)
8. .040 ALUMINUM RETURN
9. 1/4"D. X 4" LONG ALL-THREAD WITH SILICONE ADHESIVE
10. LOW VOLTAGE LED POWER SUPPLY WITH DISCONNECT
11. METAL PASS-THRU WITH 16GA LOW VOLTAGE WIRE
12. 20 AMP/120 VOLT JUNCTION BOX BY OTHERS
13. WALL CONSTRUCTION TBD BY SURVEY

UL LISTED

Atlantic Sign Company
2328 Florence Avenue
Cincinnati, OH 45206
(513) 241-6775 | FAX (513) 241-5060
atlanticsigncompany.com

APPROVED

SIGNATURE DATE

CUSTOMER	SMOOTHIE KING - MUNSTER, IN
LOCATION	8130-38 CALUMET AVE, MUNSTER, IN, 46321
SALES REP	WILLIAM YUSKO
PROJECT MGR.	JESSICA REYNOLDS
DRAWN BY	GREG ESSERT
DATE	9-2-2021
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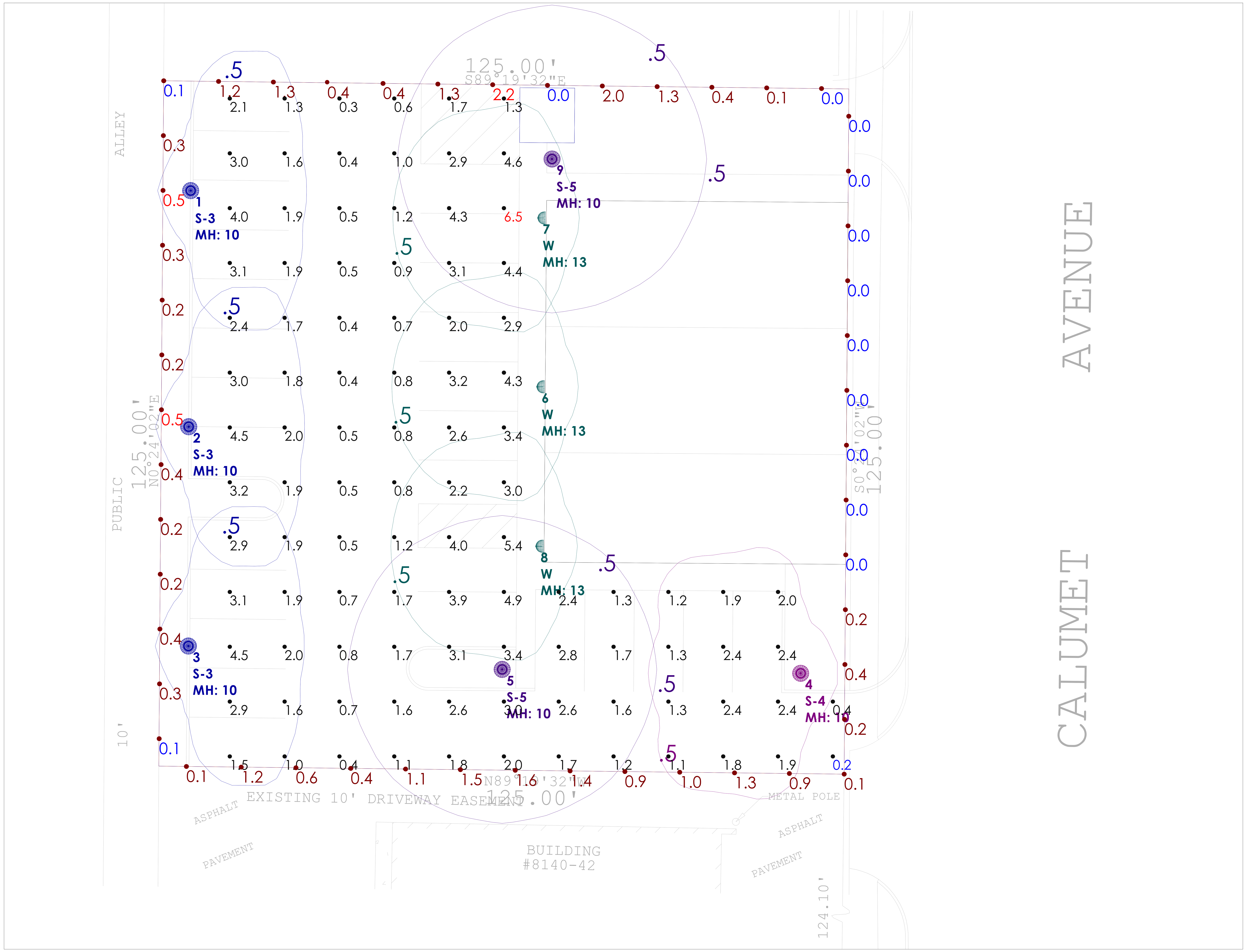

Luminaire Schedule- Part numbers are provided by the manufacturer and are only intended to be used as a reference to output and optics used.

Symbol	Qty	Tag	Arrangement	Lum. Watts	Arr. Watts	Lum. Lumens	Arr. Lum. Lumens	LLF	Manufacturer	Description
	3	S-3	SINGLE	58.31	58.31	2908	2908	0.900	KIM LIGHTING	SRS2-72L-260-3K7-3-BC-CP
	1	S-4	SINGLE	58.31	58.31	3055	3055	0.900	KIM LIGHTING	SRS2-72L-260-3K7-4W-BC-CP
	2	S-5	SINGLE	58.31	58.31	5826	5826	0.900	KIM LIGHTING	SRS2-72L-260-3K7-5W-CP
	3	W	SINGLE	21	21	3067	3067	0.850	HUBBELL OUTDOOR	RDI2-D-20-3K7-FT-X-X

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	Description
PARKING LOT_Planar	Illuminance	Fc	2.08	6.5	0.2	10.40	32.50	READINGS @ GRADE
PROPERTY LINE- WEST	Illuminance	Fc	0.28	0.5	0.1	2.80	5.00	READINGS @ GRADE
PROPERTY LINES- N,E,S	Illuminance	Fc	0.63	2.2	0.0	N.A.	N.A.	READINGS @ GRADE

Luminaire Location Summary

LumNo	Tag (Qty)	Label	Mtg Ht	Orient	Tilt
1	S-3 (1)	SRS2-72L-260-3K7-3-BC-CP	10	0	0
2	S-3 (1)	SRS2-72L-260-3K7-3-BC-CP	10	0	0
3	S-3 (1)	SRS2-72L-260-3K7-3-BC-CP	10	0	0
4	S-4 (1)	SRS2-72L-260-3K7-4W-BC-CP	10	180	0
5	S-5 (1)	SRS2-72L-260-3K7-5W-CP	10	180	0
6	W (1)	RDI2-D-20-3K7-FT	13	180	0
7	W (1)	RDI2-D-20-3K7-FT	13	180	0
8	W (1)	RDI2-D-20-3K7-FT	13	180	0
9	S-5 (1)	SRS2-72L-260-3K7-5W-CP	10	180	0

Parking Lot Design Guide	Basic (for typical conditions)	Basic Enhanced Security (in consideration of personal security or vandalism)	Security (security lighting for public spaces)	High Security (security lighting for public spaces)
	lux/fc	lux/fc	lux/fc	lux/fc
Minimum Horizontal Illuminance (Measured on parking surface without any shadowing from any object)	2.0/0.2	5.0/0.5	10.0/1.0	30.0-60.0/3.0-6.0
Uniformity Ratio Maximum - to - Minimum	20:1	15:1	15:1	*4:1 *Avg-Min
Minimum Vertical Illuminance (for facial recognition measured at 5' above the parking surface at the point of lowest horizontal illuminance)	1.0/0.1	2.5/0.25	5.0-8.0/0.5-0.8	12-60/1.2-6.0

Recommendations based on RP-33-99, RP-20-98, 9th Edition IESNA Lighting Handbook

PG-Enlighten is neither licensed nor insured to determine code compliance. Code compliance review by others.

enlighten

#	Date	Comments

Revisions

Drawn By: Joeli Collins
Drawn By: joeli.collins@pg-enlighten.com
Date:7/23/2021
Scale: 1" = 10'

Project Name:
SMOOTHIE KING SITE

Location:
8130-8138 CALUMET AVE, MUNSTER, IN

KIM LIGHTING®

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

SRSP2

DECORATIVE AND POST TOP

Solitaire®

FEATURES

- TiR Optics
- Patented low profile luminaire
- Available in 580nm, 3000K, 4000K and 5000K standard CCT
- Type 1, 2, 3, 4W, 5QM, 5W distributions
- 0 - 10V dimming drivers standard
- IP66 optic assembly

c UL us LISTED

RELATED PRODUCTS

Intent KFL LTV8

PHOTOMETRY

DELIVERED LUMENS

DIMENSIONS

SPECIFICATIONS

CONSTRUCTION

- One piece non die-cast housing, low copper (<0.6% Cu) Aluminum Alloy with integral cooling ribs over the optical chamber and electrical compartment
- All hardware is stainless steel or electro-zinc plated steel
- Finish: fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat
- One-piece die-cast, low copper (<0 6% Cu) aluminum alloy lens frame.
- Silicone gaskets seal the compartments at the barrier surface.

INSTALLATION

- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury

OPTICS

- Optical cartridge system consisting of a die cast heat sink, LED engine, TIR optics, gasket and bezel plate
- Cartridge is easily disassembled to replace components. Optics are held in place without the use of adhesives
- Molded silicone gasket ensures a weatherproof seal around each individual LED

OPTICS (CONTINUED)

- Features revolutionary individual LED optical control based on high performance TIR optical designs
- Clear Acrylic lens is standard
- Optional BackLight Control for complete control of unwanted backlight
- IP66 Optical assembly
- Type 1, 2, 3, 4W, 5QM, and 5W standard distributions. Custom available
- Amber, 3000K, 4000K, 5000K standard CCT. Custom available
- Die-cast, low copper aluminum heat sink modules provide thermal transfer at PCB level
- Anodized aluminum heat sink modules

ELECTRICAL

- Dimming range from 10% to 100% through the use of standard 0-10V interface on the programmable driver
- Modular wiring harness in the service area provides user access to the dimming circuitry
- Optional factory programmed dimming profile
- Surge protection: 10kV surge suppression
- SF for 120, 277, 347 Line volts
  DF for 208, 240, 480 Line volts
- Wiring: 14GA wires rated 150°C

CONTROLS

- Optional PC 7 Pin Receptacle 7-pin construction allows for a user-defined interface and provides a controlled definition of operational performance. ANSI twist-lock control module by-others
- Button Photocell
- Consult factory for additional sensors.

CERTIFICATIONS AND LISTINGS

- Listed to UL1598 and CSA C22.2#250.0-24 for wet locations
- RoHS compliant

WARRANTY

- 5 year warranty
- See HLI Standard Warranty for additional information

KEY DATA	
Lumen Range	3155–15616
Wattage Range	58.31–135.6
Efficacy Range (LPW)	49.9–124.8
Reported Life (Hours)	L70/60,000
Weight	45 lbs / 20.41 kg
EPS Front View / Side View	1.5

HUBBELL® HUBBELL Lighting

KIM LIGHTING®

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

SRSP2

DECORATIVE AND POST TOP

ORDERING GUIDE

Example: SRSP2-72L-600-3K7-3-CP-UNV-BL-PC- 16

CATALOG #

Solitaire

Housing		Mounting		Engine		CCT/CRI		Distribution		Lens	
SRSP2	Solitaire 2.0	**PT**	Post Top	**72L-260**	72L - 260mA-6000lm	**AM**	Amber-595nm Peak [1]	**1**	Type I	**CP**	Clear Lexan
		FM	Flush Mount, for use with pole diameters from 3.375" through 5"	**72L-400**	72L - 400mA-9000lm	**3K7**	3000K, 70 CRI	**2**	Type II	**WA**	White Acrylic [2]
				72L-600	72L - 600mA-14000lm	**4K7**	4000K, 70 CRI	**3**	Type III		
						5K7	5000K, 70 CRI	**4W**	Type IV Wide		
								5QM	Type V Square Medium		
								5W	Type V Wide (Round)		

Voltage		Fixture Finish		Option		Pole Height	
UNV	120-277V	**BLS**	Black Gloss Smooth	**7PR**	7-pin Receptacle	**8**	8'
347	347V	**BLT**	Black Matte Textured	**BC**	Backlight Control	**10**	10'
480	480V	**DBS**	Dark Bronze Gloss Smooth	**PC**	Button Photocell	**12**	12'
		DBT	Dark Bronze Matte Textured	**SF**	Single Fuse for 120, 277, 347 Line volts	**14**	14'
		GTT	Graphite Matte Textured	**DF**	Double Fuse for 208, 240, 480 Line volts	**16**	16'
		LGS	Light Grey Gloss Smooth			**20**	20'
		LGT	Light Grey Matte Textured				
		PSS	Platinum Silver Gloss Smooth				
		VGT	Verde Green Matte Textured				
		WHS	White Gloss Smooth				
		WHT	White Matte Textured				

Color Option	
CC [3]	Custom Color

Notes:

1 Turtle friendly

2 Only available with Type 3 and Type 5 Distributions

3 Consult factory for custom color, marine and corrosive finish options

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HUBBELL® HUBBELL Lighting

SRSP2

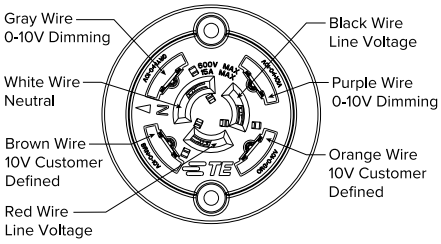
DECORATIVE AND POST TOP

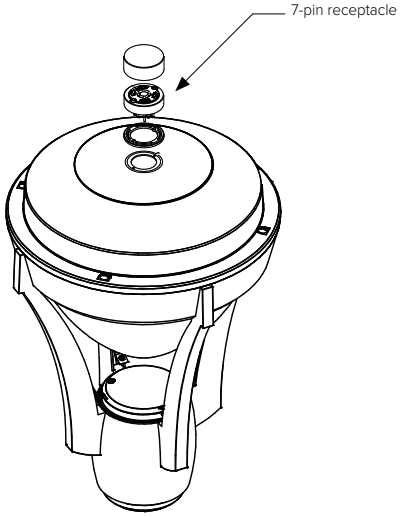
PRODUCT EXCEPTIONS & DETAILS (CONTINUED)

CONTROLS

7PR

- Fully gasketed and wired 7-pin receptacle option. Easy access location above the electrical compartment. 7-pin construction allows for a user-defined interface and provides a controlled definition of operational performance. ANSI twist-lock control module by-others.
- Standard customer operation modes:
  1. Traditional on/off photoelectric control.
  2. 5-pin wireless photoelectric control for added dimming feature.
  3. 7-pin wireless photoelectric control for dimming and additional I/O connections for customer use.





DIMMING:

- Dimming range from 100% to 10% through the use of the standard 0-10V interface on the programmable driver.
- Modular wiring harness in the service area provides user access to the dimming circuitry.
- Dimming circuitry compatible with 0-10V, user-defined control devices.
- Optional factory programmed dimming profile.

ASTRODIM

- AstroDIM provides multi-stage night-time power reduction based on an internal timer referenced to the power on/off time. There is no need for an external control infrastructure. The unit automatically performs a dimming profile based on the predefined scheduled reference to the midpoint, which is calculated based on the power on/off times. Please contact factory for feasibility.

OPTIONAL FUSING:

- SF for 120, 277, and 347 Line volts
- DF for 208, 240, and 480 Line volts
- High temperature fuse holders factory installed inside the fixture housing.
- Fuse is included.

CAUTION:

- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

KIM LIGHTING®

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

SRSP2

DECORATIVE AND POST TOP

DELIVERED LUMENS

STANDARD CLEAR ACRYLIC LENS

LED #	Nominal Lumen Package	Drive Current	Distribution	3000K 70CRI					4000K 70CRI					5000K 70CRI				
				Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w
					B	U	G			B	U	G			B	U	G	
72L	6,000	260	FR	6313	1	3	1	108.3	6487	1	3	1	111.2	7271	1	3	1	124.7
			FR-BC	3851	0	3	1	66.0	3957	0	3	1	67.9	4436	0	3	1	76.1
			2	6089	1	3	1	104.4	6256	1	3	1	107.3	7013	1	3	1	120.3
			2-BC	3221	0	3	1	55.2	3310	0	3	1	56.8	3710	0	3	1	63.6
			3	6206	1	3	2	106.4	6378	1	3	2	109.4	7149	1	3	2	122.6
			3-BC	3155	0	3	1	54.1	3242	0	3	1	55.6	3634	0	3	1	62.3
			4W	5812	1	3	2	99.7	5972	1	3	2	102.4	6694	1	3	2	114.8
			4W-BC	3314	0	3	1	56.8	3405	0	3	1	58.4	3817	0	3	1	65.5
			5QM	6148	2	3	1	105.4	6318	2	3	1	108.4	7082	2	3	1	121.5
			5W	6320	3	3	1	108.4	6494	3	3	1	111.4	7279	3	3	1	124.8
	9,000	400	FR	9284	1	3	2	101.5	9540	1	3	2	104.3	10694	2	4	2	116.9
			FR-BC	5664	1	3	1	61.9	5820	1	3	1	63.6	6524	1	3	1	71.3
			2	8954	2	3	2	97.9	9201	2	3	2	100.6	10314	2	3	2	112.8
			2-BC	4737	0	3	1	51.8	4867	1	3	1	53.2	5456	1	3	1	59.7
			3	9128	2	3	2	99.8	9379	2	3	2	102.6	10514	2	3	2	115.0
			3-BC	4640	0	3	1	50.7	4768	0	3	1	52.1	5344	1	3	1	58.4
			4W	8547	1	3	2	93.5	8783	1	3	2	96.0	9845	2	3	2	107.7
			4W-BC	4873	1	3	2	53.3	5008	1	3	2	54.8	5613	1	3	2	61.4
			5QM	9042	3	3	1	98.9	9292	3	3	1	101.6	10415	3	3	1	113.9
			5W	9294	3	3	2	101.6	9551	3	3	2	104.4	10706	3	3	2	117.1
	14,000	600	FR	13541	2	4	2	99.8	13915	2	4	2	102.6	15598	2	4	2	114.8
			FR-BC	8261	1	3	2	60.9	8489	1	3	2	62.6	9516	1	3	2	70.3
			2	13061	2	3	2	96.3	13421	2	3	2	99.0	15044	2	3	2	110.8
			2-BC	6909	1	3	1	50.9	7099	1	3	1	52.3	7958	1	3	1	58.8
			3	13314	2	3	2	98.3	13681	2	3	2	100.9	15336	2	3	2	112.4
			3-BC	6768	1	3	2	49.9	6954	1	3	2	51.3	7796	1	3	2	57.6
			4W	12467	2	3	3	91.9	12811	2	3	3	94.5	14360	2	3	3	105.8
			4W-BC	7108	1	3	2	52.4	7304	1	3	2	53.9	8188	1	3	2	60.6
			5QM	13189	3	3	2	97.3	13553	3	3	2	99.9	15192	4	3	2	112.0
			5W	13557	4	3	2	100.0	13931	4	3	2	102.7	15616	4	3	2	115.1

CRI Lumen Multiplier		
CCT	80 CRI	90 CRI
3000K	0.9119	0.7033
4000K	0.8941	N/A

Amber	
CCT	Multiplier
5000K	1
AM	0.1727

2700K Multiplier	
CCT	Multiplier
5000K	1
2700K	0.897

HUBBELL® Lighting

SRSP2

DECORATIVE AND POST TOP

DELIVERED LUMENS (CONTINUED)

CP (CLEAR POLYCARBONATE) LENS

LED #	Nominal Lumen Package	Drive Current	Distribution	3000K 70CRI					4000K 70CRI					5000K 70CRI				
				Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w
					B	U	G			B	U	G			B	U	G	
72L	6,000	260	FR	5819	1	3	1	99.8	5979	1	3	1	102.5	6703	1	3	1	114.9
			FR-BC	3550	0	3	1	60.9	3648	0	3	1	62.6	4089	0	3	1	70.1
			2	5612	1	3	1	96.3	5767	1	3	1	98.9	6465	1	3	1	110.9
			2-BC	2969	0	3	1	50.9	3051	0	3	1	52.3	3420	0	3	1	58.6
			3	5721	1	3	1	98.1	5879	1	3	1	100.8	6590	1	3	2	113.0
			3-BC	2908	0	3	1	49.9	2988	0	3	1	51.3	3350	0	3	1	57.4
			4W	5357	1	3	2	91.9	5505	1	3	2	94.4	6171	1	3	2	105.8
			4W-BC	3055	0	3	1	52.4	3139	0	3	1	53.8	3518	0	3	1	60.3
			5QM	5668	2	3	1	97.2	5824	2	3	1	99.9	6528	2	3	1	112.0
			5W	5826	3	3	1	99.9	5986	3	3	1	102.7	6710	3	3	1	115.1
	9,000	400	FR	8558	1	3	2	93.6	8794	1	3	2	96.2	9857	1	3	2	107.8
			FR-BC	5221	0	3	1	57.1	5365	1	3	1	58.7	6014	1	3	1	65.8
			2	8254	1	3	1	90.3	8482	1	3	1	92.7	9508	2	3	2	104.0
			2-BC	4366	0	3	1	47.7	4487	0	3	1	49.1	5029	1	3	1	55.0
			3	8414	2	3	2	92.0	8646	2	3	2	94.5	9692	2	3	2	106.0
			3-BC	4277	0	3	1	46.8	4395	0	3	1	48.1	4927	1	3	1	53.9
			4W	7879	1	3	2	86.2	8096	1	3	2	88.5	9075	1	3	2	99.2
			4W-BC	4492	1	3	1	49.1	4616	1	3	1	50.5	5174	1	3	2	56.6
			5QM	8335	3	3	1	91.1	8565	3	3	1	93.7	9601	3	3	1	105.0
			5W	8568	3	3	2	93.7	8804	3	3	2	96.3	9869	3	3	2	107.9
	14,000	600	FR	12483	2	4	2	92.1	12827	2	4	2	94.6	14378	2	4	2	106.0
			FR-BC	7615	1	3	2	56.2	7825	1	3	2	57.7	8772	1	3	2	64.7
			2	12040	2	3	2	88.8	12372	2	3	2	91.2	13868	2	3	2	102.3
			2-BC	6369	1	3	1	47.0	6544	1	3	1	48.3	7336	1	3	1	54.1
			3	12273	2	3	2	90.5	12611	2	3	2	93.0	14136	2	3	2	104.2
			3-BC	6239	1	3	2	46.0	6411	1	3	2	47.3	7186	1	3	2	53.0
			4W	11492	2	3	2	84.7	11809	2	3	2	87.1	13237	2	3	3	97.6
			4W-BC	6553	1	3	2	48.3	6733	1	3	2	49.7	7548	1	3	2	55.7
			5QM	12158	3	3	2	89.7	12493	3	3	2	92.1	14004	3	3	2	103.3
			5W	12497	4	3	2	92.2	12842	4	3	2	94.7	14395	4	3	2	106.2

WA (WHITE ACRYLIC) LENS

LED #	Nominal Lumen Package	Drive Current	Distribution	3000K 70CRI					4000K 70CRI					5000K 70CRI				
				Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w
					B	U	G			B	U	G			B	U	G	
72L	6,000	260	3	4538	1	3	3	77.8	4663	1	3	3	80.0	5227	1	3	3	89.6
			5W	4621	2	3	2	79.3	4749	2	3	2	81.4	5323	2	3	3	91.3
	9,000	400	3	6674	2	3	3	73.0	6858	2	3	3	75.0	7688	2	3	3	84.1
			5W	6796	3	3	3	74.3	6984	3	3	3	76.4	7828	3	4	3	85.6
	14,000	600	3	9657	2	4	4	71.2	9924	2	4	4	73.2	11124	2	4	4	82.0
			5W	9992	3	4	3	73.7	10268	3	4	3	75.7	11509	3	4	4	84.6

KIM LIGHTING®

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TYPE: PROJECT:

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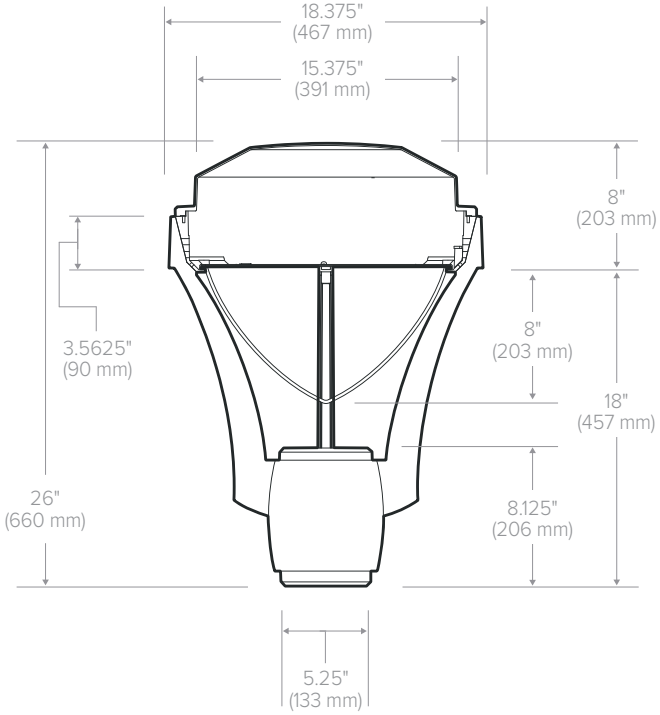
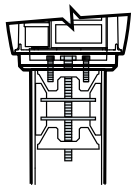
SRSP2

DECORATIVE AND POST TOP

DIMENSIONS

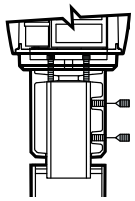


FRONT VIEW



FLUSH MOUNT

- Slips into a 3.375" Ø - 5" Ø open top pole or tenon with up to .25" profile thickness



POST TOP

- Slips on to a 2.375" Ø - pole or tenon with 4" of engagement

HUBBELL® Lighting

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DATE: LOCATION:

TYPE: PROJECT:

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DECORATIVE AND POST TOP

PHOTOMETRY

SRS2-72L-600-4K7-1

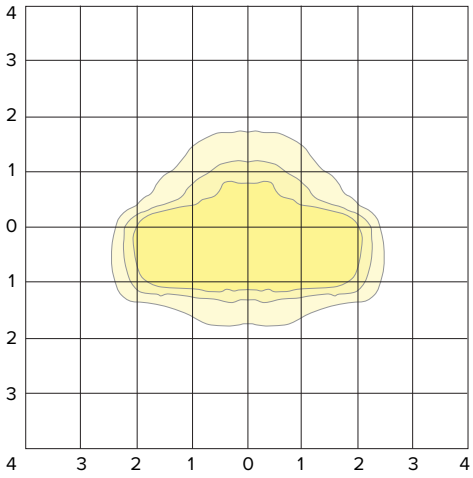
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**13915**
Watts	**135.6**
Efficacy	**102.6**
IES Type	**I**
BUG Rating	**B2-U4-G2**
Mounting Height	**15 ft**
Grid Scale	**15 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	10,473	75.3%
Downward House Side	2,428	17.4%
Downward Total	12,901	92.7%
Upward Street Side	441	3.2%
Upward House Side	572	4.1%
Upward Total	1,013	7.3%
Total Flux	13,914	100.0%

ISOFOOT CANDLE PLOT



SRS2-72L-600-4K7-2

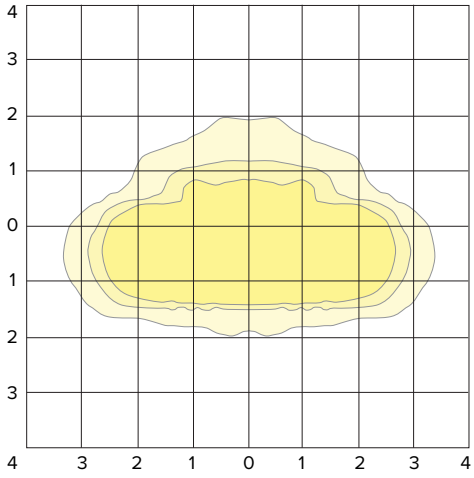
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**13422**
Watts	**135.6**
Efficacy	**99.0**
IES Type	**II**
BUG Rating	**B2-U3-G2**
Mounting Height	**15 ft**
Grid Scale	**15 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	10,073	75.0%
Downward House Side	2,693	20.1%
Downward Total	12,766	95.1%
Upward Street Side	284	2.1%
Upward House Side	372	2.8%
Upward Total	656	4.9%
Total Flux	13,422	100.0%

ISOFOOT CANDLE PLOT



SRS2-72L-600-4K7-3

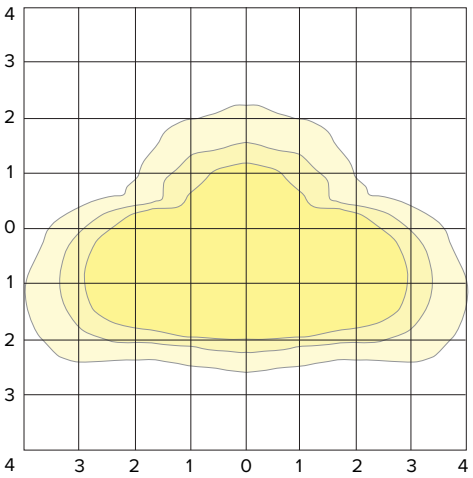
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**13681**
Watts	**135.23**
Efficacy	**101.2**
IES Type	**III**
BUG Rating	**B2-U3-G2**
Mounting Height	**15 ft**
Grid Scale	**15 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	10,431	76.2%
Downward House Side	2,621	19.2%
Downward Total	13,052	95.4%
Upward Street Side	282	2.1%
Upward House Side	347	2.5%
Upward Total	629	4.6%
Total Flux	13,681	100.0%

ISOFOOT CANDLE PLOT



HUBBELL® Lighting

SRSP2

DECORATIVE AND POST TOP

PHOTOMETRY (CONTINUED)

SRS2-72L-600-4K7-4W

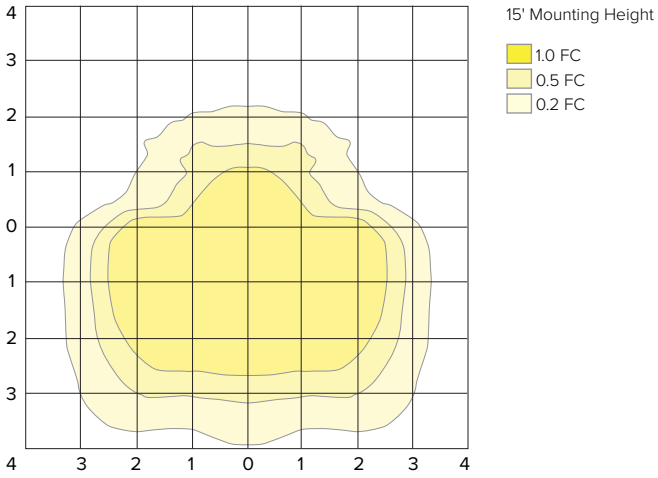
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**12810**
Watts	**135.6**
Efficacy	**94.5**
IES Type	**IV**
BUG Rating	**B2-U3-G3**
Mounting Height	**15 ft**
Grid Scale	**15 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	10,248	80.0%
Downward House Side	2,063	16.1%
Downward Total	12,311	96.1%
Upward Street Side	223	1.7%
Upward House Side	276	2.2%
Upward Total	499	3.9%
Total Flux	12,810	100.0%

ISOFOOT CANDLE PLOT



SRS2-72L-600-4K7-5Q

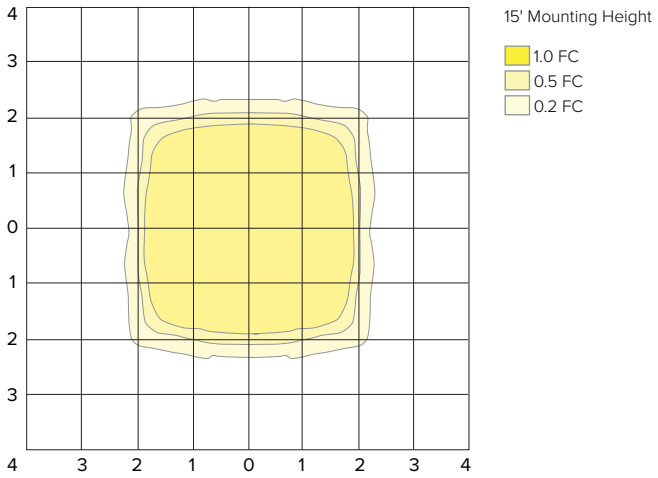
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**13554**
Watts	**135.6**
Efficacy	**100.0**
IES Type	**VQ**
BUG Rating	**B3-U3-G2**
Mounting Height	**15 ft**
Grid Scale	**15 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	6,506	48.0%
Downward House Side	6,506	48.0%
Downward Total	13,012	96.0%
Upward Street Side	271	2.0%
Upward House Side	271	2.0%
Upward Total	542	4.0%
Total Flux	13,554	100.0%

ISOFOOT CANDLE PLOT



SRS2-72L-600-4K7-5W

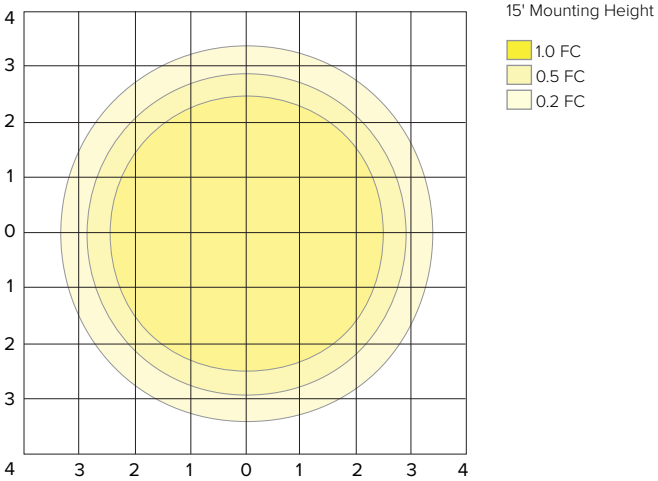
LUMINAIRE DATA

Description	**4000K, 70CRI**
Delivered Lumens	**13931**
Watts	**135.6**
Efficacy	**102.7**
IES Type	**VW**
BUG Rating	**B4-U3-G2**
Mounting Height	**15 ft**
Grid Scale	**15 ft**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	6,716	48.2%
Downward House Side	6,716	48.2%
Downward Total	13,432	96.4%
Upward Street Side	250	1.8%
Upward House Side	250	1.8%
Upward Total	499	3.6%
Total Flux	13,931	100.0%

ISOFOOT CANDLE PLOT



KIM LIGHTING®

DATE: LOCATION:

TYPE: PROJECT:

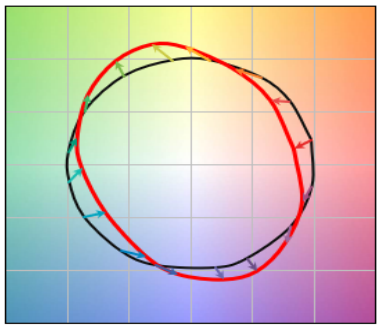
CATALOG #:

SRSP2

DECORATIVE AND POST TOP

TM-30 DATA

COLOR VECTOR GRAPHIC

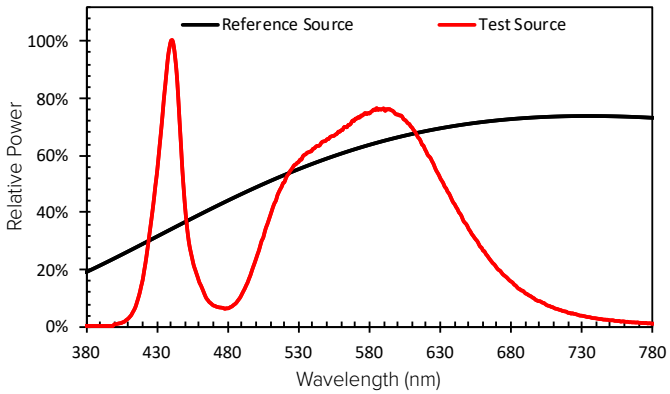


Reference Illuminant — Test Source

TEST SOURCE

R_f	68
R_g	99
CCT(K)	3947
D_{UV}	0.0004
x	0.3831
y	0.3793
CIE R_a	72

SPECTRAL POWER DISTRIBUTION COMPARISON



ELECTRICAL DATA

LED #	System Watts	Current	Line Voltage		Amps AC						Min Power Factor	Max. THD (%)	Dimming				
			VAC	Hz	120	208	240	277	347	480			Dimming Range	Source Current Out		Absolute Voltage	
														Min	Max	Min	Max
72L	58.3	260 mA	120-480	50/60	0.49	0.28	0.24	0.21	0.17	0.12	>0.9	20	10% to 100%	0mA	1mA	0V	10V
	91.45	400 mA			0.76	0.44	0.38	0.33	0.26	0.19							
	135.6	600 mA			1.13	0.65	0.57	0.49	0.39	0.28							

TM-21 Lifetime Calculation - Projected Lumen Maintenance (25°C / 77°C)						
HOURS	0	25,000	36,000	50,000	100,000	Reported L70
Projected Lumen Maintenance	100%	92.5%	90.4%	87.7%	78.9%	>60000

HUBBELL® HUBBELL Lighting

GEOPAK SERIES SIZE 2 LED

Architectural Wallpack

TRP2/RDI2 Low Glare **NEW**

Cat.#

Job

Type

HUBBELL Outdoor Lighting

Approvals

SPECIFICATIONS

Applications:
Medium sized architectural wallpacks in two stylish shapes accentuate building architecture and provide excellent illumination and uniformity

Construction:
- Die-cast aluminum housing and door
- Seven powder coat standard finishes, plus custom color options

LED/Optics:
- Precision crafted optics and reflectors provide up to 150 LPW and zero pixelation over the lens for maximum visual comfort
- Wide Throw and Forward Throw distributions available
- 3000K - 70 CRI, 4000K - 70 CRI, and 5000K - 70 CRI, CCT nominal

Electrical:
- Optional Dual Drivers & Dual Power Feeds for 50 and 70 watt versions
- 120-277, 347 and 480 voltage, 50/60Hz
- Power factor ≥ 90%
- THD (Total Harmonic Distortion) <20%
- Ambient operating temperature -40°C to 40°C

Installation/Mounting:
- Quick-mount adapter with gasket seal provides easy installation to wall or to recessed junction box (4" square junction box). Fixture attaches by two Allen-head hidden fasteners for tamper resistance.
- Black box accessory available for surface conduit application

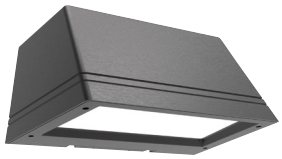
Options/Controls:
- Drivers are 0-10V dimming standard
- Universal button photocontrol for dusk to dawn energy savings
- Occupancy sensor options available for complete on/off and dimming control

Secondary Distribution:
- Optional secondary distributions provide approximately 5% uplight for lighting building facades and/or providing direct/indirect lighting for under canopy applications
- Available in three distribution including Wall Graze, Spot/Column and Canopy

Listings:
- IP65 rated housing
- DesignLights Consortium® (DLC) qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org
- Zero uplight (U0), dark sky, neighbor friendly (excludes uplight versions)
- Drivers IP66 and RoHS compliant

Warranty:
For more information visit:
http://www.hubbelloutdoor.com/resources warranty/

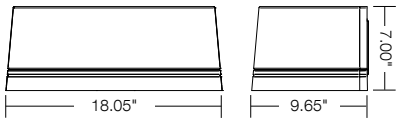
PRODUCT IMAGE(S)



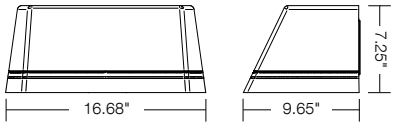
Trapezoid

Radius

DIMENSIONS



RDI2
Weight:
16 lbs (7.3 kg)



TRP2
Weight:
16 lbs (7.3 kg)

CERTIFICATIONS/LISTINGS

*3000K and warmer CCTs only

SHIPPING INFORMATION

Catalog Number	G.W(kg)/ CTN	Carton Dimensions		
		Length Inch (cm)	Width Inch (cm)	Height Inch (cm)
RDI2	18 (8.2)	20.5 (52)	9.5 (24)	12 (30)
TRP2	16 (7.3)	18.5 (47)	9.5 (24)	11.5 (29)

ORDERING INFORMATION

ORDERING EXAMPLE: TRP2-D-30-3K7-FT-UNV-UG-GT-PC

[ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ]

FAMILY
- **TRP2** Trapezoid
- **RDI2** Radius

LEDS - WATTAGE
- **D-20** 20w Low Glare Diffuse
- **D-30** 30w Low Glare Diffuse
- **D-50** 50w Low Glare Diffuse
- **D-70** 70w Low Glare Diffuse

CCT
- **3K7** 3000K, 70CRI
- **4K7** 4000K, 70CRI
- **5K7** 5000K, 70CRI

DISTRIBUTION
- **FT** Forward Throw Diffused
- **WT** Wide Throw Diffused

VOLTAGE
- **UNV** 120-277V
- **120** 120V
- **208** 208V
- **240** 240V
- **277** 277V
- **UHV**[1] 347/480V
- **347**[1] 347V
- **480**[1] 480V

FINISH
- **BL** Black Textured
- **DB** Dark Bronze Textured
- **GT** Graphite Textured
- **GYS** Light Gray Smooth
- **PS** Platinum Silver Smooth
- **WH** White Textured
- **CC** Custom Color

SECONDARY DISTRIBUTION
- **BLANK** Downlight Only
- **UG**[2] Uplight Wall Graze
- **UC**[2] Uplight Canopy
- **US**[2] Uplight Spot/Column

CONTROL OPTIONS
- **PC** Button Photocontrol
- **SCP**[4,5] Programmable occupancy sensor, factory default is 10% light output
- **SCO**[4] Sensor Control, On/Off

SPEC SCP/SCO MOUNT HEIGHT
- **-8F** Up to 8ft mount height
- **-20F** Up to 20ft mount height

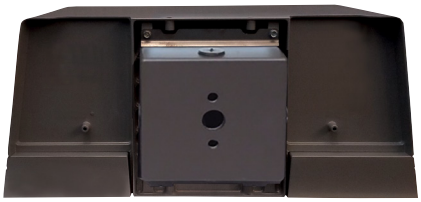
OPTIONS
- **SF**[3] Single Fuse & Fuse Holder
- **DF**[3] Double Fuse & Fuse Holder
- **2DR**[6] Dual Drivers
- **2PF**[6] Dual Power Feeds

[1] 70 watt version only, not available with PC, SCP or SCO sensors
[2] Not available with SF, DF, 2DR or 2PF electrical options
[3] Must specify voltage
[4] PCU option not applicable, included in sensor
[5] Must order minimum of one remote control to program dimming settings, 0-10V fully adjustable dimming with automatic daylight calibration and different time delay settings
[6] Not available with 20w, 30w or uplight versions

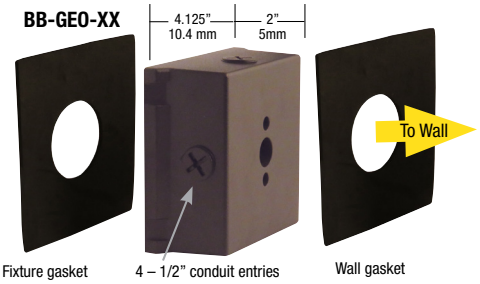
ACCESSORIES - Order separately

Catalog Number	Description
SCP-REMOTE*	Remote control for SCP option. Order at least one per project to program and control dimming settings
BB-GEO-XX	Black box with 4 - 1/2" threaded conduit holes, specify finish by replacing "XX" with finish selection, eg. Dark Bronze "DB"

* Must order minimum of one remote control to program dimming settings, 0-10V fully adjustable dimming with automatic daylight calibration and different time delay settings.
** When ordering with SiteSync, one of the following interface options must be chosen an ordered separately. Each option contains the SiteSync License, GUI and Bridge Node.
\+ If needed, an additional Bridge Node can be ordered.



BB-GEO-XX – Mounted to luminaire



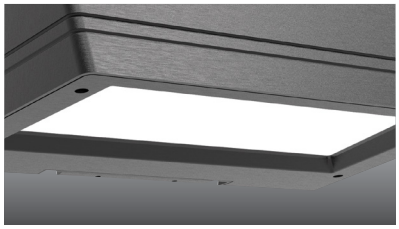
INPUT POWER CONSUMPTION

# OF LEDS	VERSION	INPUT VOLTAGE (V)	CURRENT (Amps)	SYSTEM POWER (w)
180	Downlight Only	120	0.18	21
		277	0.08	21
		120	0.28	33
		277	0.12	33
		120	0.41	49
		277	0.18	49
		120	0.52	62
		277	0.22	62
		347	0.18	62
		480	0.13	62
	With Uplight	120	0.18	22
		277	0.08	22
		120	0.29	35
		277	0.13	35
		120	0.43	52
		277	0.19	52
		120	0.55	66
		277	0.24	66
		347	0.19	66
		480	0.14	66

PERFORMANCE DATA - LOW GLARE

				5K (5000K nominal, 70 CRI)					4K (4000K nominal, 70 CRI)					3K (3000K nominal, 70 CRI)				
SECONDARY DISTRIBUTION	NOMINAL WATTS	SYSTEM WATTS	MAIN DISTR. TYPE	LUMENS	LPW	B	U	G	LUMENS	LPW	B	U	G	LUMENS	LPW	B	U	G
None	D-20	21.0	FT	3,082	147	1	0	1	3,067	146	1	0	1	2,883	137	1	0	1
			WT	3,195	152	1	0	0	3,179	151	1	0	0	2,988	142	1	0	0
	D-30	33.4	FT	4,995	150	1	0	1	4,970	149	1	0	1	4,672	140	1	0	1
			WT	5,178	155	1	0	1	5,152	154	1	0	1	4,843	145	1	0	1
	D-50	48.7	FT	7,094	146	1	0	1	7,058	145	1	0	1	6,635	136	1	0	1
			WT	7,353	151	1	0	1	7,316	150	1	0	1	6,877	141	1	0	1
	D-70	61.8	FT	8,669	140	1	0	1	8,626	140	1	0	1	8,108	131	1	0	1
			WT	8,986	145	1	0	1	8,941	145	1	0	1	8,405	136	1	0	1
UC (Canopy)	D-20	22.3	FT	2,991	134	1	3	1	2,976	133	1	3	1	2,798	125	1	3	1
			WT	3,325	149	1	3	0	3,309	148	1	3	0	3,110	139	1	3	0
	D-30	35.5	FT	4,847	137	1	3	1	4,823	136	1	3	1	4,534	128	1	3	1
			WT	5,389	152	1	3	1	5,362	151	1	3	1	5,040	142	1	3	1
	D-50	51.7	FT	6,884	133	1	3	1	6,850	132	1	3	1	6,439	125	1	3	1
			WT	7,653	148	1	3	1	7,615	147	1	3	1	7,158	138	1	3	1
	D-70	65.7	FT	8,413	128	1	3	1	8,371	127	1	3	1	7,869	120	1	3	1
			WT	9,353	142	1	3	1	9,306	142	1	3	1	8,748	133	1	3	1
UG (Wall Graze)	D-20	22.3	FT	2,966	133	1	3	1	2,952	132	1	3	1	2,774	124	1	3	1
			WT	3,302	148	1	3	0	3,286	147	1	3	0	3,089	139	1	3	0
	D-30	35.5	FT	4,808	135	1	3	1	4,784	135	1	3	1	4,497	127	1	3	1
			WT	5,352	151	1	3	1	5,325	150	1	3	1	5,006	141	1	3	1
	D-50	51.7	FT	6,827	132	1	3	1	6,793	131	1	3	1	6,386	124	1	3	1
			WT	7,600	147	1	3	1	7,562	146	1	3	1	7,109	137	1	3	1
	D-70	65.7	FT	8,344	127	1	3	1	8,302	126	1	3	1	7,804	119	1	3	1
			WT	9,288	141	1	3	1	9,242	141	1	3	1	8,687	132	1	3	1
US (Spot/ Column)	D-20	22.3	FT	3,156	142	1	3	1	3,140	141	1	3	1	2,952	132	1	3	1
			WT	3,316	149	1	3	0	3,300	148	1	3	0	3,102	139	1	3	0
	D-30	35.5	FT	5,114	144	1	3	1	5,089	143	1	3	1	4,784	135	1	3	1
			WT	5,375	151	1	3	1	5,348	151	1	3	1	5,027	142	1	3	1
	D-50	51.7	FT	7,263	140	1	3	1	7,227	140	1	3	1	6,793	131	1	3	1
			WT	7,633	148	1	3	1	7,595	147	1	3	1	7,140	138	1	3	1
	D-70	65.7	FT	8,876	135	1	3	1	8,832	134	1	3	1	8,302	126	1	3	1
			WT	9,328	142	1	3	1	9,282	141	1	3	1	8,725	133	1	3	1

LOW - GLARE



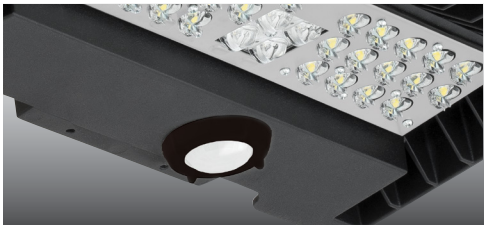
Designed for optimal visual comfort and maximum performance, the low glare versions provide excellent illumination and uniformity with zero LED pixelation.

UPLIGHT

Optional uplight distributions provide accent lighting for columns, canopies or building facades

The wall graze also creates a 50/50 appearance on the wall while still providing general illumination on the ground

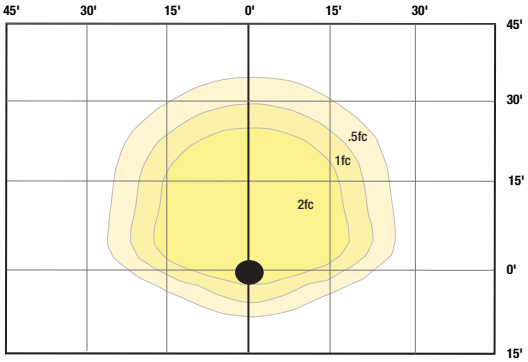
CONTROL OPTIONS



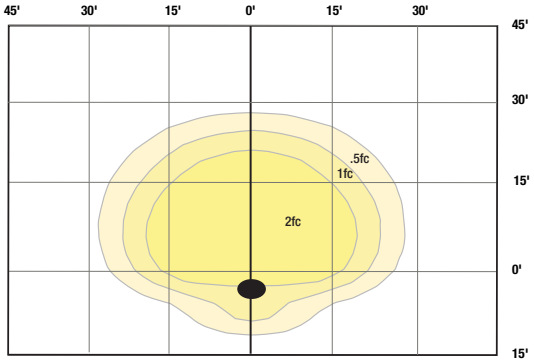
Programmable occupancy sensor offers greater control and energy savings with adjustable delay and dimming levels (Factory default is 10%).

PHOTOMETRICS

Mounting Height 15ft



FORWARD THROW



WIDE THROW

UPLIGHT GRAZE

UPLIGHT SPOT/COLUMN

RSA-K SERIES POLES
ROUND STRAIGHT ALUMINUM

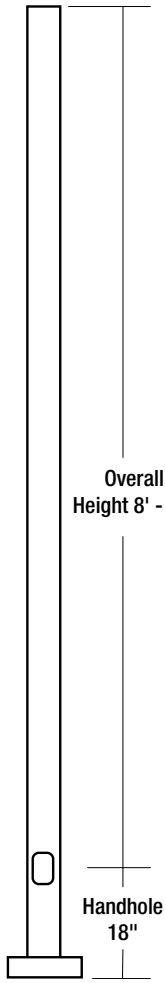
Cat.#

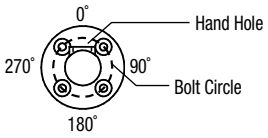
Job

Type

KIM LIGHTING

Approvals





APPLICATIONS

- Lighting installations for side and top mounting of luminaires with effective projected area (EPA) not exceeding maximum allowable loading of the specified pole in its installed geographic location

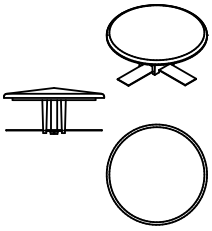
CONSTRUCTION

- SHAFT: One-piece straight aluminum with round cross section; Extruded shafts of 6061-T6 aluminum in 1/8", 3/16", or 1/4" thickness. Base plate of 356 cast aluminum.
- BOLT COVERS: Four (4) individual bolt covers provided, painted to match pole and base finish.
- POLE CAP: Pole shaft supplied with removable cover when applicable; Tenon and post-top configurations also available
- HAND HOLE: Rectangular 3x5 aluminum hand hole frame (2.38" x 4.38" opening); Mounting provisions for grounding lug located behind gasketed cover
- ANCHOR BOLTS: Four galvanized anchor bolts provided per pole with minimum yield of 55,000 psi (ASTM F1554). Galvanized hardware with two washers and two nuts per bolt for leveling

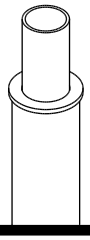
FINISH

- Durable thermoset polyester powder coat paint finish with nominal 3.0 mil thickness
- Powder paint finish coat available in multiple standard colors; Custom colors available; RAL number preferable.

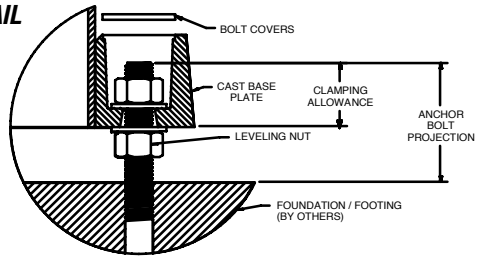
POLE CAP



TENON



BASE DETAIL



ORDERING INFORMATION

Reference page 2 for available configurations

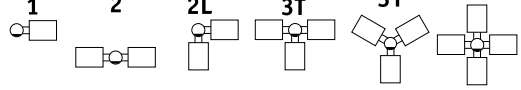
ORDERING EXAMPLE:

RSA K - 16 - 40 - A/B/C - 2L - K2 - DBS - VM2

SERIES	HEIGHT	SHAFT	THICKNESS	MOUNTING	DRILL PATTERN	FINISH	OPTIONS
RSA-K Round Straight Aluminum Pole Hubbell Lighting	Reference page 2 Ordering matrix	Reference page 2 Ordering matrix	Reference page 2 Ordering matrix	**1** Single arm mount **2** Two fixtures at 180˚ **2L** Two fixtures at 90˚ **3T** Three fixtures at 90˚ **3Y** Three at 120˚ **4** Four fixtures at 90˚ **TA** Tenon (2.375" OD) **TB** Tenon (2.875" OD) **OT** Open top (includes pole cap)	**K1** 2 Bolt 5-11/16" spacing **K2** 2 Bolt 3-1/2" spacing **K3** 2 Bolt 3" spacing	**BLS** Black Gloss Smooth **BLT** Black Matte Textured **DBS** Dark Bronze Gloss Smooth **DBT** Dark Bronze Gloss Textured **GTT** Graphite Matte Textured **LGS** Light Gray Gloss Smooth **LGT** Light Gray Gloss Textured **PSS** Platinum Silver Gloss Smooth **VGT** Verde Green Matte Textured **WHS** White Gloss Smooth **WHT** White Matte Textured **Color Option** **CC** [2] Custom Color	**GFI** [1] 20 Amp GFCI Receptacle and Cover **EHH**[1] Extra Handhole **C05**[1] .5" Coupling **C07**[1] .75" Coupling **C20**[1] 2" Coupling **VM2** 2nd mode vibration damper **LAB** Less Anchor Bolts **UL** UL Certified

MOUNTING ORIENTATION

←Denotes handhole location



Notes:

1 Specify option location using logic found on page 2 **(Option Orientation)**

2 Consult factory for custom color, marine and corrosive finish options

ACCESSORIES- Order Separately

Catalog Number	Description
VM2SXX	2nd mode vibration damper

Kim Lighting • 17760 Rowland Street • Rowland Height, CA 91748 • Phone: 626-968-5666

Due to our continued efforts to improve our products, product specifications are subject to change without notice.

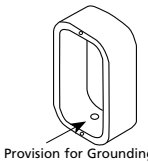
HUBBELL Lighting

ORDERING INFORMATION Cont.

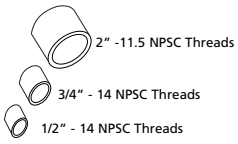
Catalog Number	Height		Nominal Shaft Dimensions	Wall Thick-ness	Bolt Circle (suggested)	Bolt Square (range)	Base Plate Diameter	Anchor bolt size	Bolt Projection	Pole weight (lbs)
	Feet	Meters								
RSA-K-10-40-A	10	3.0	4" Round	0.125	6.75"	4.77	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	27
RSA-K-12-40-A	12	3.7	4" Round	0.125	6.75"	4.77	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	31
RSA-K-14-40-A	14	4.3	4" Round	0.125	6.75"	4.77	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	36
RSA-K-16-40-A	16	4.9	4" Round	0.125	6.75"	4.77	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	40
RSA-K-18-40-A	18	5.5	4" Round	0.125	6.75"	4.77	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	45
RSA-K-20-40-A	20	6.1	4" Round	0.125	6.75"	4.77	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	50
RSA-K-10-40-B	10	3.0	4" Round	0.188	6.75"	4.77	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	38
RSA-K-12-40-B	12	3.7	4" Round	0.188	6.75"	4.77	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	44
RSA-K-14-40-B	14	4.3	4" Round	0.188	6.75"	4.77	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	51
RSA-K-16-40-B	16	4.9	4" Round	0.188	6.75"	4.77	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	58
RSA-K-18-40-B	18	5.5	4" Round	0.188	6.75"	4.77	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	65
RSA-K-20-40-B	20	6.1	4" Round	0.188	6.75"	4.77	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	71
RSA-K-12-40-C	12	3.7	4" Round	0.25	6.75"	4.77	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	57
RSA-K-14-40-C	14	4.3	4" Round	0.25	6.75"	4.77	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	66
RSA-K-16-40-C	16	4.9	4" Round	0.25	6.75"	4.77	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	75
RSA-K-18-40-C	18	5.5	4" Round	0.25	6.75"	4.77	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	83
RSA-K-20-40-C	20	6.1	4" Round	0.25	6.75"	4.77	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	92
RSA-K-12-50-B	12	3.7	5" Round	0.188	7.75"	5.48	10.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	56
RSA-K-14-50-B	14	4.3	5" Round	0.188	7.75"	5.48	10.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	64
RSA-K-16-50-B	16	4.9	5" Round	0.188	7.75"	5.48	10.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	73
RSA-K-18-50-B	18	5.5	5" Round	0.188	7.75"	5.48	10.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	81
RSA-K-20-50-B	20	6.1	5" Round	0.188	7.75"	5.48	10.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	90
RSA-K-25-50-B	25	7.6	5" Round	0.188	7.75"	5.48	10.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	111
RSA-K-16-60-A	16	4.9	6" Round	0.125	8.75"	6.19	11.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	60
RSA-K-18-60-A	18	5.5	6" Round	0.125	8.75"	6.19	11.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	67
RSA-K-20-60-A	20	6.1	6" Round	0.125	8.75"	6.19	11.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	74
RSA-K-25-60-A	25	7.6	6" Round	0.125	8.75"	6.19	11.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	91
RSA-K-18-60-C	18	5.5	6" Round	0.25	8.75"	6.19	11.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	127
RSA-K-20-60-C	20	6.1	6" Round	0.25	8.75"	6.19	11.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	140
RSA-K-25-60-C	25	7.6	6" Round	0.25	8.75"	6.19	11.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	174
RSA-K-30-60-C	30	9.1	6" Round	0.25	8.75"	6.19	11.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2-3/4"	208

NOTE Factory supplied template must be used when setting anchor bolts. Hubbell Lighting will deny any claim for incorrect anchorage placement resulting from failure to use factory supplied template and anchor bolts.

EHH - EXTRA HANDHOLE



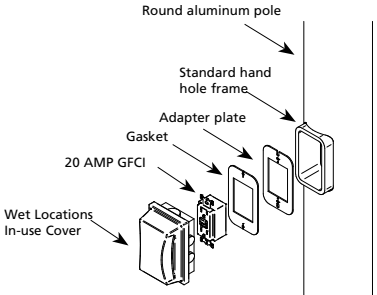
C05 - C07 - C20 - COUPLING



VM2 - VIBRATION DAMPER 2ND MODE

Factory installed, internal damper designed to alter pole resonance to reduce movement and material fatigue caused by 2nd mode vibration.

GFI – 20 AMP GFCI RECEPTACLE & COVER



OPTION ORIENTATION

Follow the logic below when ordering location specific options. For each option, include its orientation (in degrees) and its height (in feet). Example: Option C07 should be ordered as: **RSA-K-20-40-A-TA-DBS-C05-0-15** (.5" coupling on the handhole/arm side of pole, 15 feet up from the pole base) 1' spacing required between option. Consult factory for other configurations.

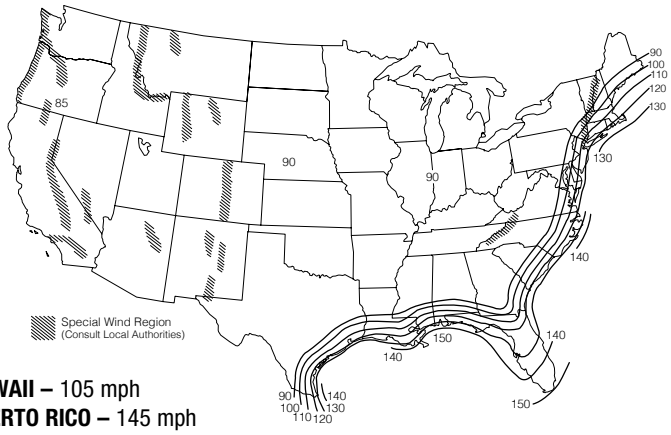
VM2SXX - VIBRATION DAMPER 2ND MODE

Field installed, internal damper designed to alter pole resonance to reduce movement and material fatigue caused by 2nd mode vibration.

VM2S08 – 8'
VM2S12 – 12'
VM2S16 – 16'
VM2S20 – 20'
VM2S24 – 24'

For more information about pole vibration and vibration dampers, please consult http://cdn.spauldinglighting.com/content/products/literature/literature_files/Pole_Wind_Induced_Flyer_HL0I0022.pdf
Due to our continued efforts to improve our products, product specifications are subject to change without notice.

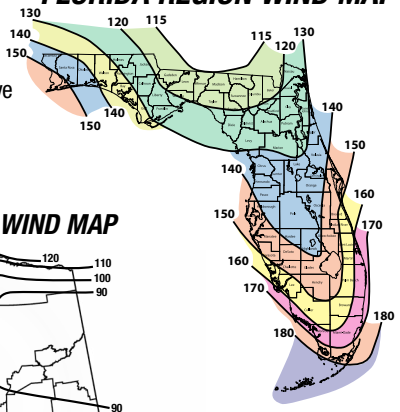
ASCE7-05 WIND MAP



HAWAII – 105 mph
PUERTO RICO – 145 mph

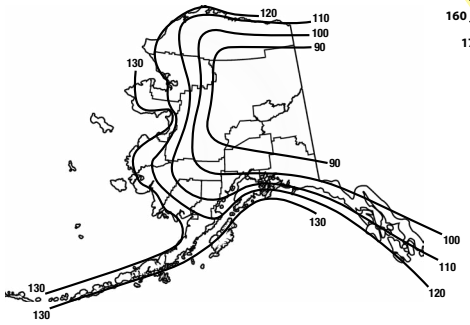
***PRINTED WITH PERMISSION FROM ASCE**

FLORIDA REGION WIND MAP



- Florida region wind map above is based upon 3-second gust winds and the 2017 Florida Building Code

ALASKA REGION WIND MAP



ASCE 7-05 wind map EPA Load Rating - 3 second gust wind speeds										
Catalog Number	**85**	**90**	**100**	**105**	**110**	**120**	**130**	**140**	**145**	**150**
RSA-K-10-40-A	9.0	7.9	6.2	5.5	4.8	3.9	3.2	2.7	2.5	2.3
RSA-K-12-40-A	6.8	5.9	4.5	3.9	3.4	2.6	2.1	1.7	1.6	1.4
RSA-K-14-40-A	5.1	4.4	3.1	2.6	2.2	1.6	1.2	0.9	0.8	0.7
RSA-K-16-40-A	3.8	3.2	2.1	1.6	1.3	0.7	0.5	NR	NR	NR
RSA-K-18-40-A	2.7	2.1	1.2	0.8	NR	NR	NR	NR	NR	NR
RSA-K-20-40-A	1.7	1.2	NR	NR	NR	NR	NR	NR	NR	NR
RSA-K-10-40-B	13.7	12.1	9.6	8.6	7.7	6.3	5.3	4.5	4.2	3.9
RSA-K-12-40-B	10.7	9.4	7.3	6.5	5.7	4.6	3.8	3.2	3.0	2.7
RSA-K-14-40-B	8.4	7.3	5.6	4.9	4.2	3.3	2.7	2.2	2.0	1.9
RSA-K-16-40-B	6.6	5.8	4.2	3.6	3.0	2.2	1.8	1.4	1.3	1.1
RSA-K-18-40-B	5.1	4.3	3.0	2.4	2.0	1.3	1.0	0.7	0.6	0.5
RSA-K-20-40-B	3.8	3.1	2.0	1.5	1.1	0.5	NR	NR	NR	NR
RSA-K-12-40-C	14.1	12.5	9.9	8.8	7.9	6.4	5.4	4.6	4.2	3.9
RSA-K-14-40-C	11.3	9.9	7.7	6.8	6.0	4.8	4.0	3.4	3.1	2.9
RSA-K-16-40-C	9.1	7.9	6.0	5.3	4.6	3.5	2.9	2.4	2.2	2.0
RSA-K-18-40-C	7.3	6.3	4.6	3.9	3.3	2.4	1.9	1.6	1.4	1.2
RSA-K-20-40-C	5.7	4.8	3.4	2.8	2.3	1.5	1.1	0.8	0.7	0.6
RSA-K-12-50-B	18.1	16.0	12.9	11.7	10.6	8.9	7.5	6.4	5.9	5.5
RSA-K-14-50-B	14.6	12.8	10.2	9.2	8.4	7.0	5.8	5.0	4.6	4.3
RSA-K-16-50-B	11.9	10.3	8.1	7.3	6.6	5.4	4.5	3.8	3.5	3.3
RSA-K-18-50-B	9.5	8.2	6.3	5.7	5.1	4.2	3.4	2.8	2.6	2.4
RSA-K-20-50-B	7.5	6.4	4.8	4.3	3.8	3.0	2.4	2.0	1.8	1.6
RSA-K-25-50-B	3.8	2.9	1.9	1.6	1.3	0.9	0.6	NR	NR	NR
RSA-K-16-60-A	11.9	10.6	8.4	7.6	6.9	5.7	4.7	4.0	3.7	3.4
RSA-K-18-60-A	9.5	8.4	6.7	6.0	5.4	4.4	3.6	3.0	2.8	2.5
RSA-K-20-60-A	7.5	6.5	5.1	4.6	4.1	3.3	2.7	2.2	2.0	1.8
RSA-K-25-60-A	3.6	3.1	2.2	1.9	1.6	1.1	0.8	0.5	NR	NR
RSA-K-18-60-C	21.4	19.1	15.5	14.0	12.0	9.9	8.3	7.0	6.5	6.0
RSA-K-20-60-C	17.9	15.9	12.8	11.6	10.5	8.1	6.8	5.7	5.2	4.8
RSA-K-25-60-C	11.4	10.1	8.0	7.2	6.5	4.8	3.9	3.2	2.9	2.6
RSA-K-30-60-C	6.9	6.0	4.6	4.1	3.6	2.4	1.8	1.4	1.2	1.1

Florida Building Code 2017 EPA Load Rating - 3 second gust wind speeds								
Catalog Number	**115**	**120**	**130**	**140**	**150**	**160**	**170**	**180**
RSA-K-10-40-A	6.4	5.8	4.7	3.8	3.1	2.5	2.4	2.3
RSA-K-12-40-A	4.6	4.1	3.2	2.4	1.8	1.7	1.6	1.5
RSA-K-14-40-A	3.2	2.8	2.0	1.4	0.9	NR	NR	NR
RSA-K-16-40-A	2.1	1.7	1.0	0.5	NR	NR	NR	NR
RSA-K-18-40-A	1.1	0.8	NR	NR	NR	NR	NR	NR
RSA-K-10-40-B	10.1	9.1	7.6	6.3	5.3	4.4	4.2	3.9
RSA-K-12-40-B	7.6	6.9	5.6	4.5	3.7	2.9	2.8	2.7
RSA-K-14-40-B	5.8	5.1	4.0	3.1	2.4	1.8	1.6	1.4
RSA-K-16-40-B	4.3	3.7	2.7	2.0	1.3	0.8	0.5	NR
RSA-K-18-40-B	3.0	2.5	1.7	1.0	NR	NR	NR	NR
RSA-K-20-40-B	1.9	1.5	0.7	NR	NR	NR	NR	NR
RSA-K-12-40-C	10.3	9.3	7.7	6.4	5.3	4.4	4.2	4.0
RSA-K-14-40-C	8.0	7.2	5.8	4.7	3.8	3.0	2.8	2.6
RSA-K-16-40-C	6.2	5.5	4.3	3.3	2.5	1.9	1.7	1.5
RSA-K-18-40-C	4.6	4.0	3.0	2.1	1.5	0.9	0.7	0.5
RSA-K-20-40-C	3.3	2.8	1.9	1.2	0.6	NR	NR	NR
RSA-K-12-50-B	13.2	12.0	9.9	9.4	8.0	6.8	5.9	5.1
RSA-K-14-50-B	10.4	9.3	7.5	7.0	6.3	5.3	4.5	3.8
RSA-K-16-50-B	8.0	7.1	5.6	5.3	4.9	4.0	3.3	2.7
RSA-K-18-50-B	6.1	5.3	3.9	3.6	3.3	3.0	2.3	1.8
RSA-K-20-50-B	4.4	3.7	2.9	2.8	2.7	2.1	1.5	1.1
RSA-K-25-50-B	1.3	0.7	1.0	0.5	NR	NR	NR	NR
RSA-K-16-60-A	9.3	8.4	6.8	5.5	4.5	3.7	2.9	2.3
RSA-K-18-60-A	7.4	6.6	5.3	4.2	3.3	2.5	1.9	1.4
RSA-K-20-60-A	5.9	5.2	4.0	3.0	2.2	1.6	1.0	0.6
RSA-K-25-60-A	3.0	2.4	1.5	0.8	0.2	NR	NR	NR
RSA-K-18-60-C	16.5	15.0	12.4	10.4	8.7	7.4	6.2	5.2
RSA-K-20-60-C	13.8	12.5	10.3	8.5	7.0	5.8	4.8	4.0
RSA-K-25-60-C	9.0	8.0	6.3	4.9	3.8	2.9	2.1	1.5
RSA-K-30-60-C	5.6	4.8	3.5	2.4	1.5	0.8	NR	NR

NOTES

Wind-speed Website disclaimer:
Hubbell Lighting has no connection to the linked website and makes no representations as to its accuracy. While the information presented on this third-party website provides a useful starting point for analyzing wind conditions, Hubbell Lighting has not verified any of the information on this third party website and assumes no responsibility or liability for its accuracy. The material presented in the windspeed website should not be used or relied upon for any specific application without competent examination and verification of its accuracy, suitability and applicability by engineers or other licensed professionals. Hubbell Lighting Inc. does not intend that the use of this information replace the sound judgment of such competent professionals, having experience and knowledge in the field of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the results of the windspeed report provided by this website. Users of the information from this third party website assume all liability arising from such use. Use of the output of these referenced websites do not imply approval by the governing building code bodies responsible for building code approval and interpretation for the building site described by latitude/longitude location in the windspeed report. http://windspeed.atcouncil.org

- Allowable EPA, to determine max pole loading weight, multiply allowable EPA by 30 lbs.
- The tables for allowable pole EPA are based on the ASCE 7-05 Wind Map or the Florida Region Wind Map for the 2010 Florida Building Code. The Wind Maps are intended only as a general guide and cannot be used in conjunction with other maps. Always consult local authorities to determine maximum wind velocities, gusting and unique wind conditions for each specific application
- Allowable pole EPA for jobsite wind conditions must be equal to or greater than the total EPA for fixtures, arms, and accessories to be assembled to the pole. Responsibility lies with the specifier for correct pole selection. Installation of poles without luminaires or attachment of any unauthorized accessories to poles is discouraged and shall void the manufacturer's warranty
- Wind speeds and listed EPAs are for ground mounted installations. Poles mounted on structures (such as bridges and buildings) must consider vibration and coefficient of height factors beyond this general guide; Consult local and federal standards
- Wind Induced Vibration brought on by steady, unidirectional winds and other unpredictable aerodynamic forces are not included in wind velocity ratings. Consult Hubbell Lighting's Pole Vibration Application Guide for environmental risk factors and design considerations. http://cdn.spauldinglighting.com/content/products/literature/literature_files/Pole_Wind_Induced_Flyer_HLOI0022.pdf
- Extreme Wind Events like, Hurricanes, Typhoons, Cyclones, or Tornadoes may expose poles to flying debris, wind shear or other detrimental effects not included in wind velocity ratings

Due to our continued efforts to improve our products, product specifications are subject to change without notice.

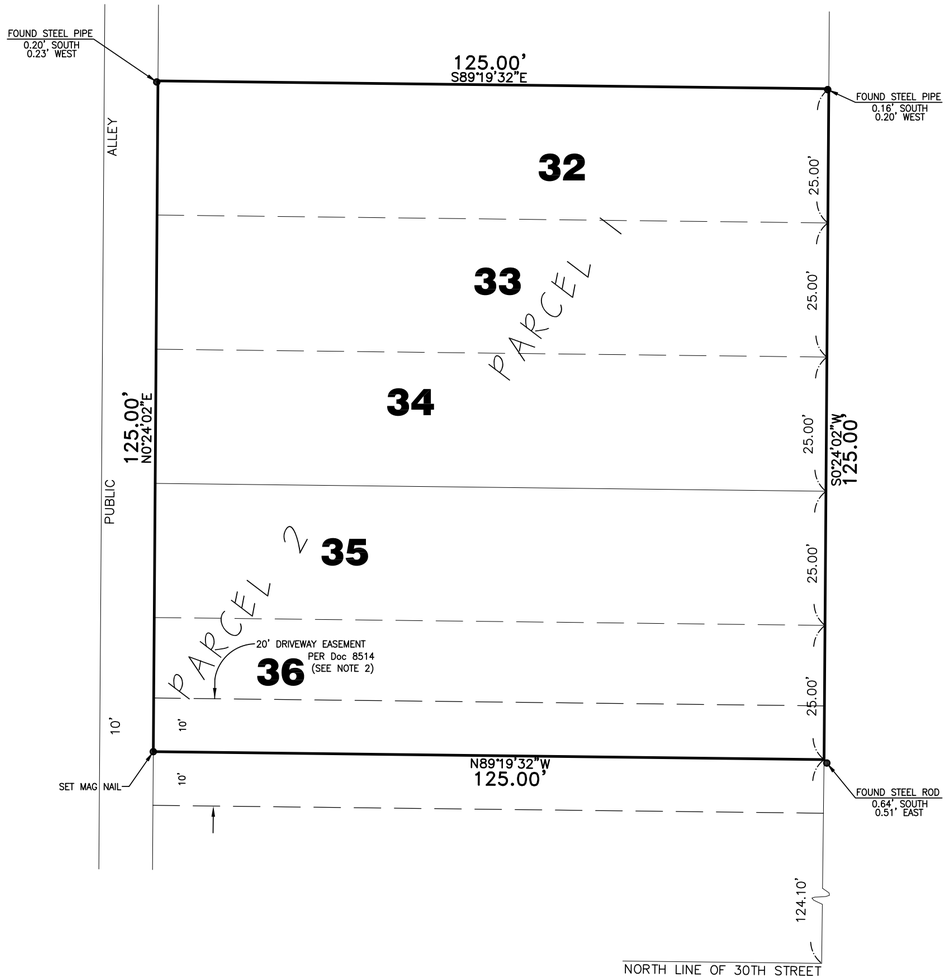
8130–38 CALUMET AVENUE CONSOLIDATION

AN ADDITION TO THE TOWN OF MUNSTER IN SECTION 24, TOWNSHIP 36 NORTH, RANGE 10 WEST OF THE SECOND PRINCIPAL MERIDIAN, IN LAKE COUNTY, INDIANA

PARCEL 1:
LOTS 32 TO 34, BOTH INCLUSIVE, IN CALUMET RIDGE 2ND ADDITION TO MUNSTER, INDIANA, AS PER PLAT THEREOF RECORDED IN PLAT BOOK 20, PAGE 14, IN THE OFFICE OF THE RECORDER OF LAKE COUNTY, INDIANA.

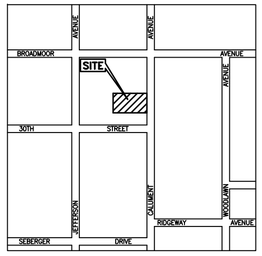
PARCEL 2:
LOTS 35 AND 36 IN CALUMET RIDGE 2ND ADDITION TO MUNSTER, INDIANA, AS PER PLAT THEREOF RECORDED IN PLAT BOOK 20, PAGE 14, IN THE OFFICE OF THE RECORDER OF LAKE COUNTY, INDIANA.

LAKE COUNTY TAX PARCEL NUMBERS	
PARCEL 1	45-06-24-229-013.000-027 (LOTS 32-34)
PARCEL 2	45-06-24-229-014.000-027 (LOTS 35-36)



80.00' R.O.W.

CALUMET AVENUE



VICINITY MAP

OWNER:

PARTH 35 LLC
12821 S. DIVISION STREET
BLUE ISLAND, IL 60406

DEVELOPER:

PARTH PATEL
12821 S. DIVISION STREET
BLUE ISLAND, IL 60406

ENGINEER/SURVEYOR:

LANDMARK ENGINEERING LLC
7808 W. 103rd STREET

AREAS		
PARCEL 1	9375 SQ. FT.	0.215 AC
PARCEL 2	6250 SQ. FT.	0.143 AC
TOTAL	15,625 SQ. FT.	0.359 AC (more or less)

OWNER

PARTH 35 LLC DOES HEREBY CERTIFY THAT IT IS THE OWNER OF THE PROPERTY HEREIN DESCRIBED AND THAT, AS SUCH OWNER, IT HAS CAUSED SAID PROPERTY TO BE SURVEYED AND CONSOLIDATED AS HEREON SHOWN. THIS CONSOLIDATION SHALL BE KNOWN AND DESIGNATED AS "8130–38 CALUMET AVENUE CONSOLIDATION, AN ADDITION TO THE TOWN OF MUNSTER IN SECTION 24, TOWNSHIP 36 NORTH, RANGE 10 WEST OF THE SECOND PRINCIPAL MERIDIAN, IN LAKE COUNTY, INDIANA". ALL STREETS AND EASEMENTS SHOWN AND NOT HERETOFORE DEDICATED ARE HEREBY DEDICATED TO THE TOWN OF MUNSTER..

SIGNED THIS _____ DAY OF _____, A.D. 2021,

BY: _____ _____, ITS _____
(SIGNATURE) (PRINTED NAME) (TITLE)

COUNTY OF _____)
ss
STATE OF _____)

BEFORE ME, THE UNDERSIGNED NOTARY PUBLIC, IN AND FOR SAID COUNTY AND STATE, PERSONALLY APPEARED _____ AND DID ACKNOWLEDGE THE EXECUTION OF THE FOREGOING INSTRUMENT AS HIS/HER VOLUNTARY ACT AND DEED AND AS THE VOLUNTARY ACT AND DEED OF PARTH 35 LLC, FOR THE USES AND PURPOSES HEREIN EXPRESSED.

WITNESS MY HAND AND NOTARIAL SEAL THIS _____ DAY OF _____, A.D. 2021.

_____
(SIGNATURE)

_____
(PRINTED NAME)

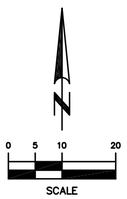
MY COMMISSION EXPIRES _____

PLAN COMMISSION

SUBMITTED TO, APPROVED AND ACCEPTED BY THE PLAN COMMISSION OF THE TOWN OF MUNSTER, LAKE COUNTY, INDIANA, THIS _____ DAY OF _____, A.D. 2021.

BY: _____ ATTEST: _____
CHAIRMAN EXECUTIVE SECRETARY

_____ _____
(PRINTED NAME) (PRINTED NAME)



STATE OF ILLINOIS)
COUNTY OF COOK) S.S.

I, MARK H. LANDSTROM, HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR LICENSED IN COMPLIANCE WITH THE LAWS OF THE STATE OF INDIANA AND THAT, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THE HEREON DRAWN PLAT CORRECTLY REPRESENTS A SURVEY MADE UNDER MY SUPERVISION AND COMPLETED ON MARCH 12, 2021, AND THAT ALL MONUMENTS SHOWN ACTUALLY EXIST AND ARE ACCURATELY SHOWN. DISTANCES ARE SHOWN IN FEET AND DECIMAL PARTS THEREOF AND BEARINGS ARE BASED ON THE NAD83 INDIANA WEST STATE PLANE COORDINATE ZONE 1302, AS DETERMINED BY GPS MEASUREMENT. THE AREA OF THE CONSOLIDATION IS 15,625 SQUARE FEET = 0.359 ACRES (more or less).

I FURTHER CERTIFY THAT ALL THIS PROPERTY IS WITHIN UNSHADED FLOOD ZONE X, AN AREA DETERMINED TO BE OUTSIDE THE 0.2 PERCENT ANNUAL CHANCE FLOODPLAIN, AS DESIGNATED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY ON THE FLOOD INSURANCE RATE MAP PANEL 18089C0109E, HAVING AN EFFECTIVE DATE OF JANUARY 18, 2012.

I ALSO AFFIRM, UNDER THE PENALTIES FOR PERJURY, THAT I HAVE TAKEN REASONABLE CARE TO REDACT EACH SOCIAL SECURITY NUMBER IN THIS DOCUMENT, UNLESS REQUIRED BY LAW.

DATED AT PALOS HILLS, ILLINOIS, THIS 19th DAY OF JULY, A.D. 2021.

MARK H. LANDSTROM
IPLS No. 29500004
MLANDSTROM@LANDMARK80.COM

PREPARED FOR:
PARTH PATEL

PREPARED BY:
LANDMARK
ENGINEERING LLC
DESIGN FIRM REGISTRATION NO. 184–005577–0010
7808 WEST 103RD STREET
PALOS HILLS, ILLINOIS 60465–1529
Phone (708) 599–3737

Survey No. 21–01–038–CONS