



# PLAN COMMISSION STAFF REPORT

**To:** Members of the Plan Commission

**From:** Tom Vander Woude, Planning Director

**Meeting Date:** August 10, 2021

**Agenda Item:** PC Docket No. 21-009

**Application:** Subdivision – Preliminary Plat

**Hearing:** PRELIMINARY HEARING

**Summary:** Parth Patel requesting approval of a 1 lot subdivision to construct a 3-unit commercial building including a Smoothie King at 8130-8138 Calumet Avenue.

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**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:** Public Hearing

**Additional Actions Required:** Findings of Fact

**Staff Recommendation:** Schedule public hearing

**Attachments:**

1. Smoothie King, Munster, IN Site Plan set prepared by Landmark Engineering LLC dated 07.23.2021
2. Smoothie King Retail Building presentation set prepared Domenella Architects, Ltd. dated 07.23.2021
3. 8130-8138 Calumet Avenue Consolidation plat of subdivision prepared by Landmark Engineering LLC dated 07.19.2021

**BACKGROUND**

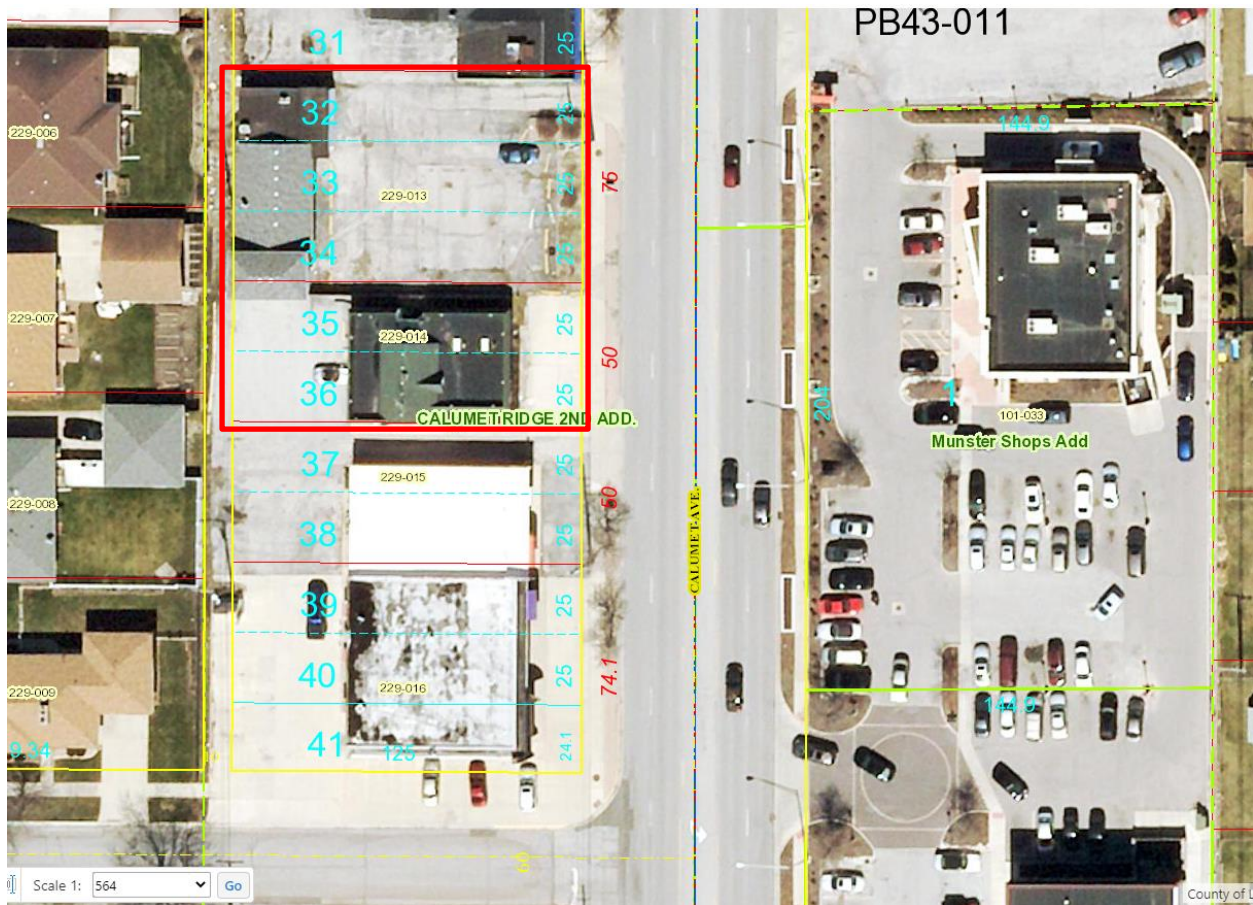


Figure 1 Subject property outlined in red

Parth Patel is seeking approval of preliminary plat that will consolidate two parcels located at 8130 and 8138 Calumet Avenue. The two parcels currently each contain a vacant commercial building. Mr. Patel is seeking to demolish the buildings and redevelop the site with a 3,630 square foot, 3-unit commercial building with a Smoothie King in the south tenant space and a parking lot with 27 stalls. The applicant has a variance pending before the Board of Zoning Appeals to reduce the number of required parking spaces.

Site and engineering plans have been provided with the application. A commercial subdivision is subject to Plan Commission review and approval of a development plan, which I anticipate will be presented for approval at the September Plan Commission meeting. Both preliminary plat and development plan applications require public hearings.

### 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 and landscaping, as well as parking, provided that the variance request is approved, or the uses are limited to a single restaurant.

A more detailed analysis of the building architecture, landscaping, and lighting will be presented to the Plan Commission at the public hearing for the approval of the project's development plan.

## **MOTION**

The Plan Commission may wish to consider the following motion:

*Motion to grant a public hearing for PC docket 21-009.*



# 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)

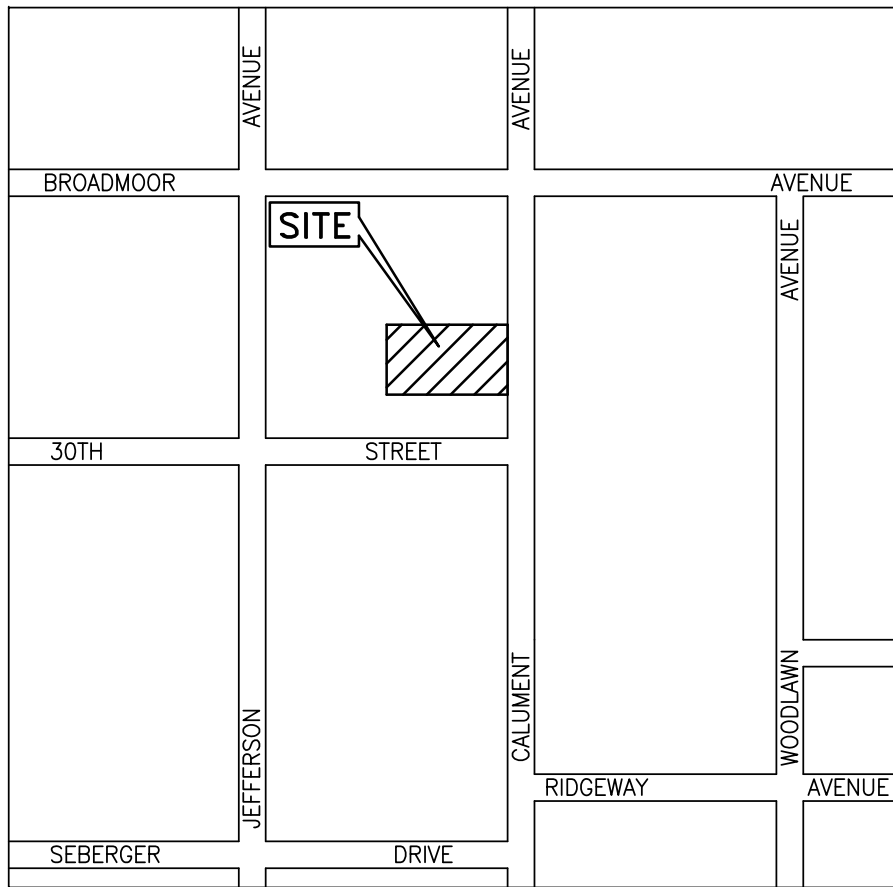
LEGEND		
	EXISTING	PROPOSED
OVERHEAD TRANSMISSION LINE	— OTL —	— OTL —
STORM SEWER	—>>—	—>>—
SANITARY SEWER	—>—	—>—
METAL FENCE	— — — —	— — — —
CHAIN LINK FENCE	—X—X—X—	—X—X—X—
SANITARY MANHOLE	⊙	⊙
MANHOLE	⊙	⊙
CATCH BASIN	⊙	⊙
INLET	⊙	⊙
FLARED END SECTION	⊙	⊙
FIRE HYDRANT	⊙	⊙
WATER VALVE	⊙	⊙
LIGHT POLE	⊙	⊙
WATER MANHOLE	⊙	⊙
TELCO PEDESTAL	⊙	⊙
BOLLARD	⊙	⊙
AT&T HANDHOLE	⊙	⊙
TRANSFORMER	⊙	⊙
UTILITY POLE	⊙	⊙
SOIL BORING	⊙	⊙
TOP OF FOUNDATION	⊙	⊙
SPOT ELEVATION	TYP: 700.00 x 490.00	TYP: 700.00 x 490.00

CS 1"=40' STRUCTURE 3"=40' S&M 1"=40'

594.50' IN ELEVATION 594.50' IN ELEVATION 590.00' IN ELEVATION 590.00' IN ELEVATION

STORM SEWER SANITARY

- INDEX
- C0.0 COVER
  - C1.0 EXISTING TOPOGRAPHIC SURVEY
  - C2.0 DEMOLITION PLAN
  - C3.0 GEOMETRY PLAN
  - C4.0 GRADING PLAN
  - C5.0 UTILITY PLAN
  - C6.0 SOIL EROSION & SEDIMENT CONTROL PLAN
  - C7.0 NOTES & DETAILS



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



*[Signature]*

SMOOTHIE KING, MUNSTER, IN

8130-38 CALUMET AVENUE, MUNSTER, IN

COVER SHEET

REVISIONS

REV.	BY	ISSUED FOR TOWN REVIEW
T.G.		

DATE

7/23/21

LANDMARK

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

DRAWN BY:

T.G.

DESIGNED BY:

B.H.

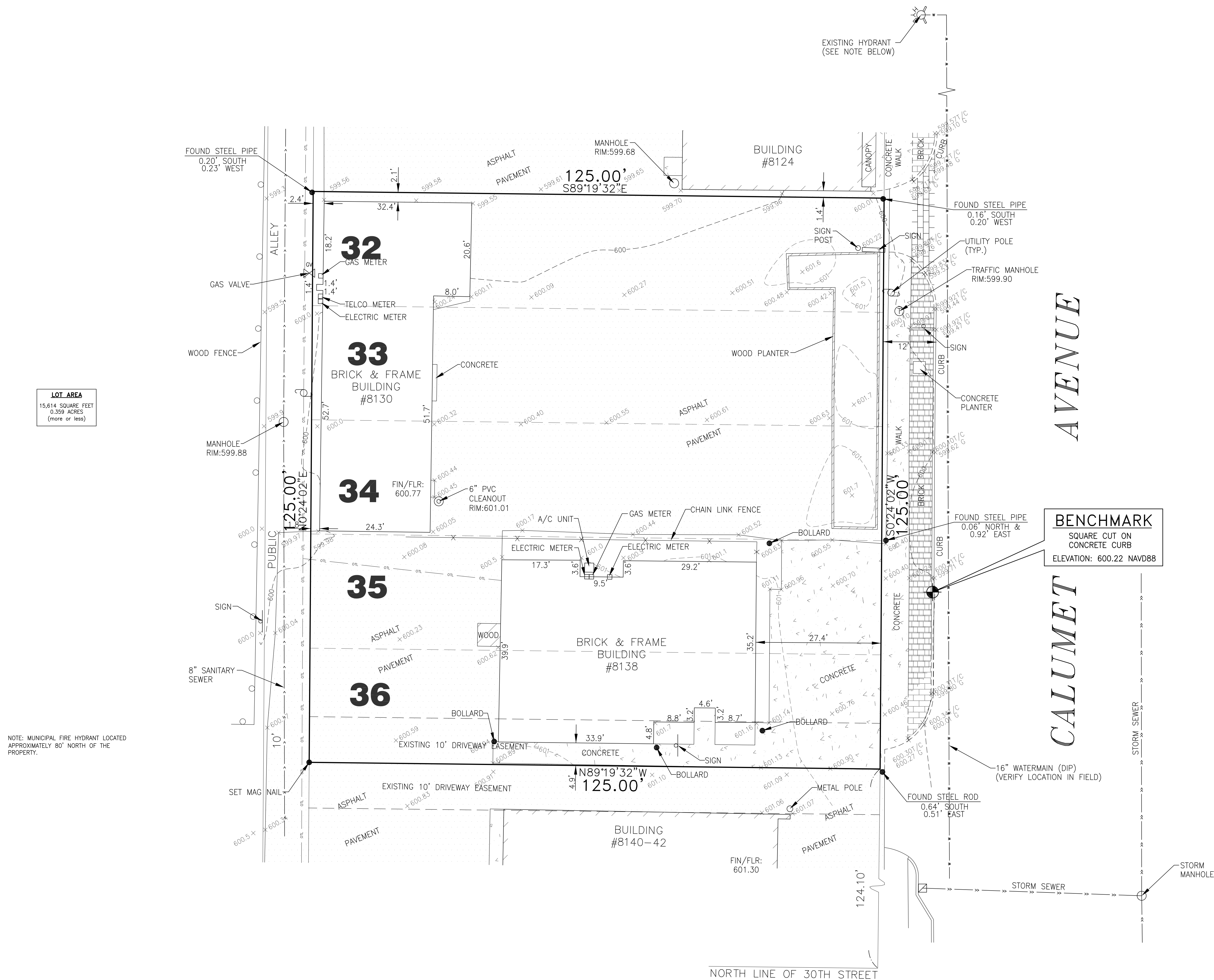
CHECKED BY:

M.L.

SHEET

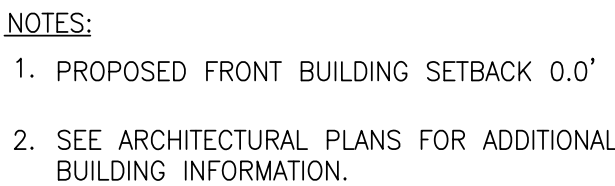
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21-01-038

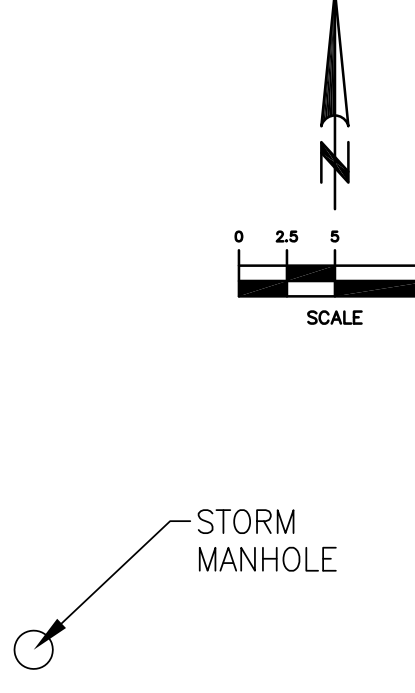








<div>SMOOTHIE KING, MUNSTER, IN</div> <div>8130-38 CALUMET AVENUE, MUNSTER, IN</div> <div>GEOMETRY PLAN</div>		<div><b>LANDMARK</b></div> <div>ENGINEERING</div> <div>DESIGN FROM 12577-2016</div> <div>7808 WEST 103RD STREET</div> <div>PALOS HILLS, ILLINOIS 60465-1529</div> <div>Phone: (708) 599-3737</div> <div>Fax: (708) 599-2281</div>				DATE	7/23/21	REV. BY	T.G.
		DRAWN BY:		T.G.	ISSUED FOR TOWN REVIEW				
		DESIGNED BY:		B.H.					
		CHECKED BY:		M.L.					
<div>SHEET</div> <div>C3.0</div> <div>21-01-038</div>									




CALUMET

BEN  
SQU  
CON  
ELEVATION

AVENUE

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

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

DRAWN BY: T.G.		SMOOTHIE KING, MUNSTER, IN		 <b>LANDMARK</b> ENGINEERING LLC DESIGN FIRM REGISTRATION NO. 184-100577-0010 1000 N. WILSON AVENUE PALOS HILLS, ILLINOIS 60465-1529 Phone: (708) 599-3737 Fax: (708) 599-2291	DATE	REVISED	REV. BY
DESIGNED BY: B.H.		8130-38 CALUMET AVENUE, MUNSTER, IN			7/23/21	ISSUED FOR TOWN REVIEW	T.G.
CHECKED BY: M.L.							
		GRADING PLAN					
SHEET <i>C4.0</i> 21-01-038							



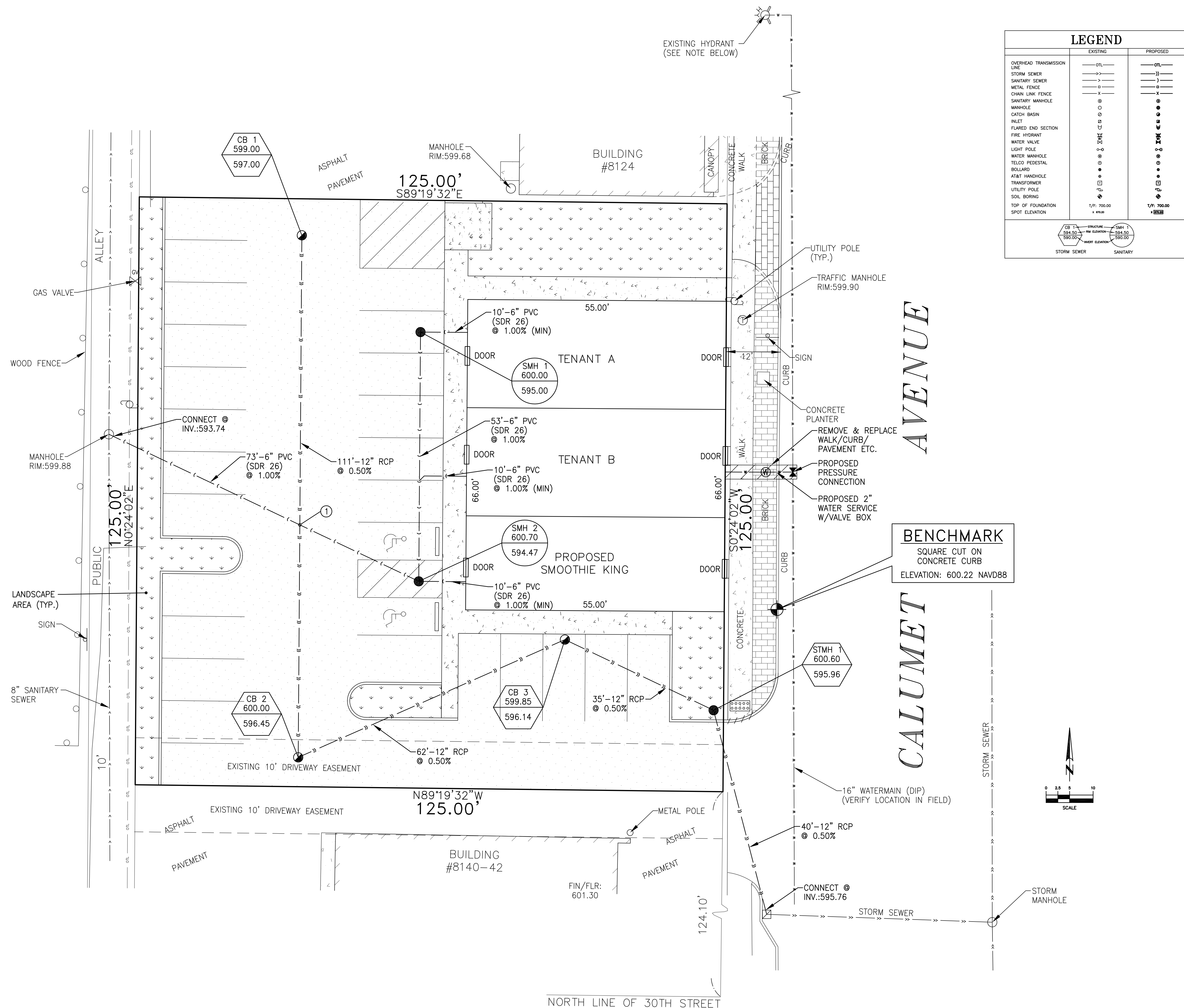
UTILITY CROSSING DATA	
① BOTTOM OF STORM:	596.44
TOP OF SANITARY:	594.72
PIPE CLEARANCE:	1.72'

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

**SEATING DATA**  
2.5 SEATS PER PARKING SPACE  
 $2.5 \times 27 = 67.5$  SEATS

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

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



	EXISTING	PROPOSED
OVERHEAD TRANSMISSION LINE	—○TL—	—○TL—
STORM SEWER	—>>>	—>>>
SANITARY SEWER	—J—	—J—
METAL FENCE	—□—	—□—
CHAIN LINK FENCE	—X—	—X—
SANITARY MANHOLE	⊙	⊙
MANHOLE	⊙	⊙
CATCH BASIN	⊙	⊙
INLET	⊕	⊕
FLARED END SECTION	⌋	⌋
FIRE HYDRANT	⌘	⌘
WATER VALVE	⌘	⌘
LIGHT POLE	○-G	○-G
WATER MANHOLE	⊙	⊙
TELCO PEDESTAL	⊙	⊙
ROLLAND	⊙	⊙
AT&T HANDLE	⊙	⊙
TRANSFORMER	□	□
UTILITY POLE	⌋	⌋
SOIL BORING	⬇	⬇
TOP OF FOUNDATION	1/F: 700.00	1/F: 700.00
SPOT ELEVATION	1. 493.21	1. 493.21

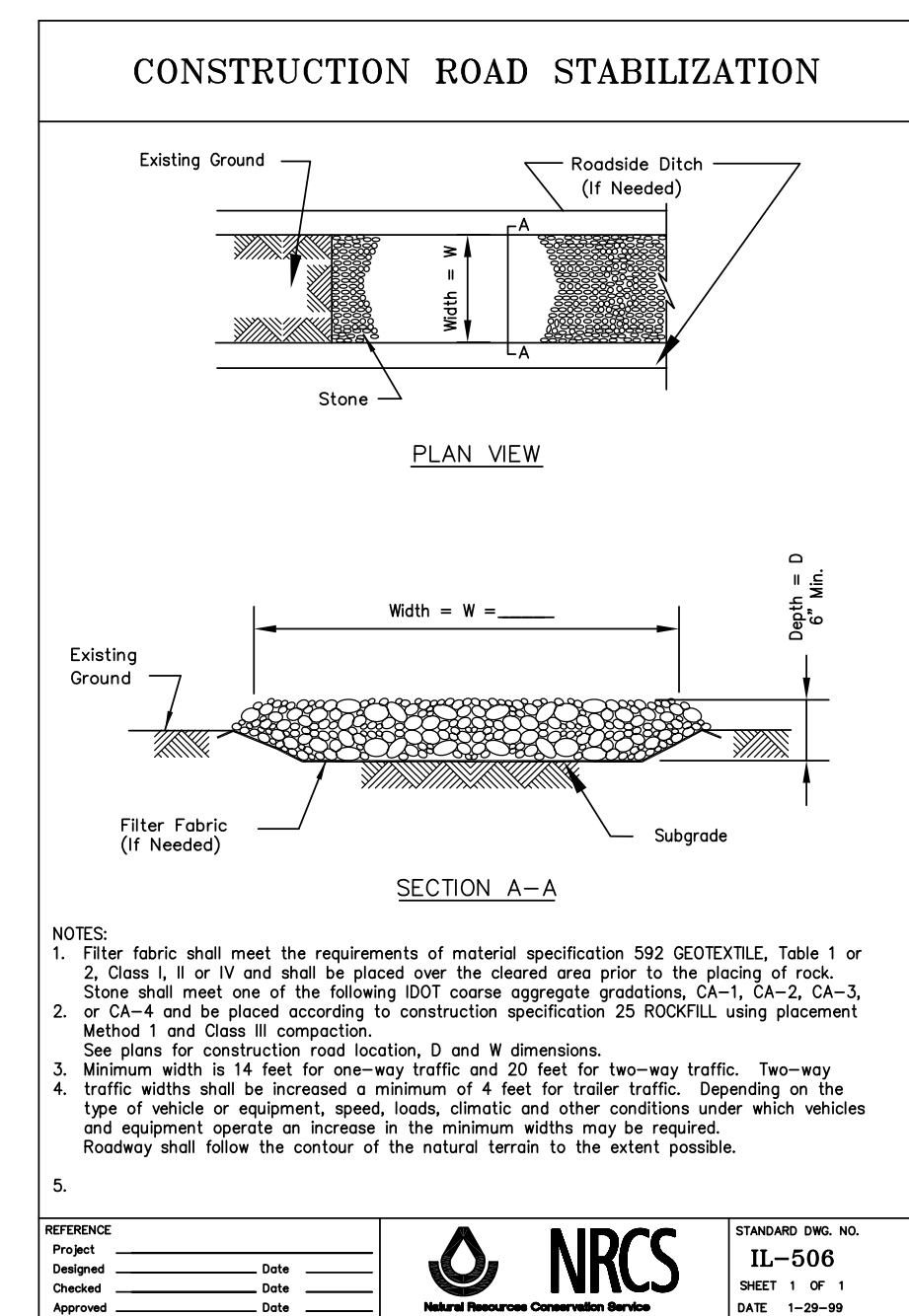
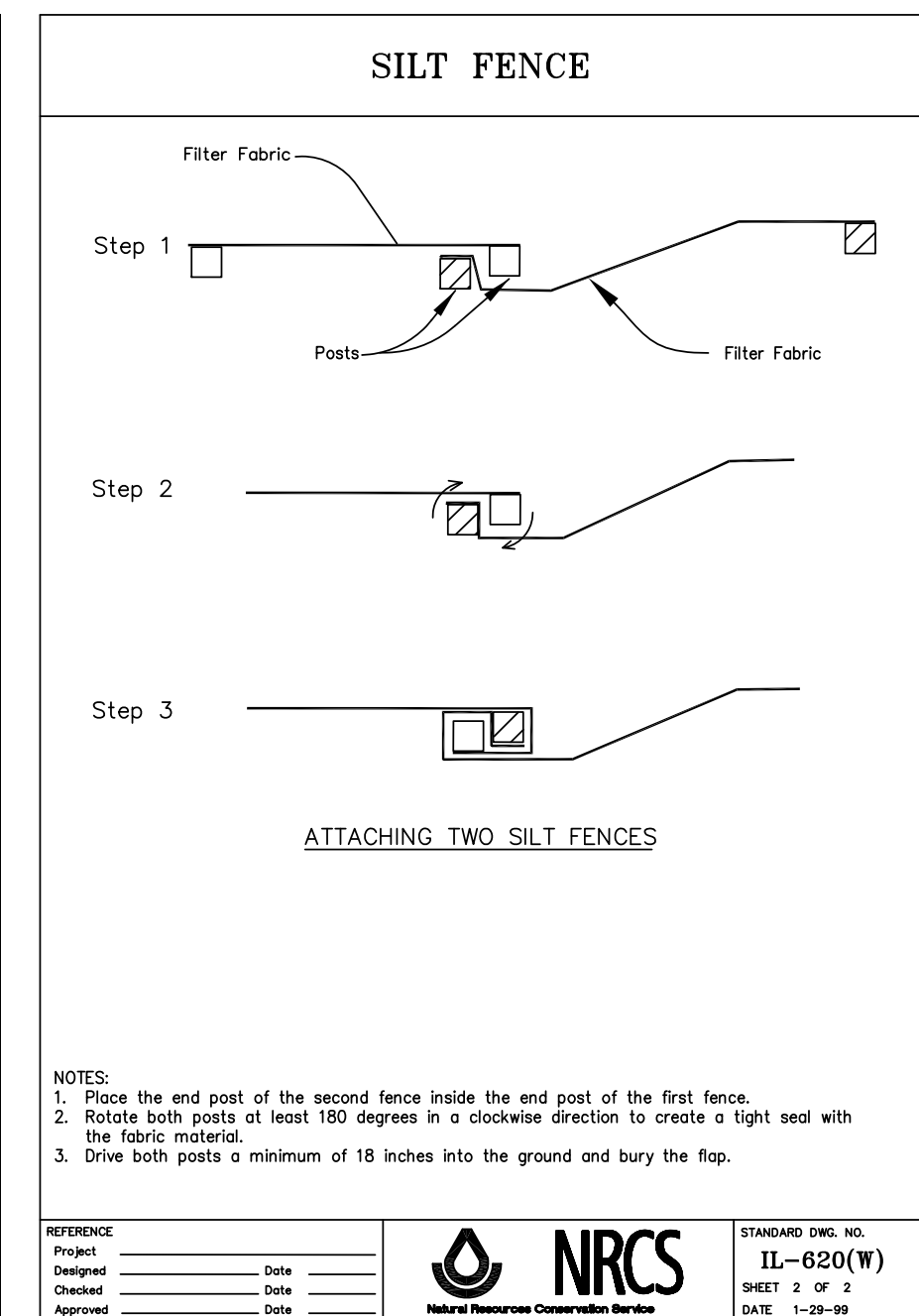
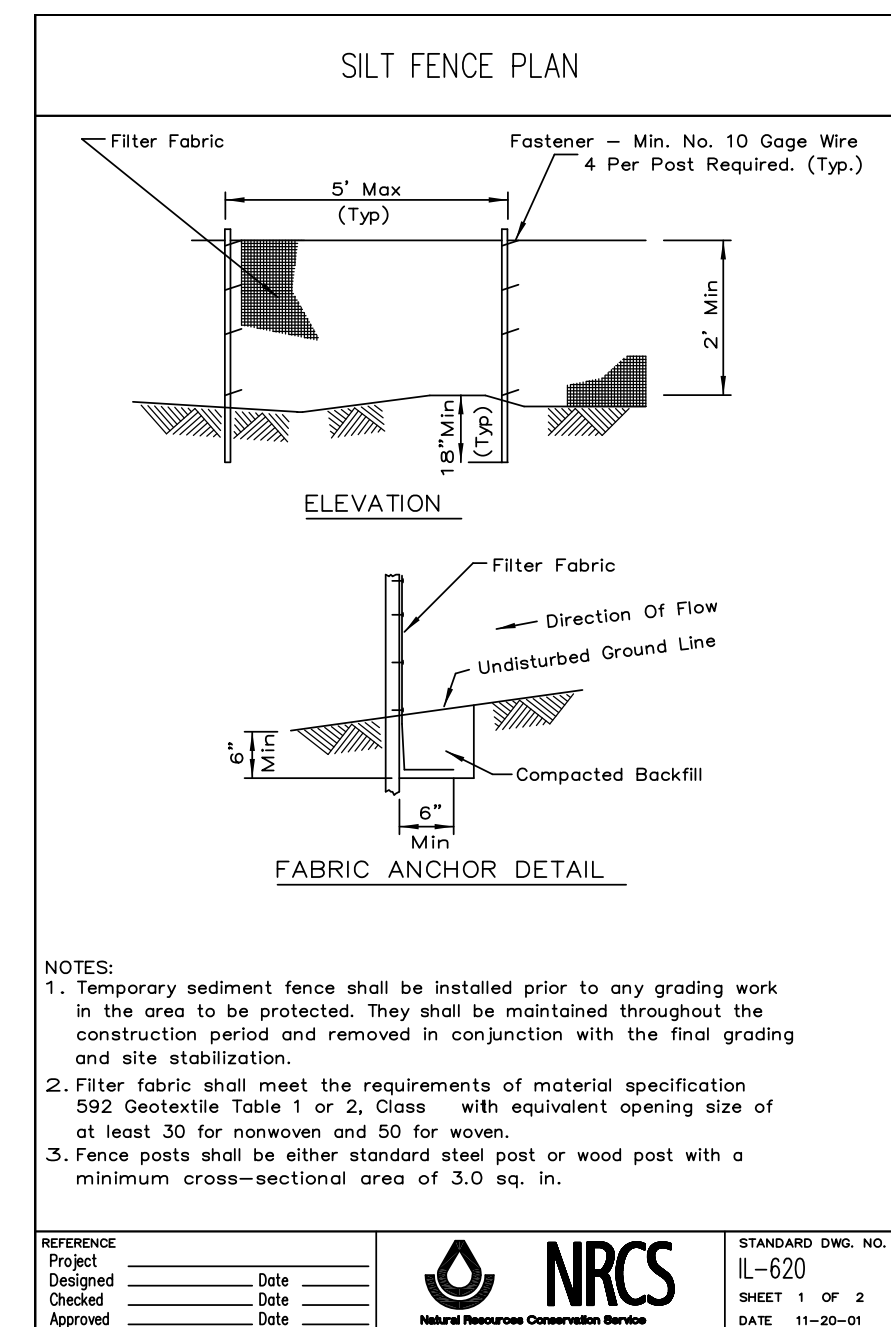
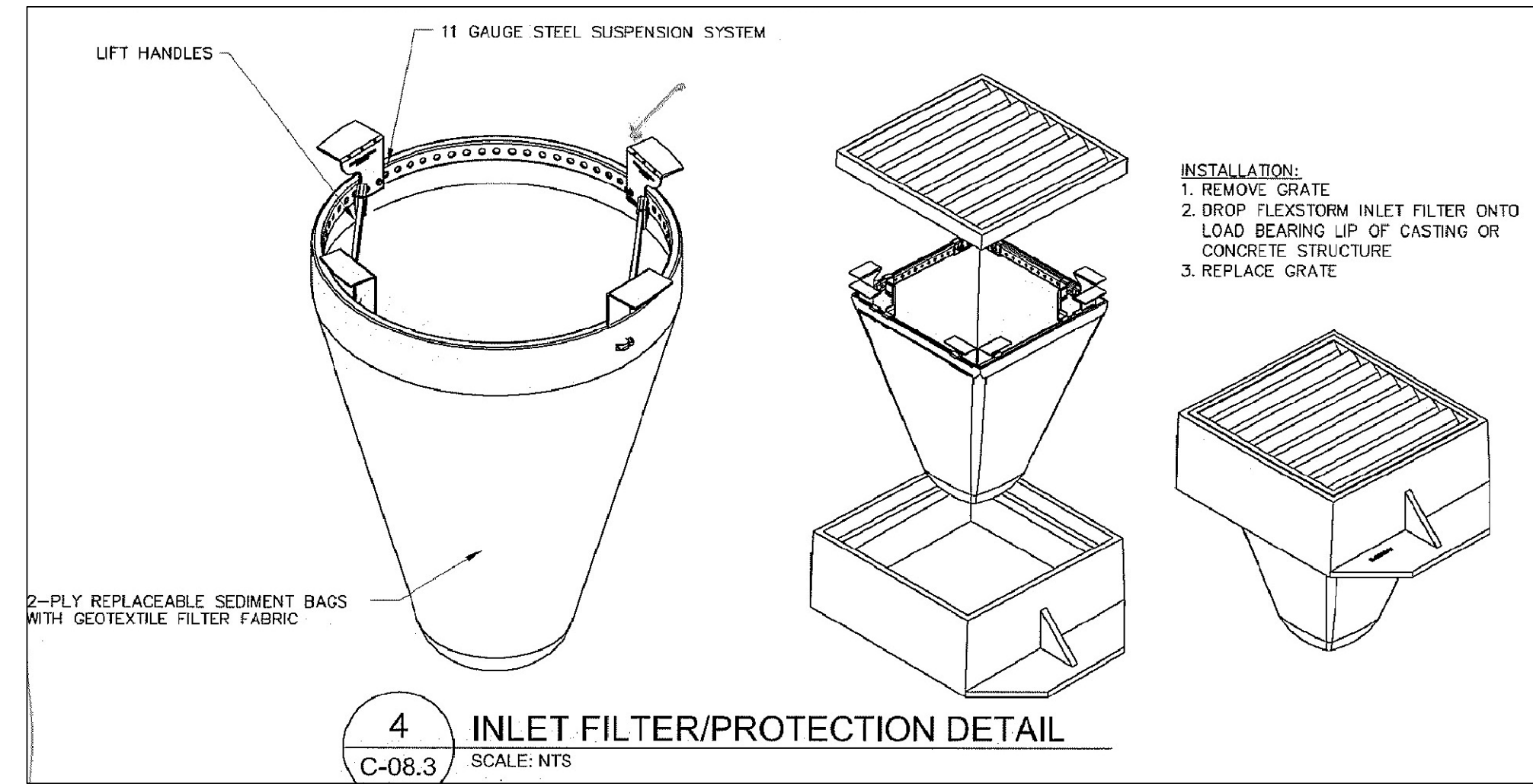
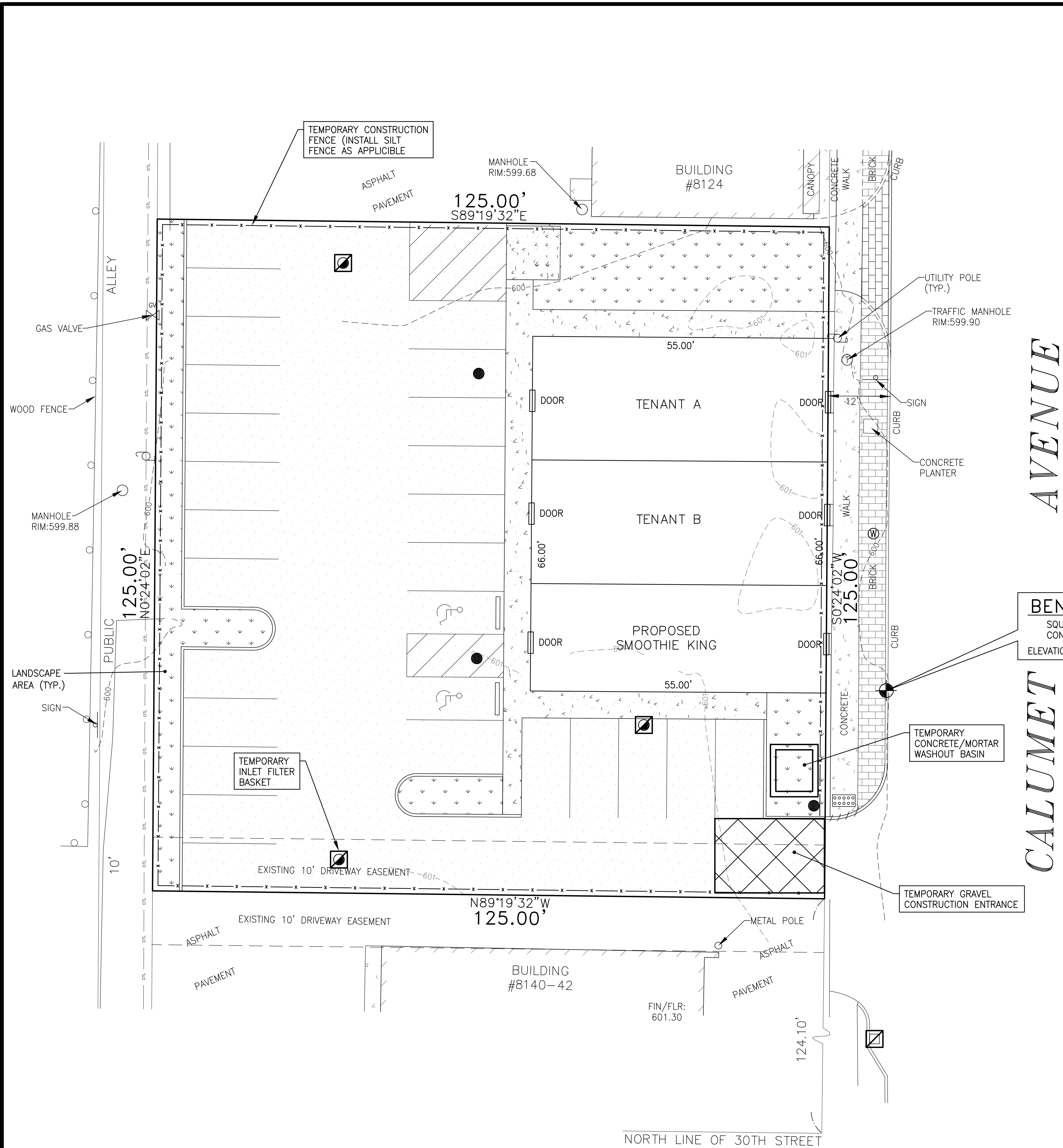
STORM SEWER
SANITARY

**LANDMARK**  
— **ENGINEERING LLC** —  
DESIGN FIRM REGISTRATION NO. 184-005577-0010  
7808 WEST 103RD STREET  
PALOS HILLS, ILLINOIS 60465-1529  
Phone: (708) 599-3737  
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SMOOTHIE KING, MUNSTER, IN  
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



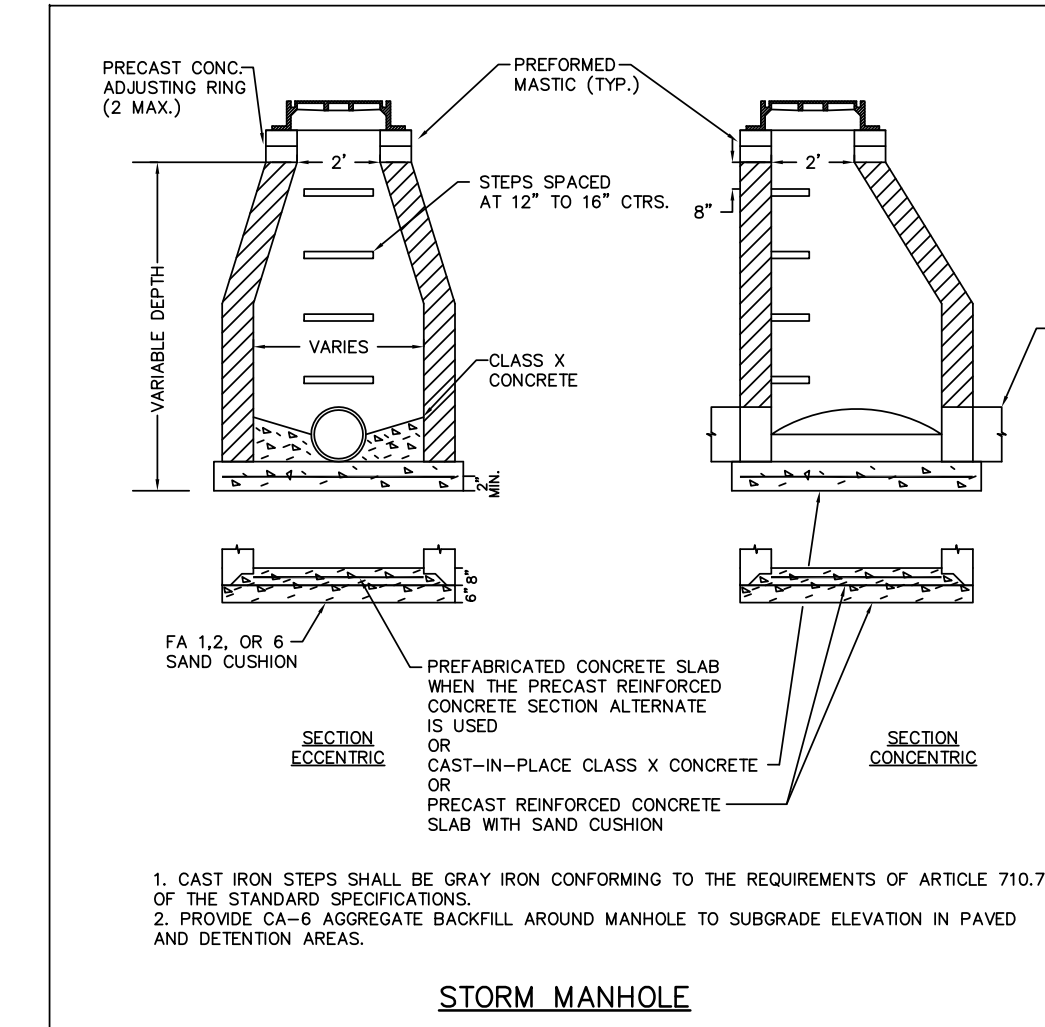


EARTHWORK SPECIFICATIONS:

- SCOPE OF WORK
- EXTENT: THE WORK REQUIRED UNDER THIS SECTION CONSISTS OF ALL EXCAVATING, FILLING, ROUGH GRADING AND RELATED ITEMS NECESSARY TO COMPLETE THE WORK INDICATED ON THE DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS.
  - IN GENERAL, THE ITEMS OF WORK TO BE PERFORMED UNDER THIS SECTION SHALL INCLUDE: CLEANING 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.
  - 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.
  - PROVIDE AND PLACE 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.
  - THE CONTRACTOR SHALL ACCEPTING OF ANY AND ALL FILLS IT AND SHALL REMOVE ALL TRASH, RUBBERSEED AND DEBRIS FROM THE SITE PRIOR TO STARTING EXCAVATION.
- WORK INCLUDED: THE FOLLOWING ITEMS OF RELATED WORK ARE SPECIFIED AND INCLUDED IN OTHER SECTIONS OF THESE SPECIFICATIONS.
  - EXCAVATION, GRADING AND BACKFILLING FOR UTILITY LINES.
  - STORM DRAINAGE SYSTEMS.
  - SANITARY SEWER SYSTEMS.
  - WATER SUPPLY SYSTEMS.
  - DRIVES AND PAVING.
- BENCHMARKS
- MAINTAIN CAREFULLY ALL BENCHMARKS, MONUMENTS AND OTHER REFERENCE POINTS, IF DISTURBED OR DESTROYED, REPAIR AS DIRECTED BY ENGINEER.
- PROTECTION OF TREES
  - 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 REMOVAL OR PROTECTED FROM EROSION AREAS OF BUILDING CONSTRUCTION SHALL BEFORE ANY WORK IS STARTED, DO NOT STOCKPILE WITHIN BRANCH SPREAD, REMOVE INTERFERING BRANCHES WITHOUT INJURY TO TRUNKS AND COVER SCARS WITH TREE PAINT.
  - REMOVAL OF TREES
    - 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.
    - ALL BRUSH, STUMPS, WOOD AND OTHER REFUSE FROM THE TREES SHALL BE REMOVED FROM SITE OR BURNED WITH PROPER PERMITS (WHERE APPLICABLE).
  - STRIPPING OF TOPSOIL
    - 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. FILL AND STONE TOPSOIL AT A LOCATION WHERE IT WILL NOT INTERFERE WITH CONSTRUCTION OPERATIONS. TOPSOIL SHALL BE REASONABLY FREE FROM SUBSOIL, DEBRIS AND STONES.
  - SITE GRADING
    - 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.
    - ROUGH GRADING: THE TOLERANCE FOR PAVED AREAS SHALL NOT EXCEED 0.10 FEET ABOVE THE ESTABLISHED SUBGRADE. ALL OTHER AREAS SHALL NOT EXCEED 0.10 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 TO A MINIMUM OF 0.5% AND A MINIMUM OF 3:1 SLOPE.
    - SUBGRADE SHALL BE PRODEEPOLED WITH SUITABLE EQUIPMENT AND ALL SPONGY AND OTHERWISE UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL.
    - SUBGRADE FOR STREETS AND PAVED AREAS SHALL BE COMPACTED TO 95% OF MODIFIED PROCTOR.
    - SEE PROJECT MANUAL AND SOILS REPORT FOR REQUIREMENTS REGARDING UNDERCUTTING AND SUBGRADE PREPARATION FOR PAVEMENT.
    - 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 LAYS NOT TO EXCEED 4" IN LOOSE THICKNESS AND SHALL BE SPREAD AND COMPACTED AT THE PROPER MOISTURE CONTENT.
    - ALL FILL MATERIAL IN AREAS OUTSIDE OF BUILDING AND PAVEMENT AREAS SHALL BE COMPACTED LOOSELY WITH EACH LAY AND PROTECTED FROM 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).
  - DISPOSITION OF UTILITIES
    - RULES AND REGULATIONS GOVERNING THE RESPECTIVE UTILITIES SHALL BE OBSERVED IN EXECUTING ALL WORK UNDER THIS SECTION.
    - 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.
    - WHERE ACTIVE UTILITIES ARE ENCOUNTERED BUT NOT SHOWN ON THE DRAWINGS, THE ENGINEER SHALL BE ADVISED BEFORE WORK IS CONTINUED.
    - INACTIVE AND ABANDONED UTILITIES ENCOUNTERED IN EXCAVATING AND GRADING OPERATIONS SHALL BE REPORTED TO THE ENGINEER. THEY SHALL BE REMOVED, FLOUGED OR CAPPED AS DIRECTED BY THE ENGINEER.
  - SEEDING PREPARATION
    - SOLVE ANY SURFACE OR SUBSURFACE DRAINAGE PROBLEMS AND CONSTRUCT PERMANENT EROSION CONTROL STRUCTURES.
    - REMOVE ALL ROCKS, ROOTS AND OTHER MATERIALS THAT MAY INTERFERE WITH SEEDING PREPARATION.
    - PERFORM THE MAJOR FILLING SHAPING AND SMOOTHING OF GULLED OR SEVERELY ERODED AREAS.

GENERAL NOTES:

- 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.
- 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.
- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO NOTIFY AND COORDINATE CONSTRUCTION WITH ALL RESPECTIVE UTILITIES.
- ALL QUANTITIES GIVEN ON THESE PRINTS, VERBALLY OR IN THE SCOPE OF WORK SECTION ARE ESTIMATES AND SHALL BE CONFIRMED BY THE BIDDING CONTRACTORS.
- OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS FOR EXCAVATIONS; FINAL RULE 29 CFR PART 19-26, SUBPART 10" APPLIES TO ALL EXCAVATIONS EXCEEDING FIVE (5) FEET IN DEPTH.
- 6) IN ADDITION, EXCAVATION EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRE THE DESIGN OF A TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER.
- IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER AND CONTRACTOR TO MAINTAIN QUALITY CONTROL THROUGHOUT THIS PROJECT.
- TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION TO CONFORM TO APPLICABLE LOCAL STANDARDS.
- THE ENGINEER AND/OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS AND METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.
- IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER THAT ALL LANDSCAPE REQUIREMENTS ARE MET AND CONFORM TO APPLICABLE LOCAL STANDARDS.
- THE SITE DOES NOT LIE IN A SPECIAL FLOOD HAZARD AREA AS ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY- NATIONAL FLOOD INSURANCE PROGRAM, WHEN PLOTTED BY SCALE ON FLOOD INSURANCE RATE MAP #180890109E, DATED JANUARY 18, 2012.
- BEARINGS, DIMENSIONS AND EASEMENTS ARE SHOWN FOR REFERENCE ONLY. SEE RECORD SURVEYS & PLAT FOR EXACT INFORMATION.
- THIS SITE DOES NOT CONTAIN ANY WETLANDS AS SHOWN ON THE U.S. DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE: MUNSTER INDIANA, NATIONAL WETLANDS INVENTORY MAP DATED 1990.

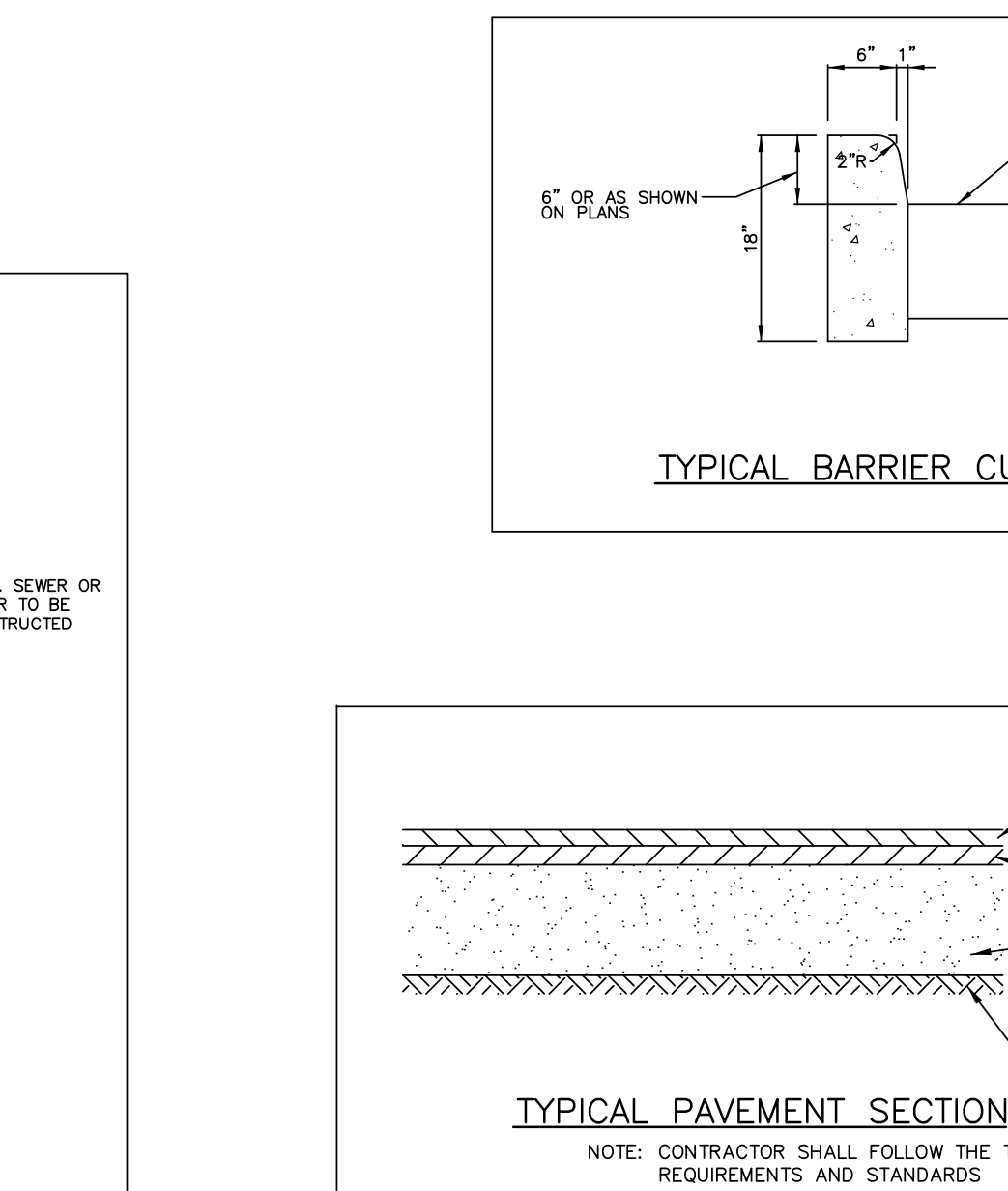


EROSION CONTROL SPECIFICATIONS:

- 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 SHALL BE CONSULTED IN THE EVENT THIS OCCURS.
- TEMPORARY SEEDING IS TO BE APPLIED TO ANY GRADED AREA THAT WILL REMAIN UNALTERED FOR AN EXTENDED PERIOD OF TIME.
- PERMANENT SEEDING IS TO BE APPLIED IMMEDIATELY TO AREAS THAT HAVE ACHIEVED FINAL AND FINISHED GRADE.
- PERSISTENT EXISTING VEGETATION ON THE SITE WHENEVER AND WHEREVER POSSIBLE TO PREVENT TOPSOIL EROSION.
- ALL SEDIMENT CAPTURING MEASURES SHALL BE IMPLEMENTED PRIOR TO THE DISTURBANCE OF THE CONSTRUCTION AREA THEY ARE INTENDED TO SERVE.
- ALL EROSION CONTROL MEASURES PROPOSED ARE TO BE PROPERLY MAINTAINED TO CONTINUE THEIR EFFECTIVENESS.
- IF GRADING OCCURS DURING THE MONTHS OF DECEMBER, JANUARY OR FEBRUARY DORMANT SEEDING PROCEDURES SHALL BE USED.
- 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 SEASONAL CONDITION AND/OR CONSTRUCTION ACTIVITY. WATER GRASS AND EXECUTE NECESSARY WEEDING UNTIL FULL STAND OF GRASS HAS BEEN OBTAINED.
- THE IMPLEMENTATION AND MAINTENANCE OF THE EROSION CONTROL IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER.
- IT SHALL BE THE CONTRACTOR'S AND/OR OWNER'S RESPONSIBILITY TO MINIMIZE SEDIMENTATION (FROM ON-SITE CONSTRUCTION ACTIVITIES) FROM BEING DEPOSITED ON ADJACENT PROPERTIES AND NEARBY STREAMS/DITCHES IN STRICT COMPLIANCE WITH RULE 57 (227 IAC 15-5, CONSTRUCTION ACTIVITY) WATER 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, INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT PRIOR TO ANY CONSTRUCTION ACTIVITY.

STORM SEWER SPECIFICATIONS:

- SCOPE OF WORK
- 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.
- MATERIALS
  - STORM SEWERS:
    - REINFORCED CONCRETE SEWER PIPE SHALL CONFORM TO ASTM C-76 CLASS 3 LATEST REVISION WITH JOINTS CONFORMING TO ASTM C-443 LATEST REVISION.
    - STORM SEWERS HANCOV "10" PIPE AND ADS OR APPROVED EQUIV. WITH THE FOLLOWING REQUIREMENTS:
      - 4 INCH THROUGH 10 INCH MEETING ASHITO M522 TYPE S, 12 INCH THROUGH 36 INCH MEETING ASHITO M204 TYPE S.
      - 6 INCH MEETING ASTM 01056 GRADE 242.
      - FITTINGS MEETING ASHITO M522 OR ASHITO M204, MEETING ASTM 03350 CELL CLASSIFICATION 224200; OR ASTM 03350 TYPE II, CLASS C, CATEGORY 4, GRADE P33.
  - DRAINAGE STRUCTURES:
    - TO ASTM C-478 LATEST REVISION AND LATEST REVISION OF MOST PRECAST STRUCTURE DETAILS.
    - CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOW HOLES, POROSITY, HARD SPOTS, SURFACE CRACKS 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 TENDACIOUS WHEN COLD, NOT STICKY OR BRITTLE. THEY SHALL BE GRAY IRON MEETING ASTM A-48 LATEST REVISION.
    - JOINTS - STRUCTURE SECTIONS SHALL BE JOINTED WITH RUBBER TIE GASKETS, THE RUBBER TIE GASKETS SHALL MEET ASTM C-443 LATEST REVISION.
- SUBDRANS
  - PERFORATED PLASTIC PIPE SUBDRANS SHALL CONFORM TO ASTM D3034, SDR 35, ASTM D2729, OR ASTM F405.
- APPLICATION
  - 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 OR REGULATIONS AS AMENDED BY ANY AGENCIES. CONTRACTOR SHALL FURNISH ALL BONES NECESSARY TO GET PERMITS FOR CUTS AND CONNECTIONS TO EXISTING SEWERS.
  - 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.
  - 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.
  - WORKMANSHIP: TO CONFORM TO ALL LOCAL, STATE AND NATIONAL CODES AND TO BE APPROVED BY ALL LOCAL AND STATE AGENCIES HAVING JURISDICTION.
  - 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. WHEN CONSTRUCTION IS IN PROGRESS, UNDER NO CIRCUMSTANCES LAY PIPE OR APPURTENANCES IN STANDING WATER. CONDUCT THE DISCHARGE FROM TRENCH DOWNWARDS TO DRAINS OR NATURAL DRAINAGE CHANNELS.
  - 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.
- BACKFILLING
  - 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 SOIL. TAMP 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.
  - HOPK 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.
- SUBDRANS: ALL SUBDRANS 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.
- 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.



PAVING SPECIFICATIONS:

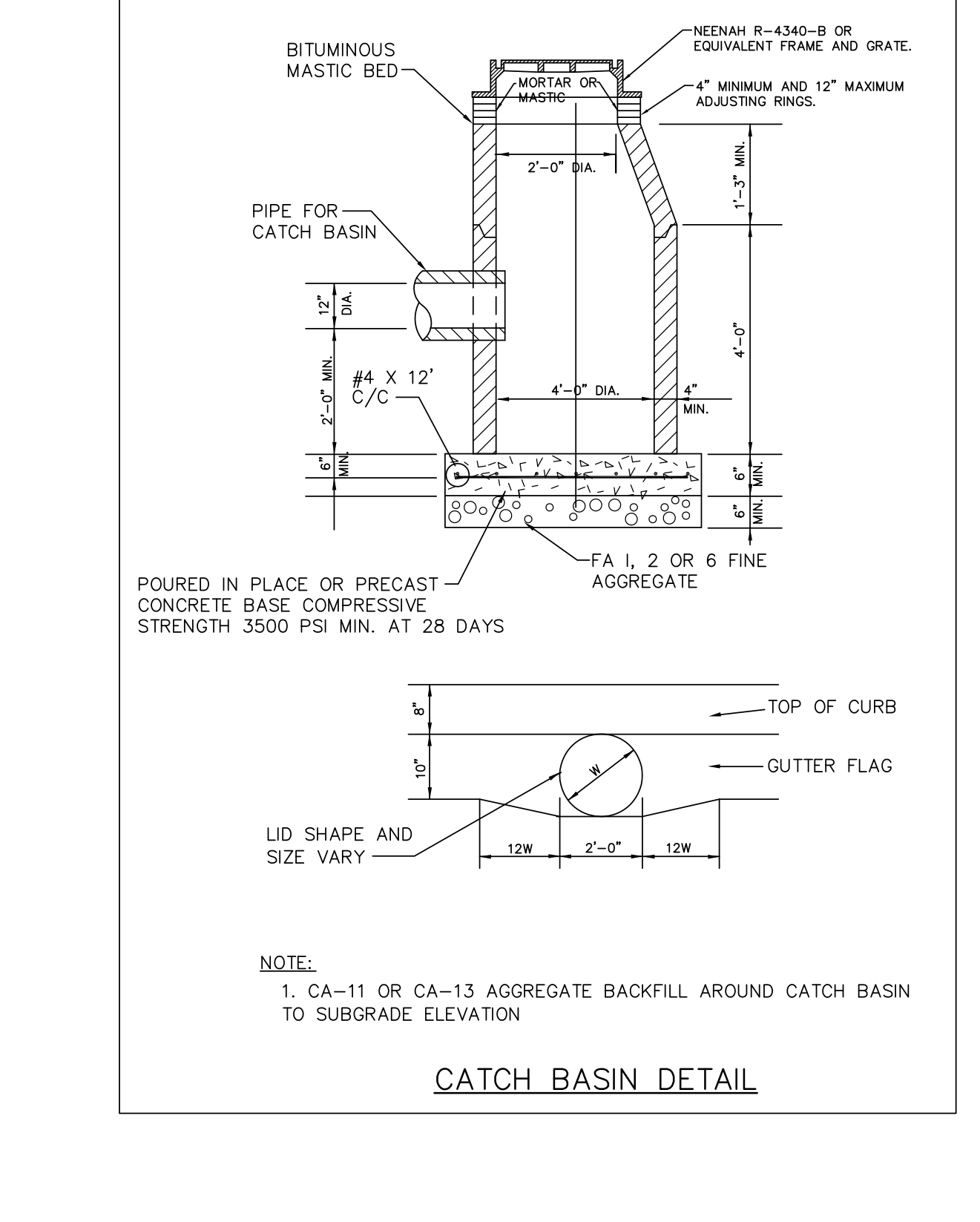
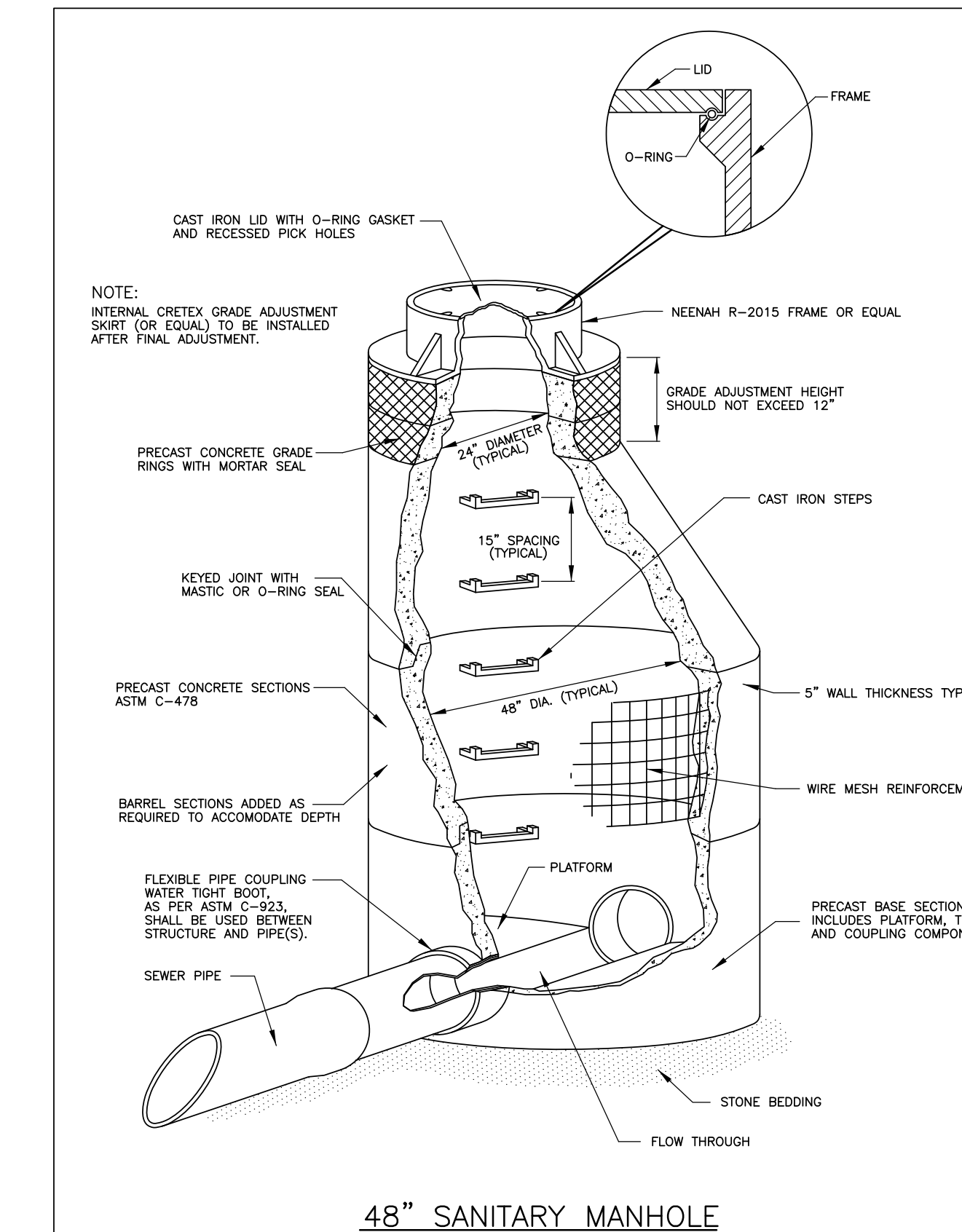
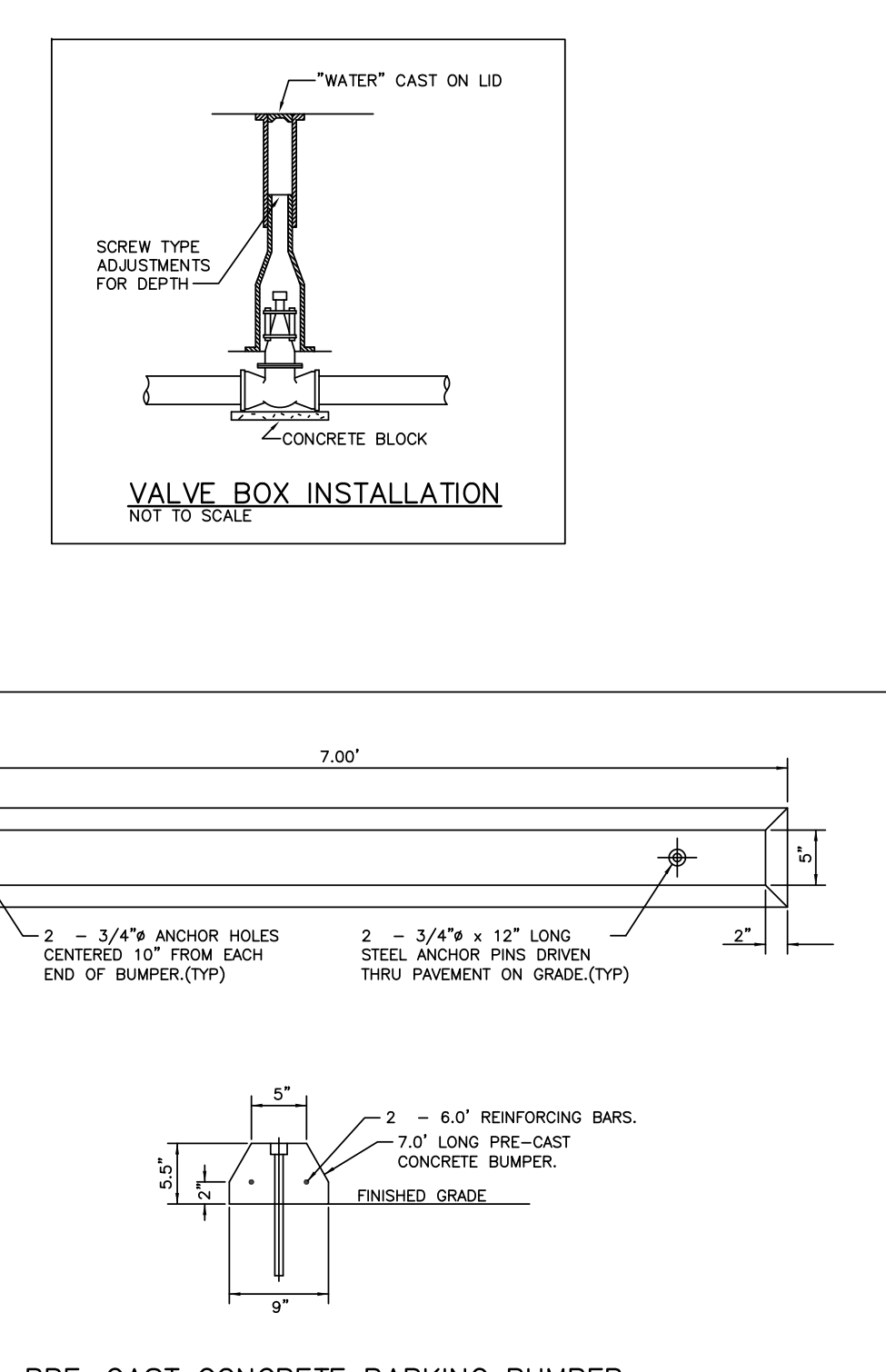
- SCOPE OF WORK
- THE WORK REQUIRED UNDER THIS SECTION INCLUDES ALL EXTERIOR CONCRETE AND BITUMINOUS PAVING AND RELATED ITEMS NECESSARY TO COMPLETE THE WORK INDICATED ON DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS, INCLUDING BUT NOT LIMITED TO: ALL DRIVES, PARKING AREAS IN CONTRACT LIMITS CURBS AND OUTTERS SIDEWALKS AND CONCRETE SLABS, EXTERIOR STEPS
- MATERIALS
  - 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 8 BAGS PER CUBIC YARD OF CONCRETE AND MAXIMUM WATER CONTENT SHALL BE 5.5 US 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 PLACED CONCRETE SHALL BE NO LESS THAN 1-1/4 INCHES NOR MORE THAN 3 INCHES. STANDARD TEST ASTM C1243 SHALL BE USED TO MEASURE SLUMP. MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS SHALL BE 4500 PSI. ALL EXTERIOR CONCRETE SHALL HAVE AN ENTRAINMENT OF 5% TO 8% BY VOLUME PER ASTM C626. RETEMPERING OF DELIVERED CONCRETE WILL NOT BE ALLOWED. CONCRETE SHALL BE COMPOSED OF:
    - PORTLAND CEMENT, CONFORMING TO ASTM C-150, TYPE II OR TYPE IIA.
    - AGGREGATES: CONFORMING TO ASTM C-33.
    - WATER: SHALL BE CLEAR AND FREE FROM INJURIOUS AMOUNTS OF OILS.
    - WELDED STEEL WIRE FABRIC: WHERE REQUIRED FOR CONCRETE REINFORCEMENT SHALL CONFORM TO ASTM A 185.
  - PRE MOLDED JOINT FILLER: SHALL BE NON-EXTRUDING TYPE MEETING ASTM C-844, EXCEPT THAT PRE MOLDED JOINT FILLER USED IN CONCRETE WALK CONSTRUCTION MAY BE EITHER NON-EXTRUDING OR RESILIENT.
- 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.
- COMPACTED AGGREGATE SUB-BASE SHALL BE CRUSHED STONE OR CRWEL 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 PARTICLES, AND SHALL BE FREE FROM FINE PARTICLES WITH DIRT. COMPACTED AGGREGATE SHALL BE GRADED AS FOLLOWS: PER LATEST REVISIONS.

SIZE	% PASSING
1-1/2"	100
3/4"	80-100
1/2"	70-920
#4	55-60
#8	35-60
#20	25-50
#30	12-30
#200	5-10

- APPLICATION
  - ACCORDANCE WITH EARTHWORK SECTION, TO BRING SUB GRADES, AFTER FINAL COMPACTION, TO THE REQUIRED GRADES AND SECTIONS FOR SITE IMPROVEMENT.
  - 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.
  - COMPACTION OF SUB-GRADE: THE FIRST 8 INCHES BELOW THE SUB-GRADE SHALL BE COMPACTED TO AT LEAST 100% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE PROVISIONS OF ASHITO T-99. WATER SHALL BE PREVENTED FOR STANDING ON THE COMPACTED SUB-GRADE.
  - UTILITY STRUCTURES: CHECK FOR CORRECT ELEVATION OF ALL MANHOLE COVERS, INLETS, VALVE BOXES AND UTILITY STRUCTURES LOCATED WITHIN AREAS TO BE PAVED AND MARK, OR HAVE ANY NECESSARY ADJUSTMENTS IN SUCH STRUCTURES.
- PLACING CONCRETE:
  - SUBGRADE: PLACE CONCRETE ONLY ON A MOIST, COMPACTED SUBGRADE OF BASE FREE FROM LOOSE MATERIAL. PLACE NO CONCRETE ON A MUDGY OR FROZEN SUBGRADE.
  - FORMS: ALL FORMS SHALL BE FREE FROM MUD, 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.
  - 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.
- CONCRETE CURB
  - EXPANSION JOINTS: SHALL BE 1/2 INCH THICK PRE MOLDED AT ENDS OF ALL RETURNS AND A MAXIMUM SPACING OF 100 FEET.
  - CONTRACTION JOINTS: SHALL BE UNLESS OTHERWISE PROVIDED, CONTRACTION JOINTS SHALL BE JOINTS SPACED 10 FEET ON CENTER.
  - FINISH: TAMP AND SKEED CONCRETE AS SOON AS PLACED, AND FILL ANY HONEYCOMBED PLACES, FINISH SQUARE CORNERS TO 1/4 INCH RADIUS AND OTHER CORNERS TO RADI SHOWN.
- CONCRETE WALKS AND EXTERIOR STEPS:
  - SLOPES: PROVIDE 1/4 INCH PER FOOT CROSS SLOPE. MAKE ADJUSTMENTS IN SLOPES A WALK INTERSECTIONS AS NECESSARY TO PROVIDE PROPER DRAINAGE.
  - DIMENSIONS: WALKS AND STEPS SHALL BE ONE COURSE CONSTRUCTION AND OF WIDTHS AND DETAILS SHOWN ON THE DRAWINGS.
  - FINISH: SKEED CONCRETE AND TROWEL WITH A STEEL TROWEL TO A HARD DENSE SURFACE AFTER SURFACE WATER HAS DISAPPEARED. APPLY MEDIUM BROOM FINISH AND SCORIE 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.
    - 1/2" PREFORMED JOINT FILLER SHALL EXTEND NO LESS THAN 1/2" BELOW FINISH SURFACE.
    - ALL EXPANSION JOINTS SHALL BE SEALED WITH A WATERPROOF SELF LEVELING JOINT SEALANT (i.e. BASF SL 1) INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
- 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.
- BITUMINOUS PAVEMENT: NOT 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.
- 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.

PAVEMENT MARKING SPECIFICATIONS:

- SUMMARY
- SECTION INCLUDES
  - PAINTING AND MARKING OF PAVEMENTS.
- REFERENCES
  - 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.
    - AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION (ASHITO):
      - ASHITO M247 - GLASS BEADS USED IN TRAFFIC PAINTS
      - ASHITO M248 - READY-MIXED WHITE AND YELLOW TRAFFIC PAINTS
    - ASTM INTERNATIONAL (ASTM):
      - ASTM 04414 - STANDARD PRACTICE FOR MEASUREMENT OF WET FILM THICKNESS BY NOTCHED GAUGES.
    - FEDERAL SPECIFICATIONS (FS):
      - FS A-A-2886 - PAINT, TRAFFIC, SOLVENT BASED (SUPERSEDES FS TT-P-85 AND FS TT-P-15, TYPE I)
      - FS TT-B-1325 - BEADS (GLASS SPHERES) RETRO-REFLECTIVE
      - FS TT-P-1952 - PAINT, TRAFFIC AND AIRFIELD MARKING, WATERBORNE
  - PRODUCT CONDITIONS
    - MAINTAIN ACCESS FOR VEHICULAR AND PEDESTRIAN TRAFFIC AS REQUIRED FOR OTHER CONSTRUCTION ACTIVITIES. UTLITY FLAGMEN, BARRICADES, WARNING SIGNS, AND WARNING LIGHTS AS REQUIRED.
  - QUALITY ASSURANCE
    - USE TRAINED AND EXPERIENCED PERSONNEL IN APPLYING THE PRODUCTS AND OPERATING THE EQUIPMENT REQUIRED FOR PROPERLY PERFORMED WORK.
  - PRODUCTS
    - MATERIALS
      - 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 ACT STANDARDS. PAINT MATERIALS SHALL CONFORM TO THE RESTRICTIONS OF THE LOCAL AIR POLLUTION CONTROL DISTRICT.
      - WATERBORNE PAINT: PAINTS SHALL CONFORM TO FS TT-P-1952.
      - SOLVENT BORNE PAINT: PAINT SHALL CONFORM TO FS A-A-2886 OR ASHITO M248. PAINT SHALL BE NON-BLEEDING, QUICK DRYING, AND ALKALY PETROLEUM BASE PAINT SUITABLE FOR TRAFFIC-BEARING SURFACE AND BE MIXED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS BEFORE APPLICATION FOR COLORS WHITE, YELLOW, BLUE, AND RED.
      - GLASS BEADS: ASHITO M 247, TYPE 1 OR FS TT-B-1325, TYPE 1, GRADATION A.
    - EXAMINATION
      - EXAMINE THE WORK AREA AND CORRECT CONDITIONS DETRIMENTAL TO TIMELY AND PROPER COMPLETION OF THE WORK. DO NOT PROCEED UNTIL UNSATISFACTORY CONDITIONS ARE CORRECTED.
    - PREPARATION
      - SWEET AND CLEAN SURFACE TO ELIMINATE LOOSE MATERIAL AND DUST.
      - 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. THE COUPLER 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.
      - NEW PAVEMENT SURFACES SHALL BE ALLOWED TO CURE FOR NOT LESS THAN 30 DAYS BEFORE APPLICATION OF MARKING MATERIALS.
    - APPLICATION
      - 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 CURVES AND CROSSWALKS, USE STRAIGHTEDGE TO ENSURE UNIFORM, CLEAN, AND STRAIGHT STRIPES.
      - INSTALL PAVEMENT MARKINGS ACCORDING TO MANUFACTURER'S RECOMMENDED PROCEDURES FOR THE SPECIFIED MATERIAL.
      - FOLLOWING ITEMS SHALL BE PAINTED WITH COLORS NOTED BELOW:
        - PEDESTRIAN CROSSWALKS: WHITE
        - EXTERIOR SIDEWALK CURBS AND GUARD POSTS: YELLOW
        - FIRE LANES: RED OR PER LOCAL CODE
        - LANE STRIPING WHERE SEPARATING TRAFFIC MOVING IN OPPOSITE DIRECTIONS: YELLOW
      - LANE STRIPING WHERE SEPARATING TRAFFIC MOVING IN THE SAME DIRECTION: WHITE
      - ADA SYMBOLS: BLUE OR PER LOCAL CODE
      - ADA PARKING SPACE MARKINGS AS SHOWN ON THE DRAWINGS.
      - PARKING STALL STRIPING: WHITE, UNLESS OTHERWISE NOTED ON CONSTRUCTION DRAWINGS
    - 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 5 LB/40.
    - FIELD QUALITY CONTROL
      - 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.
      - 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 04414.
    - CLEANING
      - WASTE MATERIALS SHALL BE REMOVED AT THE END OF EACH WORKDAY. UPON COMPLETION OF THE WORK, ALL CONTRACTORS AND DESIGNS 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.



REV. BY  
T.G.

ISSUED FOR TOWN REVIEW

DATE  
7/23/21

REVISIONS

ENGINEERING, LLC  
DESIGN TEAM  
7808 WEST 103RD STREET  
PALOS HILLS, ILLINOIS 60465-1529  
Phone: (708) 599-5337  
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



Issue:	Rev. No.	Description	Date
Presentation Set		ISSUE FOR VILLAGE REVIEW	7/23/2021

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

Seals and Certificates

DLD

Checked By:

XAJA

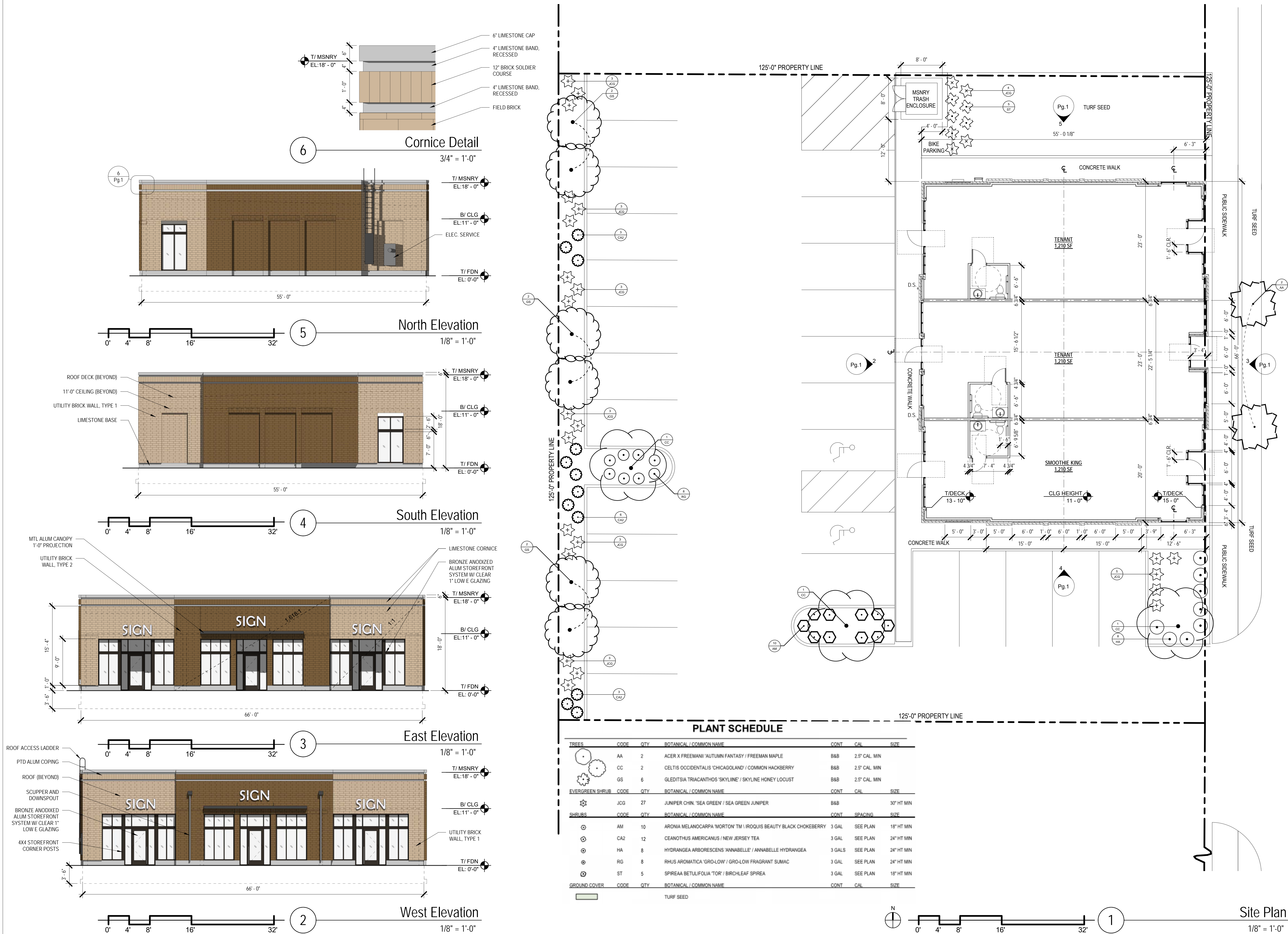
Drawn By:

2021.05.02

Project Number

Smoothie King  
Retail Building  
8130 Calumet Ave  
Munster, IN 46321

Presentation  
Drawings





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 <u>TAX PARCEL NUMBERS</u>	
PARCEL 1	45-06-24-229-013.000-027 (LOTS 32-34)
PARCEL 2	45-06-24-229-014.000-027 (LOTS 35-36)

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 \_\_\_\_\_ )  
STATE OF \_\_\_\_\_ ) ss

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: \_\_\_\_\_ CHAIRMAN \_\_\_\_\_  
\_\_\_\_\_  
(PRINTED NAME)

ATTEST: \_\_\_\_\_ EXECUTIVE SECRETARY \_\_\_\_\_  
\_\_\_\_\_  
(PRINTED NAME)

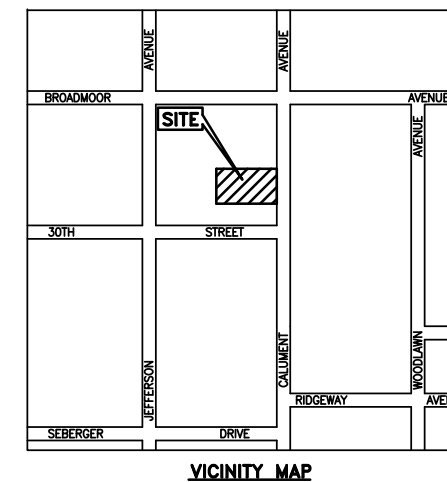
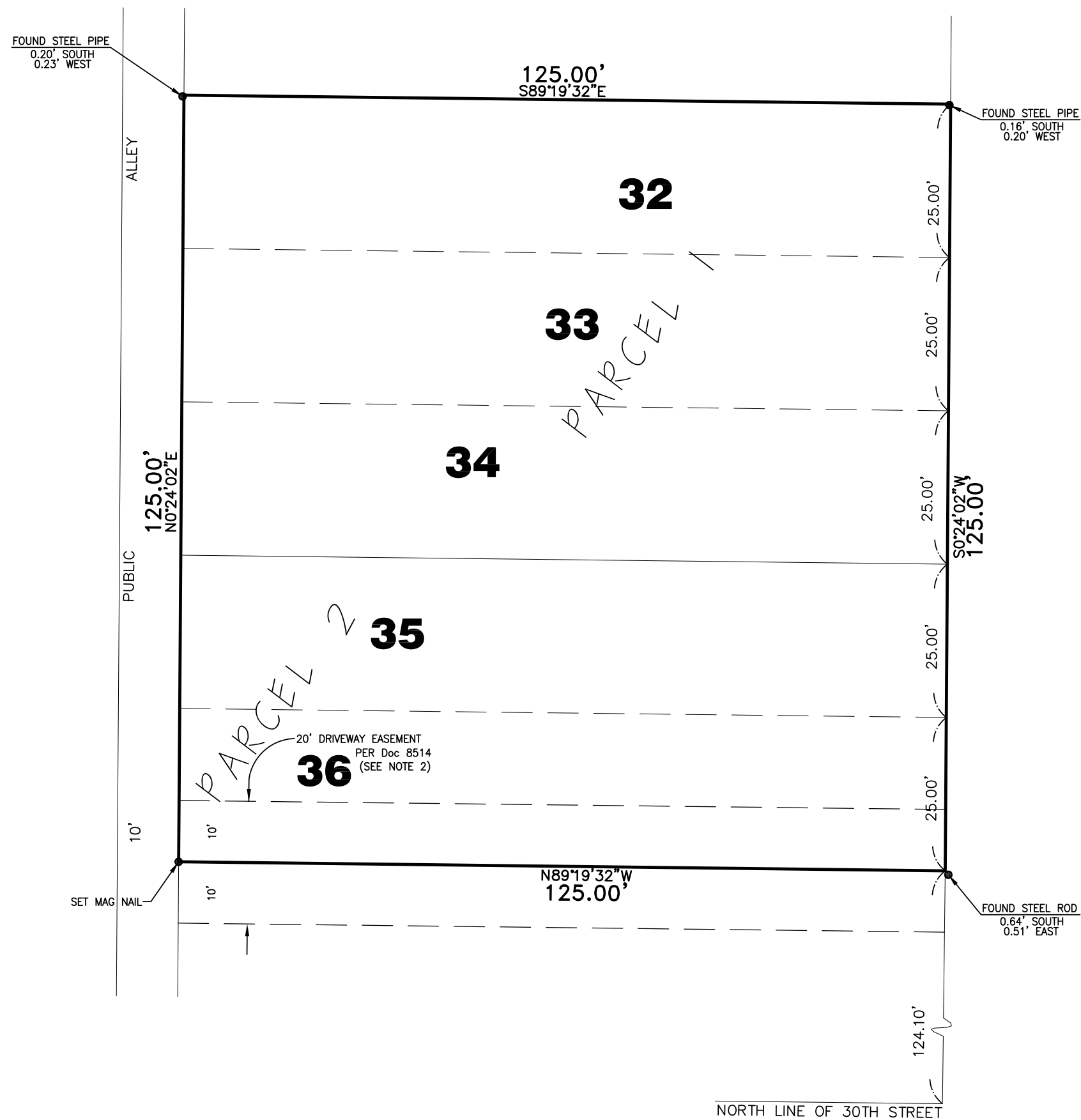
PREPARED FOR:  
PARTH PATEL

PREPARED BY:



7808 WEST 103RD STREET  
PALOS HILLS, ILLINOIS 60465-1529  
Phone (708) 599-3737

Survey No. 21-01-038-CONS



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
<hr/>		
TOTAL	15,625 SQ. FT.	0.359 AC
		(more or less)

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.



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