

AS-BUILT for BARRON HEATING 5100 PACIFIC HIGHWAY

DE 2008-07

SITUATE IN A PORTION OF THE NE QUARTER OF SECTION 33, T. 39 N., R. 02 E., W.M.
CITY OF FERNDALE, WHATCOM COUNTY, WASHINGTON

LEGEND

- = FOUND REBAR & PLAS. CAP (PLS#24225)
- = FOUND 1/2" REBAR & PLAS. CAP (PLS#38980)
- = FOUND NAIL/FLASHER
- = FND REBAR W/RED PLAS. CAP TRAV. PT.
- [] = RECORD DATA PER SPECIFIC BINDING SITE PLAN NO. 5, PACIFIC INDUSTRIAL PARK
- PH = EXIST TELEPHONE PEDESTAL
- PP = EXIST POWER POLE
- PP = EXIST POWER POLE LIGHT POLE
- SD = EXIST SD MANHOLE (NO LID)
- SD = EXIST SD CATCH BASIN
- D18 = EXIST 18" STORM DRAIN LT
- D18 = EXIST 18" STORM DRAIN RT
- D12 = EXIST 12" STORM DRAIN LT
- D12 = EXIST 12" STORM DRAIN RT
- M4 = EXIST 4" DIA MAPLE TREE
- S = EXIST SIGN
- TOP = EXIST TOP OF BANK/RO SHOULDER
- TOE = EXIST TOE OF BANK
- CD = EXIST CENTERLINE OF DITCH
- CD = INDICATES DRAINAGE DIRECTION
- CD = EXISTING FIRE STAND PIPE
- CD = EXISTING WATER VALVE
- CD = EXISTING FIRE HYDRANT
- CD = EXISTING WATER BLOW-OFF VALVE
- W = EXIST WATER LINE
- SS = EXIST SANITARY SEWER MANHOLE
- SS = EXIST 8" SANITARY SEWER LINE & "LOW DIRECTION"
- SS = SPOT ELEV ON EXIST EDGE OF PAVEMENT
- SS = SPOT ELEV ON EXIST TOP BACK OF CURB
- SS = SPOT ELEV ON EXIST C.L. OF PAVED ROAD
- SS = SPOT ELEV ON EXIST C.L. OF DITCH
- SS = SPOT ELEV ON EXIST GROUND
- SS = SPOT ELEV ON TOP ASPHALT
- SS = SPOT ELEV ON EDGE OF GRAVEL
- SS = EXISTING STOP SIGN
- SS = EXISTING CHAIN LINK FENCE
- SS = EXIST OVERHEAD UTILITIES

- TP 58.30 = PROPOSED ELEV ON TOP OF PAVEMENT
- TW 58.80 = PROPOSED ELEV ON TOP OF WALK
- TC 58.80 = PROPOSED ELEV ON TOP OF CURB
- SD = PROPOSED STORM DRAIN CATCH BASIN
- SD = PROPOSED STORM DRAIN MANHOLE (TYPE 2)
- SD = PROPOSED CHAIN LINK FENCE
- SD = PROPOSED STORM DRAIN LINE
- SS = PROPOSED SAN. SEWER LINE
- SS = PROPOSED WATER LINE
- SS = PROPOSED OR RELOCATED FIRE HYDRANT
- SS = PROPOSED FIRE DEPT. CONNECTION
- SS = PROPOSED OR RELOCATED FIRE HYDRANT
- SS = PROPOSED WATER METER
- SS = PROPOSED POWER VAULT
- DT.2 = DETAIL CALLOUT

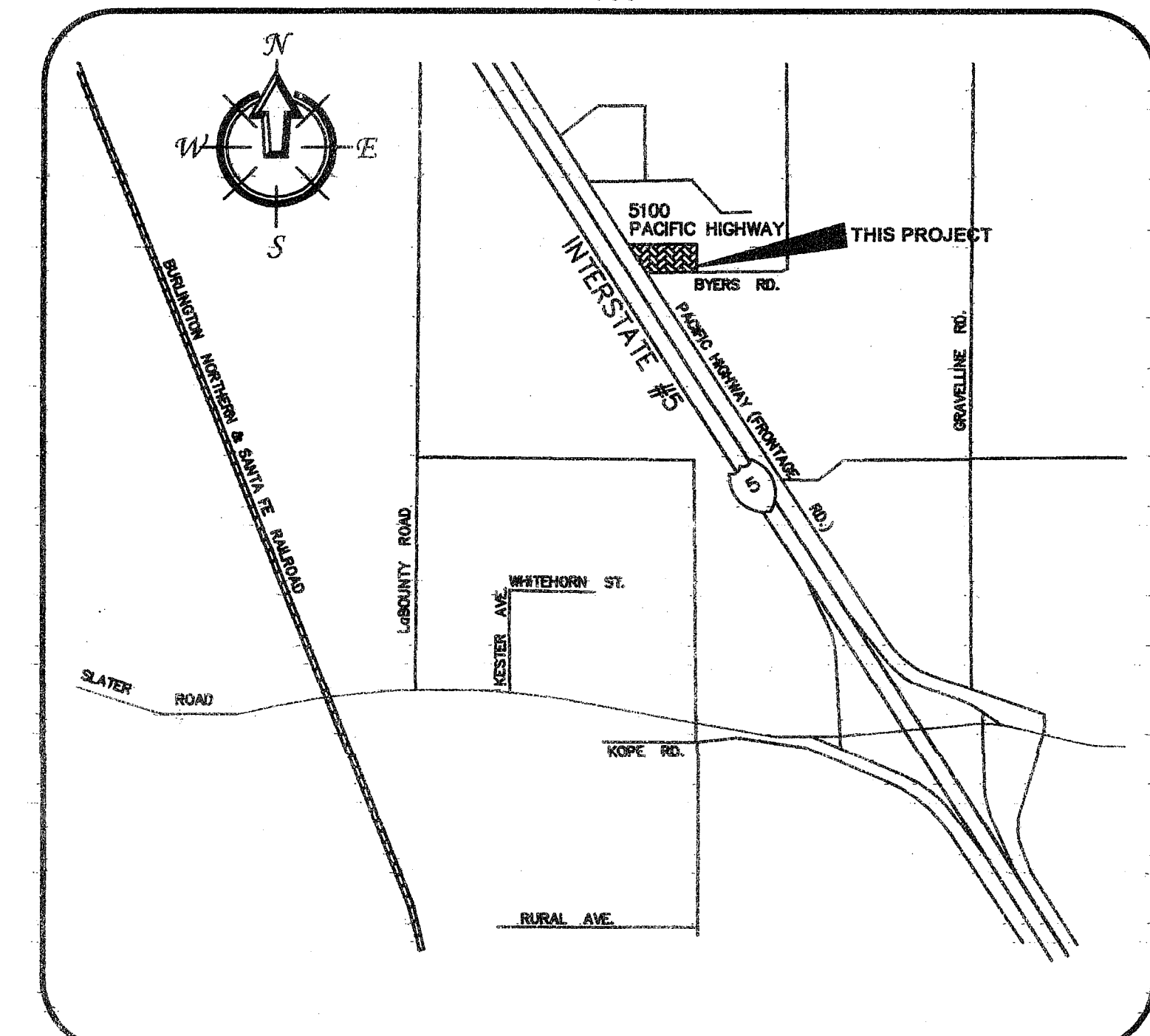
SHEET INDEX

- C1) COVER SHEET
- C2) EXISTING CONDITIONS
- C3) TEMPORARY EROSION & SEDIMENTATION CONTROL PLAN
- C4.1) MASTER SITE PLAN - PROPOSED SHOWROOM AND BUSINESS OFFICES
- C4.2) MASTER SITE PLAN - PROPOSED WAREHOUSE AND SHOP
- C5) PAVING, GRADING & DRAINAGE PLAN
- C6) SANITARY SEWER & WATER DISTRIBUTION PLAN
- C7) PACIFIC HIGHWAY PLAN & PROFILE
- C8) BYERS ROAD PLAN & PROFILE
- C9) GENERAL NOTES & DETAILS
- C10) DETAILS
- C11) DETAILS
- C12) DETAILS
- C13) DETAILS
- C14) DETAILS
- C15) STORMWATER POLLUTION PREVENTION PLAN

ABBREVIATIONS

| | | | |
|----------|----------------------------|---------|---------------------------|
| WL | = WATER LINE | IE | = INVERT ELEVATION |
| PVC | = POLY VINYL CHLORIDE | INV | = INVERT |
| D.I. | = DUCTILE IRON | SSCO | = SANITARY SEWER CLEANOUT |
| LF | = LINEAR FEET | SSMH | = SANITARY SEWER MANHOLE |
| PH | = FIRE HYDRANT | EG | = EXISTING GRADE |
| MJ | = MECHANICAL JOINT | STA | = STATION |
| FL | = FLANGE | AF NO. | = AUDITORS FILE NUMBER |
| BO | = BLOWOFF ASSEMBLY | ALIGN | = ALIGNMENT |
| CPLG | = COUPLING | RW/ R/W | = RIGHT OF WAY |
| ADAPT | = ADAPTER | TR | = TRACT EASEMENT LINE |
| LT | = LEFT | MB | = MAIL BOX |
| RT | = RIGHT | UTIL | = UTILITY |
| TYP | = TYPICAL | REQ | = REQUIRED |
| EX, EXST | = EXISTING | LOC | = LOCATION |
| EXST | = EXISTING | APPROX | = APPROXIMATE |
| CL | = CENTERLINE | CONC | = CONCRETE |
| FF, FFE | = FINISH FLOOR ELEVATION | PLNTR | = PLANTER |
| EP, EOP | = EDGE OF PAVING | WLK | = WALKWAY |
| EL, ELEV | = ELEVATION | FLD | = FIELD |
| R | = RADIUS | PC | = POINT OF CURVE |
| FG | = FINISHED GRADE | PT | = POINT OF TANGENCY |
| FGE | = FINISHED GRADE ELEVATION | TP | = TOP OF PAVEMENT |
| TBC | = TOP BACK OF CURB | HP | = HIGH POINT |
| | | OPP | = CORRUGATED PLASTIC PIPE |

VICINITY MAP 1"=1000'



PROJECT INFORMATION

OWNER

BARRON HEATING
5100 PACIFIC HWY
FERNDAL, WA 98248
(360) 676-1131

ARCHITECT

CARLETTI ARCHITECTS, PS
PETER CARLETTI
116 E FIR ST #A
MT. VERNON, WA 98273
(360) 424-0394

CIVIL ENGINEER

FREELAND & ASSOCIATES, INC.
TONY FREELAND, PE
220 W. CHAMPION ST.
BELLINGHAM, WA 98225
(360) 650-1408
(360) 650-1401 {FAX}

CONTRACTOR

ROOSEDAHL-HONCOOP
GARY HONCOOP
5977 GUIDE MERIDIAN
BELLINGHAM, WA 98226
(360) 398-2800

SURVEYOR

LAND DEVELOPMENT ENGR. & SURVEYING
5160 INDUSTRIAL PL.
FERNDAL, WA 98248
(360) 383-0620
(360) 383-0639 {FAX}

CECSL

STREMLER GRAVEL, INC.
LANE STREMLER
250 BAY LYN ROAD
LYNDEN, WA 98264
(360) 354-8585

APPROVED

SEP 28 2009
BY *[Signature]*
CITY OF FERNDAL

CALL BEFORE YOU DIG
FOR BURIED UTILITY LOCATIONS
1-800-424-5555

Surveyor's Certification

I CERTIFY THAT THE LOCATIONS, ELEVATIONS, DEPTHS, AND AS-BUILT COMMENTS REFLECTING MATERIALS ACTUALLY USED DURING CONSTRUCTION ACCURATELY REFLECT EXISTING FIELD CONDITIONS AS DETERMINED BY ME OR UNDER MY DIRECT SUPERVISION ON THIS

By: *[Signature]*

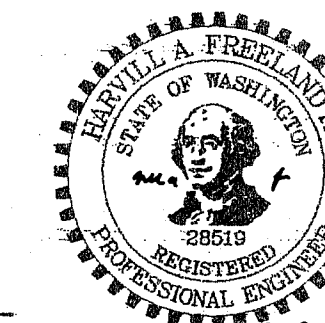
Date: 5/27/2009

Engineer's Certification

I HEREBY CERTIFY THAT THE IMPROVEMENTS IN BARRON HEATING HAVE BEEN INSPECTED BY FREELAND & ASSOCIATES, INC. AND TO THE BEST OF MY KNOWLEDGE, HAVE BEEN CONSTRUCTED IN CONFORMANCE WITH THE CITY OF FERNDAL DEVELOPMENT STANDARDS, THE CITY OF FERNDAL MUNICIPAL CODE, SUBSEQUENT STANDARDS ADOPTED BY REFERENCE THEREIN, AND STANDARD ENGINEERING PRACTICE.

By: *[Signature]*

Date: 9-9-09



1409 North Garden Street
Bellingham, WA 98225

t: 360.650.1408
f: 360.650.1401

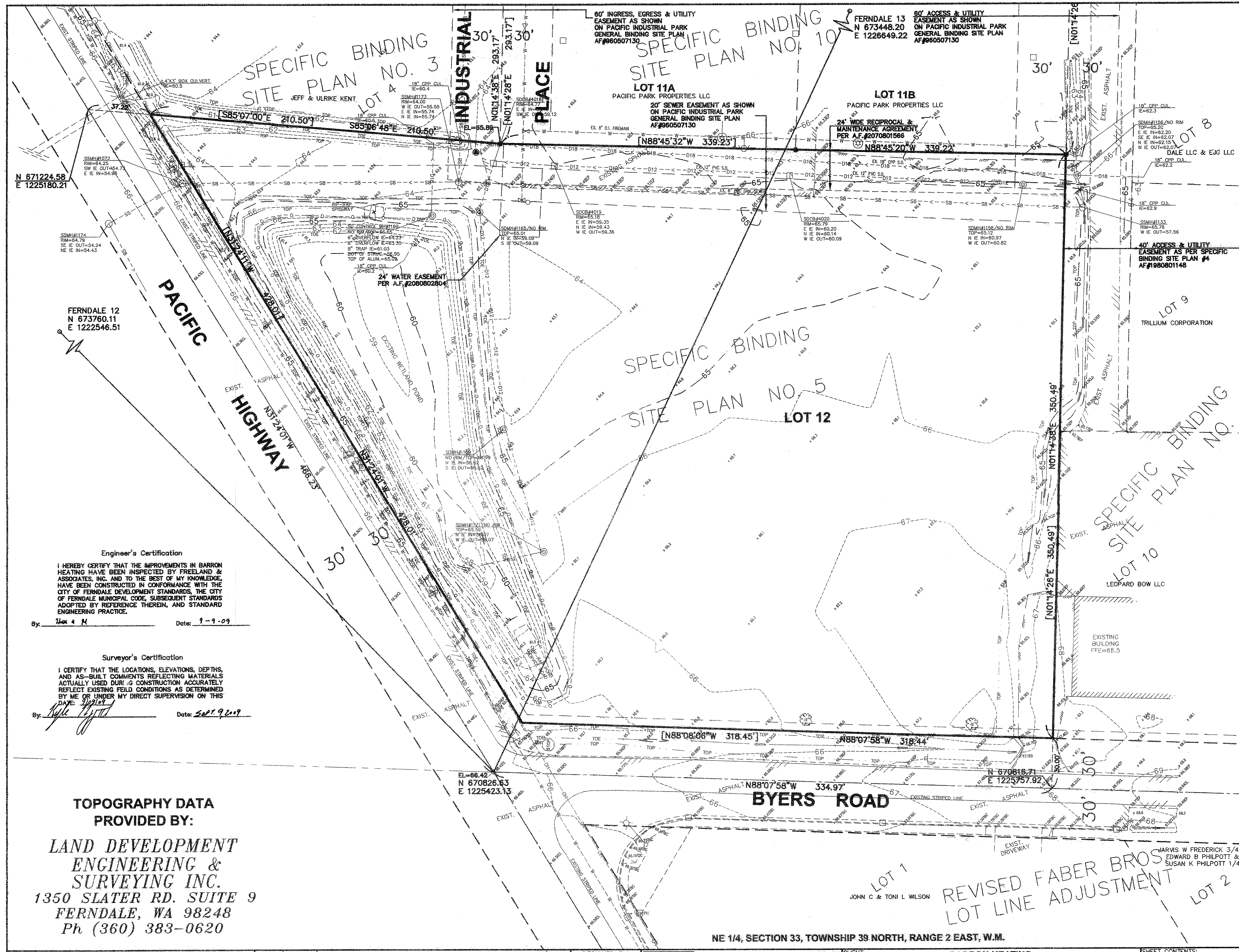
06085ASB2.dwg

DATE: 09-09-09

JOB #: 06085

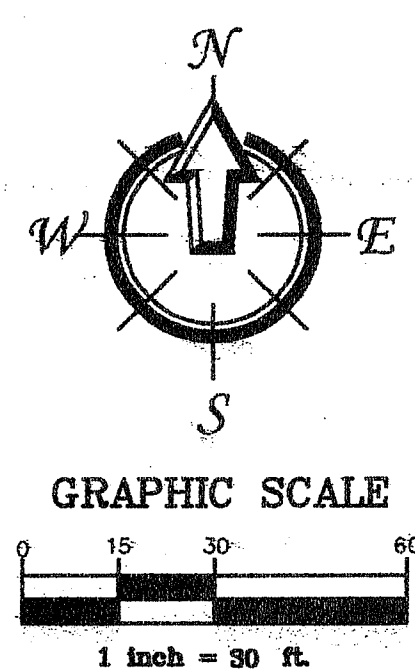
SHEET: C1

FREELAND & ASSOCIATES



TOPO NOTES:

- 1) FOR THIS SURVEY DATA WAS GATHERED BY FIELD TRAVERSE & SWING TOPO UTILIZING ELECTRONIC DATA COLLECTION BY LAND DEVELOPMENT ENGR. & SURVEYING, INC. ON OR ABOUT 6-28-07.
- 2) EQUIPMENT USED: LEICA TORA 1103 TOTAL STATION 00'03"
- 3) HORIZONTAL DATUM: CITY OF FERDALE SURVEY MONUMENT NETWORK JUNE, 2001
BASIS OF BEARINGS: FERDALE 13 TO FERDALE 12
BEARING: N85°39'09"W
- 4) VERTICAL DATUM: PROPOSED OFFICE WAREHOUSE PLANS BY DEA DATED 1-06-05.
BENCH MARK: RM OF STORM DRAIN CATCH BASIN NEAR THE INTERSECTION OF PACIFIC HIGHWAY & PACIFIC PLACE.
ELEV=65.08
TBM'S: AS SHOWN ON FACE OF MAP HEREON.
- 5) CONTOUR INTERVAL IS 2 FOOT AND ARE COMPUTER GENERATED FROM FIELD TOPOGRAPHY GATHERED FOR THIS SURVEY UTILIZING ELECTRONIC DATA COLLECTION.
- 6) FREELAND & ASSOCIATES, ASSUMES NO LIABILITY FOR ANY SUBSURFACE CONDITIONS OR FEATURES THAT MAY EXIST THAT AREN'T DETECTABLE AND/OR NOT VISIBLE.
- 7) THIS TOPOGRAPHY MAP WAS DONE WITHOUT BENEFIT OF A CURRENT TITLE REPORT AND FREELAND & ASSOCIATES, IS NOT RESPONSIBLE FOR ANY EASEMENTS, COVENANTS, RESERVATIONS AND RESTRICTIONS NOT SHOWN HEREON, THAT MAY EXIST.



LEGAL DESCRIPTION:

LOT 12, SPECIFIC BINDING SITE PLAN NO. 5, PACIFIC INDUSTRIAL PARK, RECORDED UNDER WHATCOM COUNTY AUDITOR'S FILE NO. 1981100875.

LEGEND:

- = FOUND REBAR & PLAS. CAP (PLS#24225)
- = FOUND 1/2" REBAR & PLAS. CAP (PLS#38980)
- = FOUND NAIL/FLASHER
- = FOUND REBAR W/RED PLAS. CAP TRAV. PT.
- [] = RECORD DATA PER SPECIFIC BINDING SITE PLAN NO. 5, PACIFIC INDUSTRIAL PARK
- ⊠ = EXIST TELEPHONE PEDESTAL
- ⊠ = EXIST POWER POLE
- ⊠ = EXIST POWER POLE LIGHT POLE
- ⊠ = EXISTING SD MANHOLE (NO LID)
- ⊠ = EXIST SD CATCH BASIN
- ⊠ = EXIST 18" STORM DRAIN LT
- ⊠ = EXIST 18" STORM DRAIN RT
- ⊠ = EXIST 12" STORM DRAIN LT
- ⊠ = EXIST 12" STORM DRAIN RT
- ⊠ = EXIST 4" DIA MAPLE TREE
- ⊠ = EXIST SIGN
- ⊠ = EXIST TOP OF BANK/RO SHOULDER
- ⊠ = EXIST TOE OF BANK
- ⊠ = EXIST CENTERLINE OF DITCH
- ⊠ = INDICATES DRAINAGE DIRECTION
- ⊠ = EXISTING FIRE STAND PIPE
- ⊠ = EXISTING WATER VALVE
- ⊠ = EXISTING FIRE HYDRANT
- ⊠ = EXISTING WATER BLOW-OFF VALVE
- ⊠ = EXIST WATER LINE
- ⊠ = EXIST SANITARY SEWER MANHOLE
- ⊠ = EXIST 8" SANITARY SEWER LINE & FLOW DIRECTION
- ⊠ = SPOT ELEV ON EXIST EDGE OF PAVEMENT
- ⊠ = SPOT ELEV ON EXIST TOP BACK OF CURB
- ⊠ = SPOT ELEV ON EXIST C.L. OF PAVED ROAD
- ⊠ = SPOT ELEV ON EXIST C.L. OF DITCH
- ⊠ = SPOT ELEV ON EXIST GROUND
- ⊠ = SPOT ELEV ON TOP ASPHALT
- ⊠ = SPOT ELEV ON EDGE OF GRAVEL
- ⊠ = EXISTING STOP SIGN
- ⊠ = EXISTING CHAIN LINK FENCE
- ⊠ = EXIST OVERHEAD UTILITIES

Engineer's Certification

I HEREBY CERTIFY THAT THE IMPROVEMENTS IN BARRON HEATING HAVE BEEN INSPECTED BY FREELAND & ASSOCIATES, INC. AND TO THE BEST OF MY KNOWLEDGE, HAVE BEEN CONSTRUCTED IN CONFORMANCE WITH THE CITY OF FERDALE DEVELOPMENT STANDARDS, THE CITY OF FERDALE MUNICIPAL CODE, SUBSEQUENT STANDARDS ADOPTED BY REFERENCE THEREIN, AND STANDARD ENGINEERING PRACTICE.

Surveyor's Certification

I CERTIFY THAT THE LOCATIONS, ELEVATIONS, DEPTHS, AND AS-BUILT COMMENTS REFLECTING MATERIALS ACTUALLY USED DURING CONSTRUCTION ACCURATELY REFLECT EXISTING FIELD CONDITIONS AS DETERMINED BY ME OR UNDER MY DIRECT SUPERVISION ON THIS DATE: 9/9/09

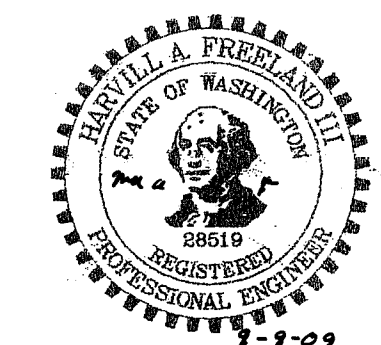
TOPOGRAPHY DATA PROVIDED BY:

LAND DEVELOPMENT ENGINEERING & SURVEYING INC.
1350 SLATER RD. SUITE 9
FERDALE, WA 98248
Ph (360) 383-0620

NE 1/4, SECTION 33, TOWNSHIP 39 NORTH, RANGE 2 EAST, W.M.

LOT 1
LOT 2
REVISED FABER BROS LOT LINE ADJUSTMENT
JOHN C & TONI L WILSON

APPROVED
SEP 28 2009
BY [Signature]
CITY OF FERDALE



CALL BEFORE YOU DIG
FOR BURIED UTILITY LOCATIONS
1-800-424-5555

| No. | Date | REVISION |
|-----|---------|--|
| 1 | 4-29-08 | UPDATED ASPHALT PAVING & STORM BETWEEN LOTS 11A/11B & 12 |

DESIGNED BY: HAF
DRAWN BY: AMM
CHECKED BY: HAF

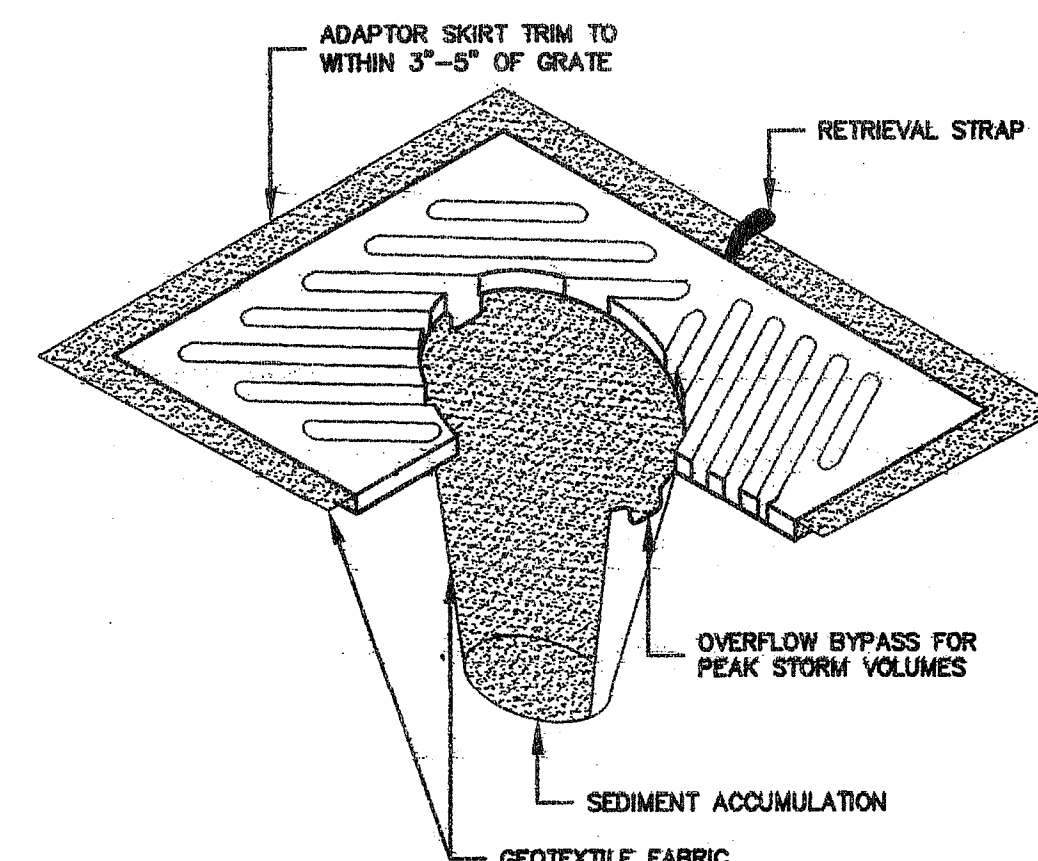
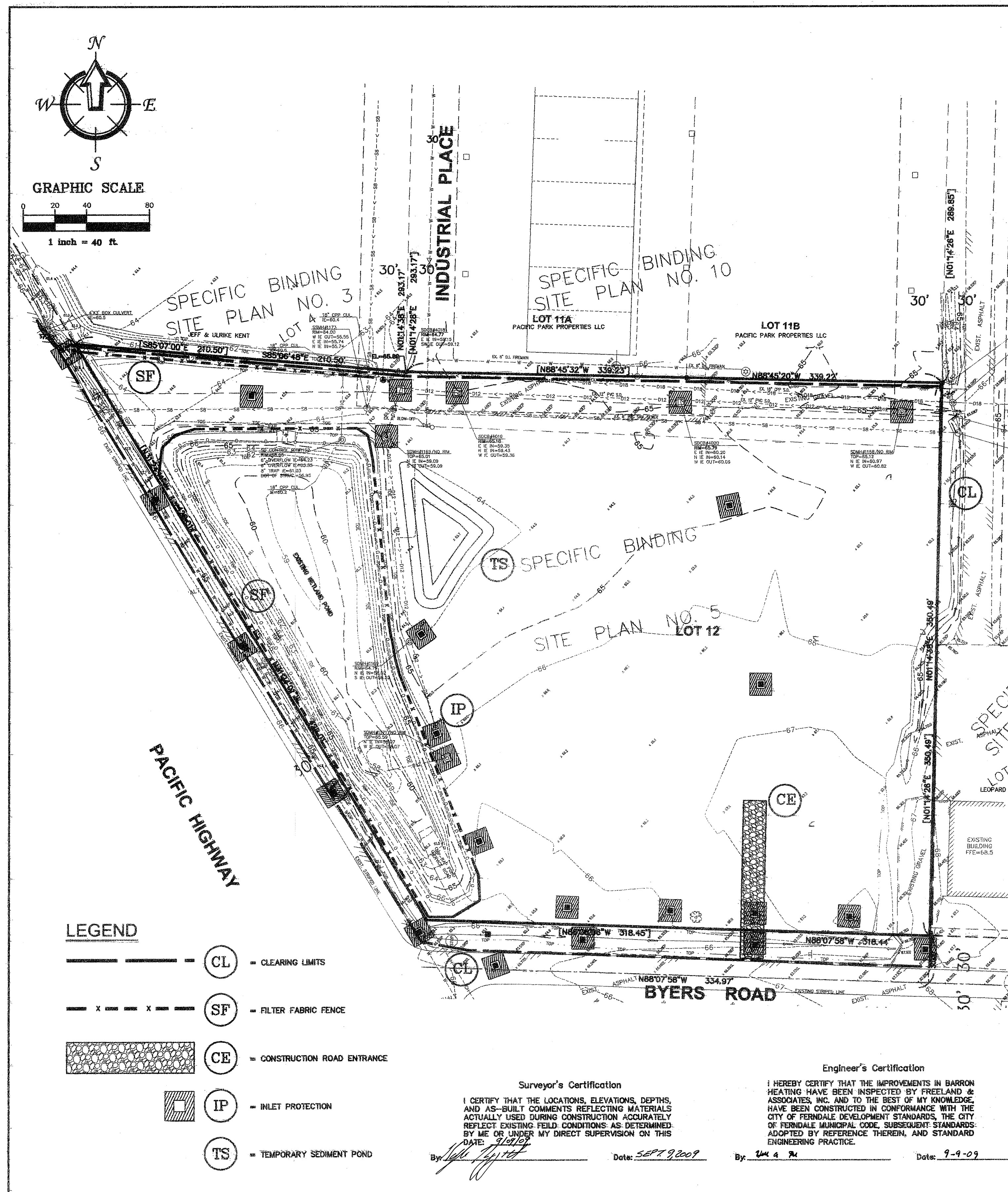
1408 North Garden Street
Bellingham, WA 98225
t: 360.850.1408
f: 360.850.1401
FREELAND & ASSOCIATES

CLIENT: BARRON HEATING
4176 MERIDIAN STREET
BELLINGHAM, WA 98226
PROJECT LOCATION: LOTS 12, SBSP NO.5
PACIFIC INDUSTRIAL PARK
FERDALE, WASHINGTON

SHEET CONTENTS:

EXISTING CONDITIONS

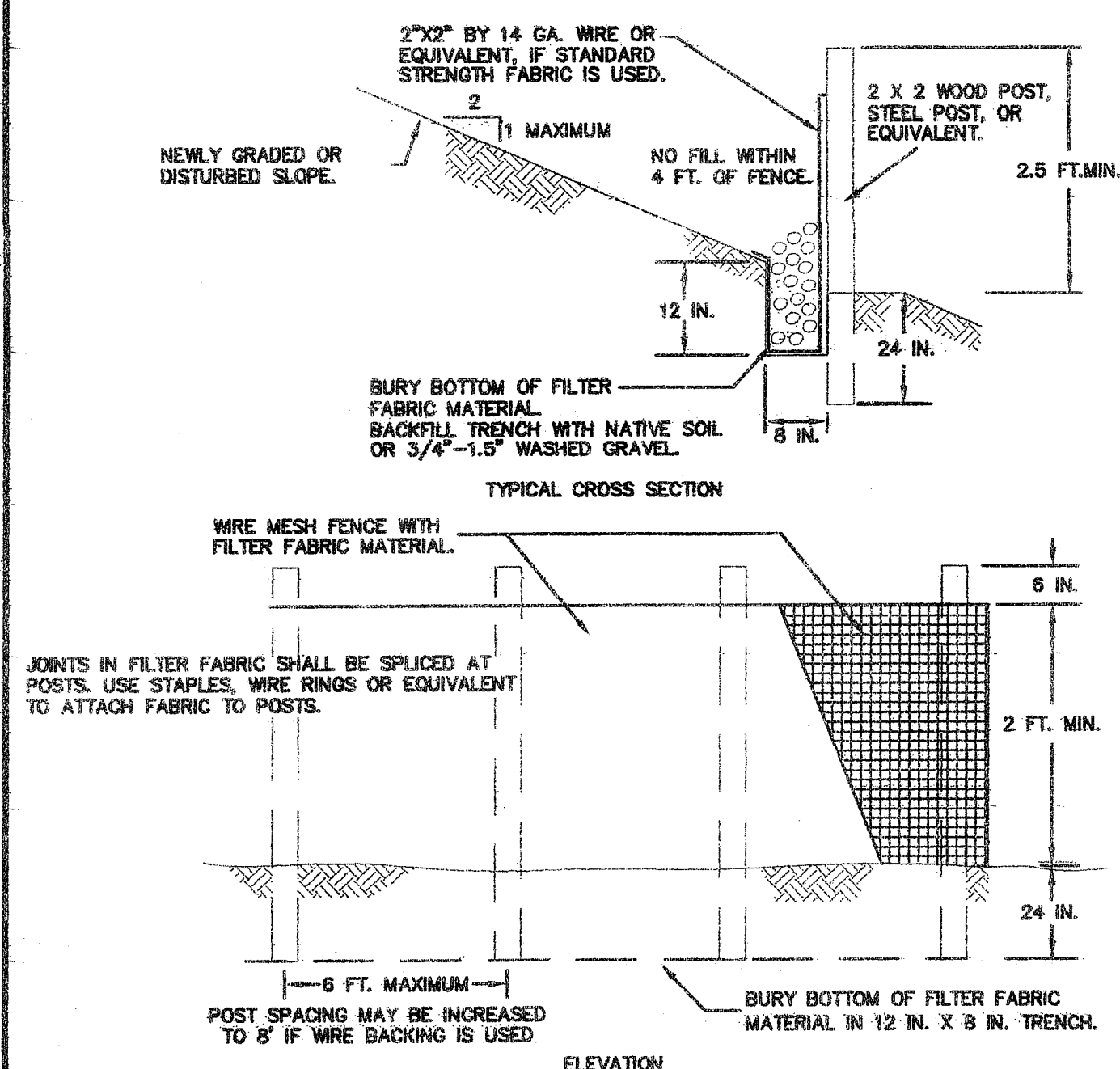
DWG #: 06085JP1
JOB #: 06085
SCALE: H: 1"=30' V: n/a
DATE: 09-09-09
SHEET: C2



NOTES:

1. INSERT SHALL BE INSTALLED PRIOR TO CLEARING AND GRADING ACTIVITY, OR UPON PLACEMENT OF A NEW CATCH BASIN.
2. SEDIMENT SHALL BE REMOVED FROM THE UNIT WHEN IT BECOMES HALF FULL.
3. SEDIMENT REMOVAL SHALL BE ACCOMPLISHED BY REMOVING THE INSERT, EMPTYING, AND RE-INSERTING IT INTO THE CATCH BASIN.

IP CATCH BASIN INSERT



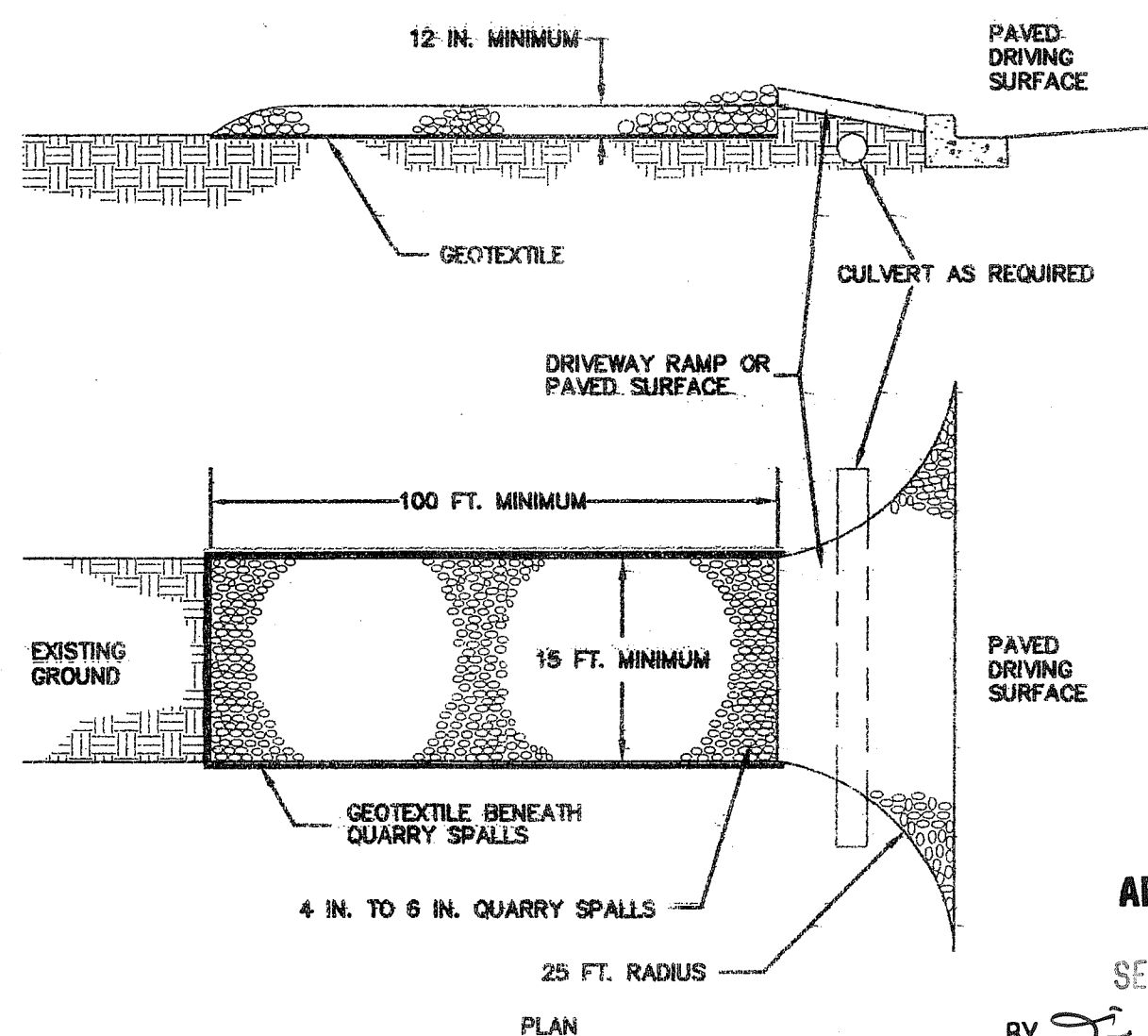
FF FILTER FABRIC FENCE

NOTES:

1. FENCE SHALL NOT BE INSTALLED ON SLOPES STEEPER THAN 2:1.
2. JOINTS IN FILTER FABRIC SHALL BE OVERLAPPED 6 INCHES AT POST.
3. USE STAPLES, WIRE RINGS, OR EQUIVALENT TO ATTACH FABRIC TO WIRE FENCE.
4. REMOVE SEDIMENT WHEN IT REACHES 1/3 FENCE HEIGHT.

EROSION/SEDIMENTATION CONTROL

1. APPROVAL OF THE EROSION/SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).
2. THE IMPLEMENTATION OF THE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED, AND LANDSCAPING IS ESTABLISHED.
3. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF CONSTRUCTION.
4. THE ESC FACILITIES SHOWN ON THE PLANS MUST BE CONSTRUCTED PRIOR TO ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM OR VIOLATE APPLICABLE WATER STANDARDS.
5. THE ESC FACILITIES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED (E.G., ADDITIONAL SUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.) AS NEEDED FOR UNEXPECTED STORM EVENTS, AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DO NOT LEAVE THE SITE.
6. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
7. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
8. AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.
9. STABILIZED CONSTRUCTION ENTRANCES AND WASH PADS SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
10. ANY AREA STRIPPED OF VEGETATION, INCLUDING ROADWAY EMBANKMENTS, WHERE NO FURTHER WORK IS ANTICIPATED FOR A PERIOD OF 7 DAYS, SHALL BE IMMEDIATELY STABILIZED WITH APPROVED ESC METHODS (E.G., SEEDING, MULCHING, NETTING, EROSION BLANKETS, ETC.).
11. PUBLIC RIGHTS-OF-WAY SHALL BE KEPT IN A CLEAN SERVICEABLE MANNER AT ALL TIMES. IN THE EVENT THAT MATERIAL IS DEPOSITED ON ROADWAYS, THE MATERIAL SHALL BE PROMPTLY REMOVED. MATERIALS ARE TO BE SWEEPED AND REMOVED PRIOR TO ANY FLUSHING. PUBLIC AND PRIVATE DRAINAGE WAYS SHALL BE PROTECTED FROM POLLUTION.
12. UPON COMPLETION OF PROJECT AND REMOVAL OF ALL ESC MEASURES, THE POND AND ALL AFFECTED CATCH BASINS MUST BE CLEANED OUT.



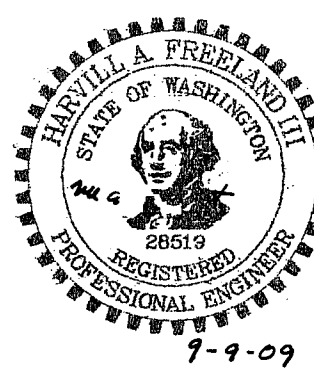
APPROVED

SEP 28 2009
BY *[Signature]*
CITY OF FERNDALE

NOTES:

1. PAD SHALL BE REMOVED AND REPLACED WHEN SOIL IS EVIDENT ON THE SURFACE OF THE PAD OR AS DIRECTED BY THE CITY.
2. PAD SHALL BE INSTALLED IN PLANTING STRIP AS APPROPRIATE.
3. PAD THICKNESS SHALL BE INCREASED IF SOIL CONDITIONS DICTATE OR PER THE DIRECTION OF THE CITY.
4. MINIMUM DIMENSIONS MAY BE MODIFIED AS REQUIRED BY SITE CONDITIONS UPON APPROVAL OF THE CITY.

CE CONSTRUCTION ROAD ENTRANCE



CALL BEFORE YOU DIG
FOR BURIED UTILITY LOCATIONS
1-800-424-5555

| No. | Date | REVISION | By |
|-----|------|----------|----|
| | | | |

DESIGNED BY: HAF
DRAWN BY: AMM
CHECKED BY: HAF

FREELAND & ASSOCIATES

1406 North Garden Street
Bellingham, WA 98225
t: 360.650.1408
f: 360.650.1401

CLIENT: BARRON HEATING
4176 MERIDIAN STREET
BELLINGHAM, WA 98226

PROJECT LOCATION: LOT 12, SBSP NO. 5
5100 PACIFIC HIGHWAY
FERNDALE, WASHINGTON

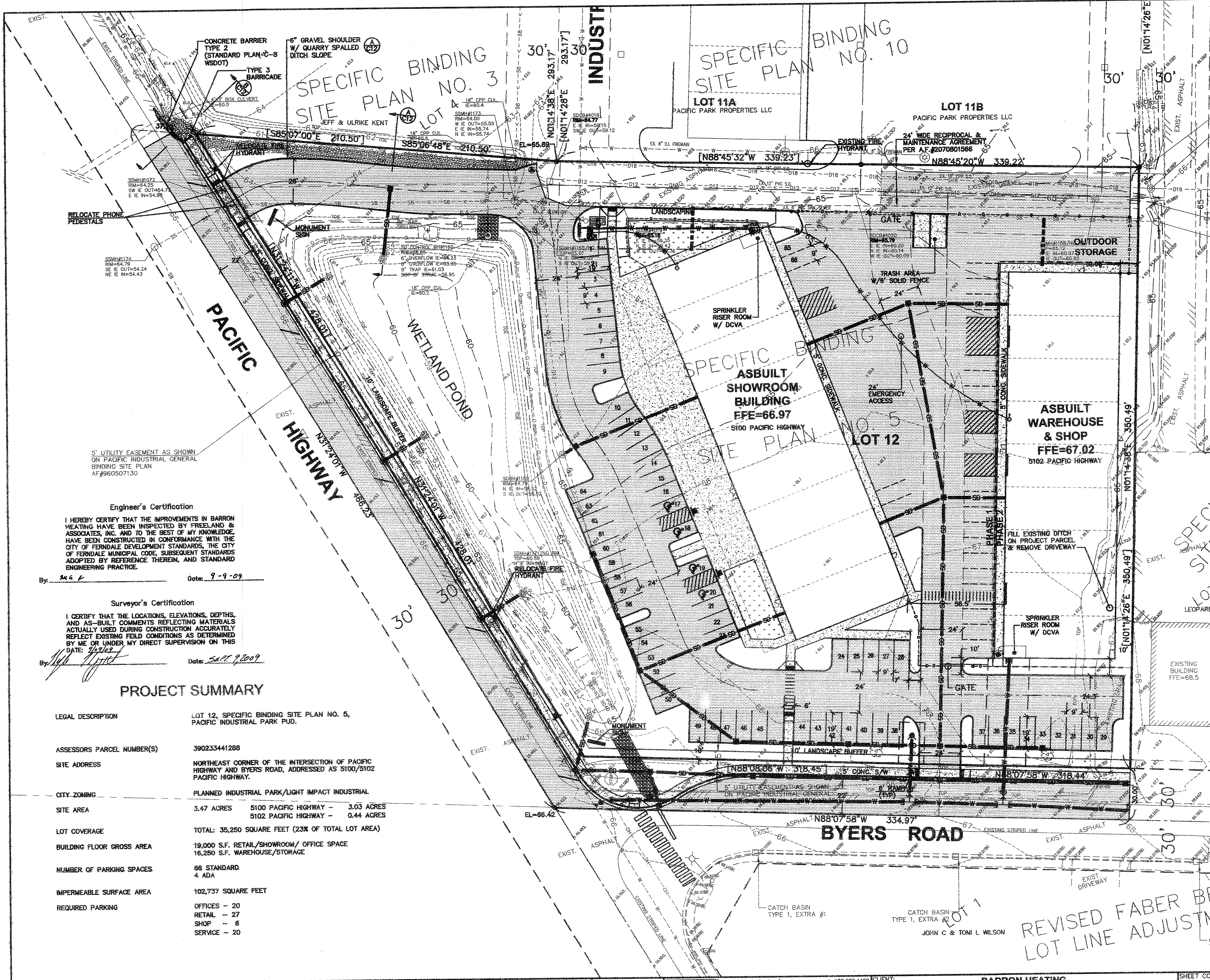
SHEET CONTENTS: TEMPORARY EROSION & SEDIMENTATION CONTROL PLAN

DWS #: 06085ASB2
JOB #: 06085
SCALE: H: 1"=40' V: n/a

DATE: 09-09-09
SHEET: C3

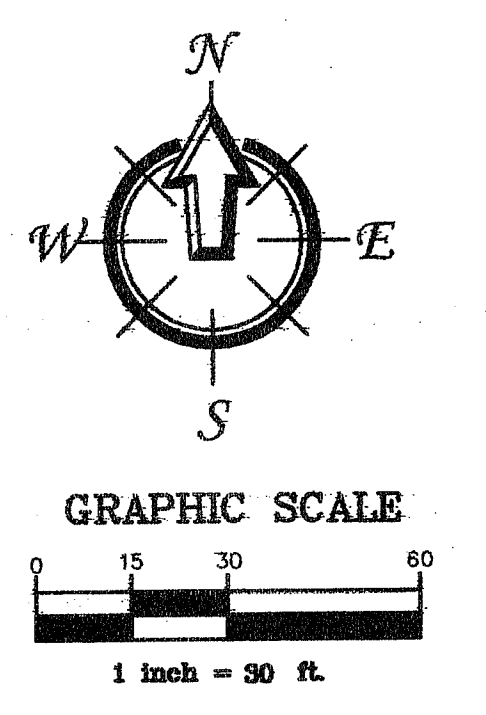
060857.003 10-27-09 DD

00387.0041 10-12-01 100136000



NOTES

1. A LAND DISTURBANCE PERMIT APPLICATION, TOGETHER WITH THE CIVIL DRAWINGS ASSOCIATED WITH PROPOSED GRADING, UTILITIES INSTALLATION, AND DRAINAGE IMPROVEMENTS, AND APPROPRIATE STORM WATER STUDY, SHALL BE SUBMITTED TO THE PUBLIC WORKS DEPARTMENT AND APPROVED PRIOR TO ISSUANCE OF BUILDING PERMITS.
2. ALL PROPOSED EARTHWORK, DRAINAGE IMPROVEMENTS, AND UTILITIES TO SERVE THIS SITE MUST BE DESIGNED AND INSTALLED TO COMPLY WITH ALL CURRENT APPLICABLE STATE AND LOCAL DEVELOPMENT STANDARDS TO THE SATISFACTION OF THE DEPARTMENT OF PUBLIC WORKS PRIOR TO THE ISSUANCE OF OCCUPANCY PERMITS FOR ANY BUILDING ON THE SITE.
3. THE EXTENT, SIZE AND LOCATION OF ALL PROPOSED UTILITY AND STORMWATER INFRASTRUCTURE ARE CONCEPTUAL. THE PRECISE EXTENT, SIZE AND LOCATION OF INFRASTRUCTURE SHALL BE REFLECTED ON SEPARATE CIVIL CONSTRUCTION DRAWINGS APPROVED BY THE PUBLIC WORKS DEPARTMENT.
4. ALL FIRE PROTECTION EQUIPMENT AND FACILITIES, AND EMERGENCY SERVICE REQUIREMENTS, SHALL BE PROVIDED TO THE SATISFACTION OF THE FIRE DISTRICT.
5. A BUILDING PERMIT APPLICATION, TOGETHER WITH DETAILED CONSTRUCTION DRAWINGS SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT FOR REVIEW AND APPROVED PRIOR TO ISSUANCE OF BUILDING PERMITS OR START OF ANY BUILDING CONSTRUCTION ACTIVITIES.
6. ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE (IBC), AND ALL OTHER APPLICABLE STATE AND LOCAL CODES AND REQUIREMENTS TO THE SATISFACTION OF THE BUILDING DEPARTMENT.
7. PLANS AND SPECIFICATIONS FOR THE PROJECT SHALL BE APPROVED BY A LICENSED ARCHITECT.
8. A SEPARATE SIGN PERMIT APPLICATION SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT FOR REVIEW AND APPROVAL OF ALL SIGNAGE ON THE SITE PRIOR TO PLACEMENT OR CONSTRUCTION. ALL SIGNAGE ON THE SITE WILL BE REVIEWED FOR COMPLIANCE WITH THE CITY'S ZONING CODE.
9. ALL PARKING SPACES SHALL BE PHYSICALLY STRIPED ON THE GROUND PRIOR TO ISSUANCE OF FINAL CERTIFICATES OF OCCUPANCY FOR ANY OF THE BUILDINGS.
10. AN ENCROACHMENT PERMIT WILL BE REQUIRED FOR ANY LAND DISTURBING WORK DONE WITHIN THE CITY RIGHT-OF-WAY.
11. CURBING SHALL BE LOCATED ALONG THE PERIMETER OF ALL PARKING AREAS WHERE PAVEMENT ABUTS LANDSCAPED AREAS.
12. IT IS THE APPLICANTS SOLE RESPONSIBILITY TO COMPLY WITH ALL APPLICABLE FEDERAL AND STATE REGULATIONS, AND TO OBTAIN ANY NECESSARY PERMITS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
13. THE APPLICANT SHALL INSTALL A STOP SIGN AT THE ENTRY TO BYERS ROAD AND ANOTHER STOP SIGN AT THE ENTRY TO PACIFIC HIGHWAY. AN ENCROACHMENT PERMIT MUST BE OBTAINED BY CITY OF FERDALE PUBLIC WORKS DEPARTMENT, AND WORK MUST BE COMPLETED TO THE SATISFACTION OF THE PUBLIC WORKS DIRECTOR PRIOR TO THE ISSUANCE OF FINAL CERTIFICATES OF OCCUPANCY FOR ANY STRUCTURE ON THE SITE.
14. ALL LANDSCAPING FOR THE PROJECT SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED FINAL LANDSCAPE PLAN PRIOR TO FINAL OCCUPANCY OF ANY BUILDINGS WITHIN THE PROJECT. IF THE PROJECT IS TO BE BUILT IN PHASES, THE APPROVED LANDSCAPE PLAN MUST INDICATE THE APPROPRIATE PHASING FOR SPECIFIC LANDSCAPING.
15. MAILBOXES FOR THE PROJECT SHALL BE AT A LOCATION DEEMED ACCEPTABLE BY THE FERDALE POST OFFICE AND THE CITY OF FERDALE. SUCH BOXES SHALL BE LOCATED AS TO NOT CONFLICT WITH ANY PROPOSED ACCESS, PARKING, OR OTHER FEATURES ON THE SITE.
16. TRAFFIC MITIGATION FEES SHALL BE PAID UPON ISSUANCE OF BUILDING PERMITS.
17. WATER CONNECTION FEES SHALL BE PAID UPON ISSUANCE OF BUILDING PERMITS.
18. SEWER CONNECTION FEES SHALL BE PAID UPON ISSUANCE OF BUILDING PERMITS.
19. STORM SEWER MITIGATION FEES BASED ON THE AREA OF EACH BUILDING LOT SHALL BE PAID UPON ISSUANCE OF BUILDING PERMITS.
20. THE STRUCTURE LABELED "FUTURE WAREHOUSE AND SHOP" SHALL NOT BE USED FOR RETAIL PURPOSES. NO RETAIL SALES, DISPLAY OF RETAIL ITEMS OR ANY OTHER PRACTICE ASSOCIATED WITH RETAIL ACTIVITY (WITH THE EXCEPTION OF WAREHOUSING AND REPAIR) SHALL BE CONDUCTED IN THIS STRUCTURE.



Engineer's Certification

I HEREBY CERTIFY THAT THE IMPROVEMENTS IN BARRON HEATING HAVE BEEN INSPECTED BY FREELAND & ASSOCIATES, INC. AND TO THE BEST OF MY KNOWLEDGE, HAVE BEEN CONSTRUCTED IN CONFORMANCE WITH THE CITY OF FERDALE MUNICIPAL CODE, SUBSEQUENT STANDARDS ADOPTED BY REFERENCE THEREIN, AND STANDARD ENGINEERING PRACTICE.

By: *[Signature]* Date: 9-9-09

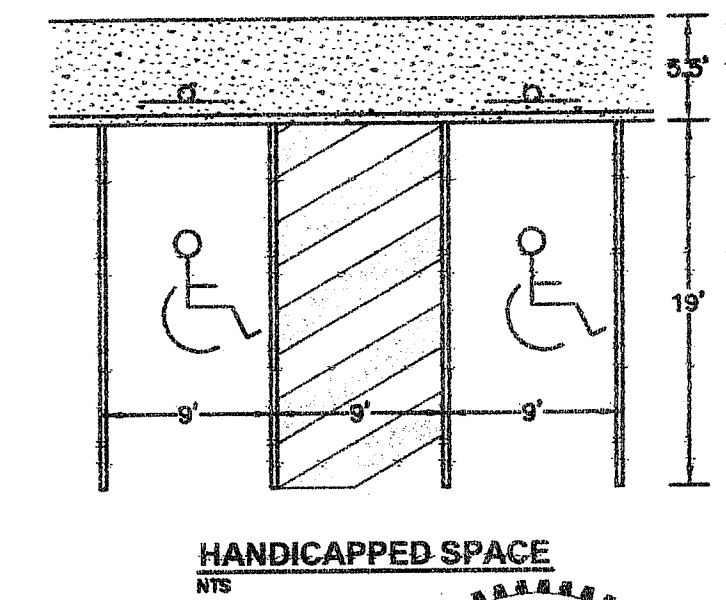
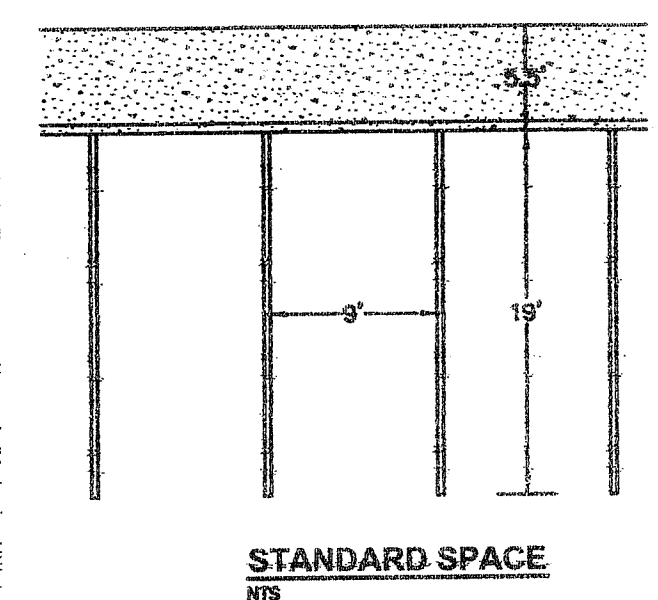
Surveyor's Certification

I CERTIFY THAT THE LOCATIONS, ELEVATIONS, DEPTHS, AND AS-BUILT COMMENTS REFLECTING MATERIALS ACTUALLY USED DURING CONSTRUCTION ACCURATELY REFLECT EXISTING FIELD CONDITIONS AS DETERMINED BY ME OR UNDER MY DIRECT SUPERVISION ON THIS DATE: 9-9-09

By: *[Signature]* Date: 9-9-09

PROJECT SUMMARY

| | |
|----------------------------|---|
| LEGAL DESCRIPTION | LOT 12, SPECIFIC BINDING SITE PLAN NO. 5, PACIFIC INDUSTRIAL PARK PUD. |
| ASSESSORS PARCEL NUMBER(S) | 390233441288 |
| SITE ADDRESS | NORTHEAST CORNER OF THE INTERSECTION OF PACIFIC HIGHWAY AND BYERS ROAD, ADDRESSED AS 5100/5102 PACIFIC HIGHWAY. |
| CITY ZONING | PLANNED INDUSTRIAL PARK/LIGHT IMPACT INDUSTRIAL |
| SITE AREA | 3.47 ACRES 5100 PACIFIC HIGHWAY - 3.03 ACRES 5102 PACIFIC HIGHWAY - 0.44 ACRES |
| LOT COVERAGE | TOTAL: 35,250 SQUARE FEET (23% OF TOTAL LOT AREA) |
| BUILDING FLOOR GROSS AREA | 19,000 S.F. RETAIL/SHOWROOM/ OFFICE SPACE 16,250 S.F. WAREHOUSE/STORAGE |
| NUMBER OF PARKING SPACES | 98 STANDARD 4 ADA |
| IMPERMEABLE SURFACE AREA | 102,737 SQUARE FEET |
| REQUIRED PARKING | OFFICES - 20 RETAIL - 27 SHOP - 8 SERVICE - 20 |



STANDARD SPACE

HANDICAPPED SPACE

APPROVED

SEP 28 2009

BY *[Signature]*
CITY OF FERDALE

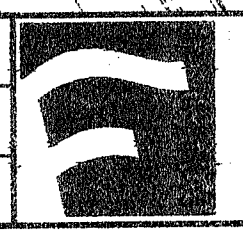


REVISED FABER BR
LOT LINE ADJUSTM

CALL BEFORE YOU DIG
FOR BURIED UTILITY LOCATIONS
1-800-424-5555

| No. | Date | REVISION |
|-----|------|----------|
| | | |

DESIGNED BY:
HAF
DRAWN BY:
AMM
CHECKED BY:
HAF



1408 North Garden Street
Bellingham, WA 98225
P: 360.650.1408
F: 360.650.1401

CLIENT:
PROJECT LOCATION:

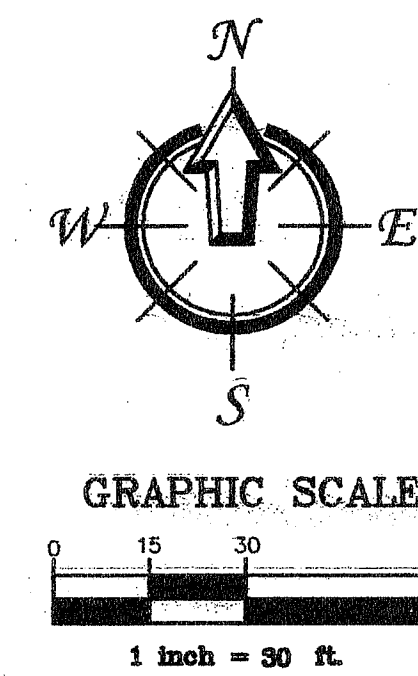
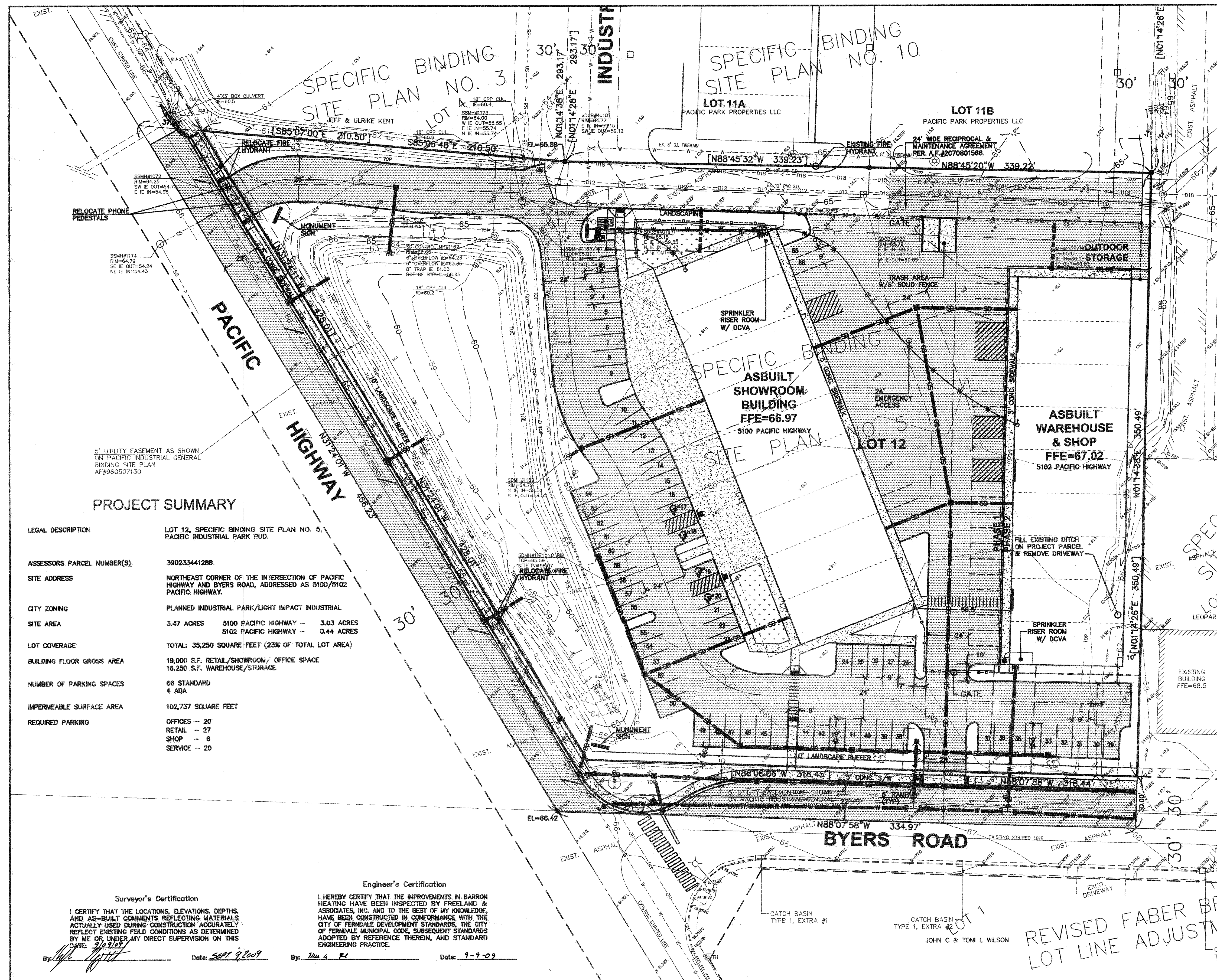
BARRON HEATING
4176 MERIDIAN STREET
BELLINGHAM, WA 98226
LOT 12 PACIFIC INDUSTRIAL PARK
5100 PACIFIC HIGHWAY
FERDALE, WASHINGTON

SHEET CONTENTS:

MASTER SITE PLAN
PROPOSED SHOWROOM AND
BUSINESS OFFICES

| | | | |
|--------|-----------|--------|----------|
| DWG #: | 06085ASB2 | DATE: | 09-09-09 |
| JOB #: | 06085 | SHEET: | C4.1 |
| SCALE: | H: 1"=30' | V: n/a | |

06397.004.2 10-27-09 BD



NOTES

1. A LAND DISTURBANCE PERMIT APPLICATION, TOGETHER WITH THE CIVIL DRAWINGS ASSOCIATED WITH PROPOSED GRADING, UTILITIES INSTALLATION, AND DRAINAGE IMPROVEMENTS, AND APPROPRIATE STORM WATER STUDY, SHALL BE SUBMITTED TO THE PUBLIC WORKS DEPARTMENT AND APPROVED PRIOR TO ISSUANCE OF BUILDING PERMITS.
2. ALL PROPOSED EARTHWORK, DRAINAGE IMPROVEMENTS, AND UTILITIES TO SERVE THIS SITE MUST BE DESIGNED AND INSTALLED TO COMPLY WITH ALL CURRENT APPLICABLE STATE AND LOCAL DEVELOPMENT STANDARDS TO THE SATISFACTION OF THE DEPARTMENT OF PUBLIC WORKS PRIOR TO THE ISSUANCE OF OCCUPANCY PERMITS FOR ANY BUILDING ON THE SITE.
3. THE EXTENT, SIZE AND LOCATION OF ALL PROPOSED UTILITY AND STORMWATER INFRASTRUCTURE ARE CONCEPTUAL. THE PRECISE EXTENT, SIZE AND LOCATION OF INFRASTRUCTURE SHALL BE REFLECTED ON SEPARATE CIVIL CONSTRUCTION DRAWINGS APPROVED BY THE PUBLIC WORKS DEPARTMENT.
4. ALL FIRE PROTECTION EQUIPMENT AND FACILITIES, AND EMERGENCY SERVICE REQUIREMENTS, SHALL BE PROVIDED TO THE SATISFACTION OF THE FIRE DISTRICT.
5. A BUILDING PERMIT APPLICATION, TOGETHER WITH DETAILED CONSTRUCTION DRAWINGS SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT FOR REVIEW AND APPROVED PRIOR TO ISSUANCE OF BUILDING PERMITS OR START OF ANY BUILDING CONSTRUCTION ACTIVITIES.
6. ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE (IBC), AND ALL OTHER APPLICABLE STATE AND LOCAL CODES AND REQUIREMENTS TO THE SATISFACTION OF THE BUILDING DEPARTMENT.
7. PLANS AND SPECIFICATIONS FOR THE PROJECT SHALL BE APPROVED BY A LICENSED ARCHITECT.
8. A SEPARATE SIGN PERMIT APPLICATION SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT FOR REVIEW AND APPROVAL OF ALL SIGNAGE ON THE SITE PRIOR TO PLACEMENT OR CONSTRUCTION. ALL SIGNAGE ON THE SITE WILL BE REVIEWED FOR COMPLIANCE WITH THE CITY'S ZONING CODE.
9. ALL PARKING SPACES SHALL BE PHYSICALLY STRIPED ON THE GROUND PRIOR TO ISSUANCE OF FINAL CERTIFICATES OF OCCUPANCY FOR ANY OF THE BUILDINGS.
10. AN ENCROACHMENT PERMIT WILL BE REQUIRED FOR ANY LAND DISTURBING WORK DONE WITHIN THE CITY RIGHT-OF-WAY.
11. CURBING SHALL BE LOCATED ALONG THE PERIMETER OF ALL PARKING AREAS WHERE PAVEMENT ABUTS LANDSCAPED AREAS.
12. IT IS THE APPLICANTS SOLE RESPONSIBILITY TO COMPLY WITH ALL APPLICABLE FEDERAL AND STATE REGULATIONS, AND TO OBTAIN ANY NECESSARY PERMITS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
13. THE APPLICANT SHALL INSTALL A STOP SIGN AT THE ENTRY TO BYERS ROAD AND ANOTHER STOP SIGN AT THE ENTRY TO PACIFIC HIGHWAY. AN ENCROACHMENT PERMIT MUST BE OBTAINED BY CITY OF FERDALE PUBLIC WORKS DEPARTMENT, AND WORK MUST BE COMPLETED TO THE SATISFACTION OF THE PUBLIC WORK DIRECTOR PRIOR TO THE ISSUANCE OF FINAL CERTIFICATES OF OCCUPANCY FOR ANY STRUCTURE ON THE SITE.
14. ALL LANDSCAPING FOR THE PROJECT SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED FINAL LANDSCAPE PLAN PRIOR TO FINAL OCCUPANCY OF ANY BUILDINGS WITHIN THE PROJECT. IF THE PROJECT IS TO BE BUILT IN PHASES, THE APPROVED LANDSCAPE PLAN MUST INDICATE THE APPROPRIATE PHASING FOR SPECIFIC LANDSCAPING.
15. MAILBOXES FOR THE PROJECT SHALL BE AT A LOCATION DEEMED ACCEPTABLE BY THE FERDALE POST OFFICE AND THE CITY OF FERDALE. SUCH BOXES SHALL BE LOCATED AS TO NOT CONFLICT WITH ANY PROPOSED ACCESS, PARKING, OR OTHER FEATURES ON THE SITE.
16. TRAFFIC MITIGATION FEES SHALL BE PAID UPON ISSUANCE OF BUILDING PERMITS.
17. WATER CONNECTION FEES SHALL BE PAID UPON ISSUANCE OF BUILDING PERMITS.
18. SEWER CONNECTION FEES SHALL BE PAID UPON ISSUANCE OF BUILDING PERMITS.
19. STORM SEWER MITIGATION FEES BASED ON THE AREA OF EACH BUILDING LOT SHALL BE PAID UPON ISSUANCE OF BUILDING PERMITS.
20. THE STRUCTURE LABELED "FUTURE WAREHOUSE AND SHOP" SHALL NOT BE USED FOR RETAIL PURPOSES. NO RETAIL SALES, DISPLAY OF RETAIL ITEMS, OR ANY OTHER PRACTICE ASSOCIATED WITH RETAIL ACTIVITY (WITH THE EXCEPTION OF WAREHOUSING AND REPAIR) SHALL BE CONDUCTED IN THIS STRUCTURE.

PROJECT SUMMARY

| | | | |
|----------------------------|---|------------------------|------------|
| LEGAL DESCRIPTION | LOT 12, SPECIFIC BINDING SITE PLAN NO. 5, PACIFIC INDUSTRIAL PARK PUD. | | |
| ASSESSORS PARCEL NUMBER(S) | 390233441288 | | |
| SITE ADDRESS | NORTHEAST CORNER OF THE INTERSECTION OF PACIFIC HIGHWAY AND BYERS ROAD, ADDRESSED AS 5100/5102 PACIFIC HIGHWAY. | | |
| CITY ZONING | PLANNED INDUSTRIAL PARK/LIGHT IMPACT INDUSTRIAL | | |
| SITE AREA | 3.47 ACRES | 5100 PACIFIC HIGHWAY - | 3.03 ACRES |
| | | 5102 PACIFIC HIGHWAY - | 0.44 ACRES |
| LOT COVERAGE | TOTAL: 35,250 SQUARE FEET (23% OF TOTAL LOT AREA) | | |
| BUILDING FLOOR GROSS AREA | 19,000 S.F. RETAIL/SHOWROOM/ OFFICE SPACE 16,250 S.F. WAREHOUSE/STORAGE | | |
| NUMBER OF PARKING SPACES | 66 STANDARD 4 ADA | | |
| IMPERMEABLE SURFACE AREA | 102,737 SQUARE FEET | | |
| REQUIRED PARKING | OFFICES - 20 RETAIL - 27 SHOP - 6 SERVICE - 20 | | |

Surveyor's Certification

I CERTIFY THAT THE LOCATIONS, ELEVATIONS, DEPTHS, AND AS-BUILT COMMENTS REFLECTING MATERIALS ACTUALLY USED DURING CONSTRUCTION ACCURATELY REFLECT EXISTING FIELD CONDITIONS AS DETERMINED BY ME OR UNDER MY DIRECT SUPERVISION ON THIS DATE: 9/17/09

By: [Signature]

Date: 9/17/09

Engineer's Certification

I HEREBY CERTIFY THAT THE IMPROVEMENTS IN BARRON HEATING HAVE BEEN INSPECTED BY FREELAND & ASSOCIATES, INC. AND TO THE BEST OF MY KNOWLEDGE, HAVE BEEN CONSTRUCTED IN CONFORMANCE WITH THE CITY OF FERDALE DEVELOPMENT STANDARDS, THE CITY OF FERDALE MUNICIPAL CODE, SUBSEQUENT STANDARDS ADOPTED BY REFERENCE THEREIN, AND STANDARD ENGINEERING PRACTICE.

By: [Signature]

Date: 9-9-09

CALL BEFORE YOU DIG
FOR BURIED UTILITY LOCATIONS
1-800-424-5555

| No. | Date | REVISION |
|-----|------|----------|
| | | |
| | | |
| | | |

DESIGNED BY: HAF
DRAWN BY: AMM
CHECKED BY: HAF

1408 North Garden Street
Bellingham, WA 98225
t: 360.650.1408
f: 360.650.1401
FREELAND & ASSOCIATES

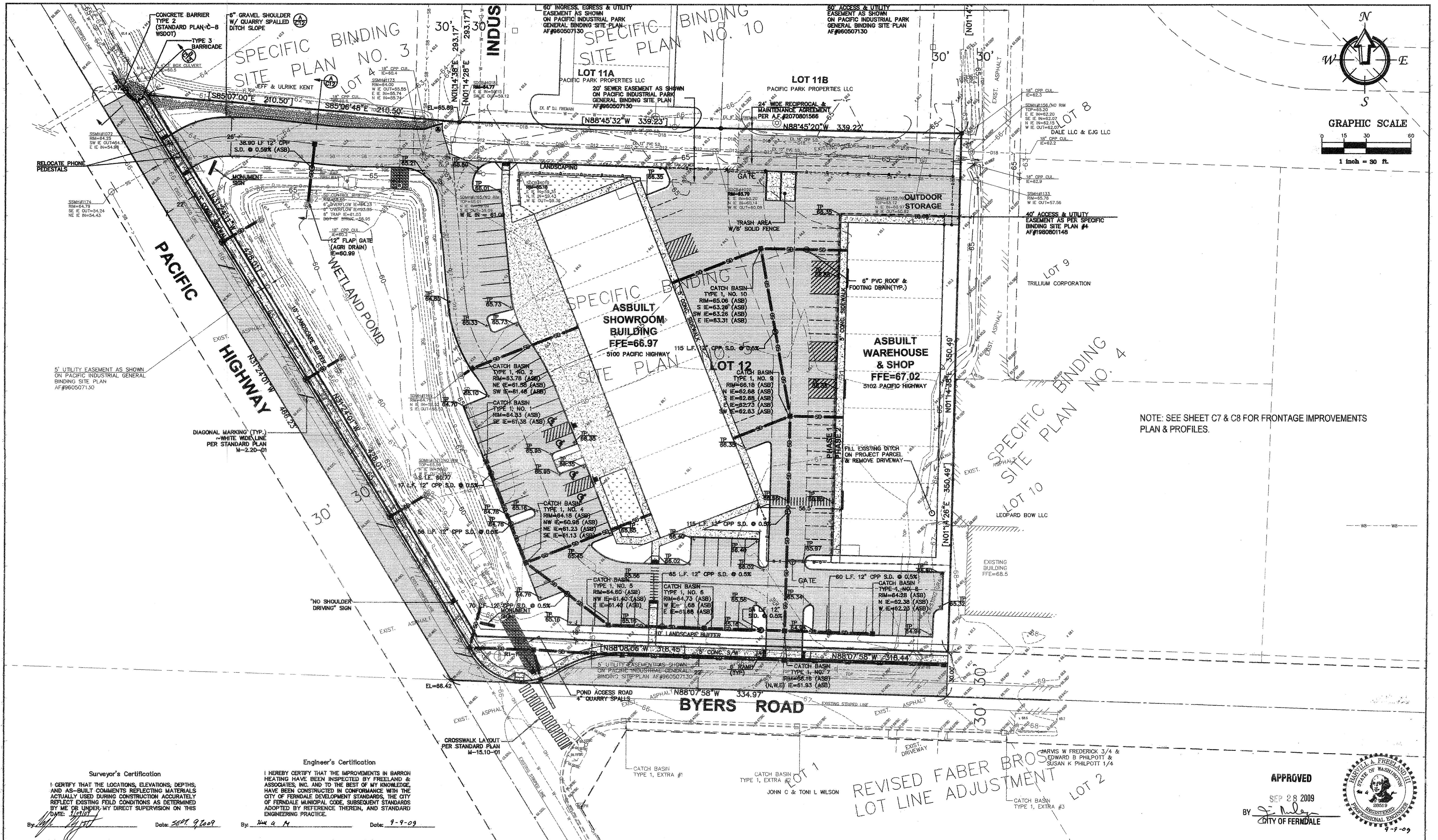
CLIENT: BARRON HEATING
4176 MERIDIAN STREET
BELLINGHAM, WA 98226
PROJECT LOCATION: LOT 12 PACIFIC INDUSTRIAL PARK
5102 PACIFIC HIGHWAY
FERDALE, WASHINGTON

SHEET CONTENTS:

**MASTER SITE PLAN
PROPOSED WAREHOUSE AND SHOP**

DWG #: 06085ASB2
JOB #: 06085
SCALE: H: 1"=30' V: n/a
DATE: 09-09-09
SHEET: C4.2





Surveyor's Certification
I CERTIFY THAT THE LOCATIONS, ELEVATIONS, DEPTHS, AND AS-BUILT COMMENTS REFLECTING MATERIALS ACTUALLY USED DURING CONSTRUCTION ACCURATELY REFLECT EXISTING FIELD CONDITIONS AS DETERMINED BY ME OR UNDER MY DIRECT SUPERVISION ON THIS DATE: 9/9/09
By: [Signature] Date: SEP 9 2009

Engineer's Certification
I HEREBY CERTIFY THAT THE IMPROVEMENTS IN BARRON HEATING HAVE BEEN INSPECTED BY FREELAND & ASSOCIATES, INC. AND TO THE BEST OF MY KNOWLEDGE, HAVE BEEN CONSTRUCTED IN CONFORMANCE WITH THE CITY OF FERDALE MUNICIPAL CODE, SUBSEQUENT STANDARDS ADOPTED BY REFERENCE THEREIN, AND STANDARD ENGINEERING PRACTICE.
By: [Signature] Date: 9-9-09

REVISED FABER BROS LOT LINE ADJUSTMENT

APPROVED
SEP 28 2009
By: [Signature]
CITY OF FERDALE

PROFESSIONAL ENGINEER
STATE OF WASHINGTON
28519
9-9-09

CALL BEFORE YOU DIG
FOR BURIED UTILITY LOCATIONS
1-800-424-5555

| No. | Date | REVISION |
|----------|-------------------|----------|
| 10/02/08 | REVISED SITE PLAN | |

DESIGNED BY: HAF, JPS
DRAWN BY: AMM
CHECKED BY: HAF

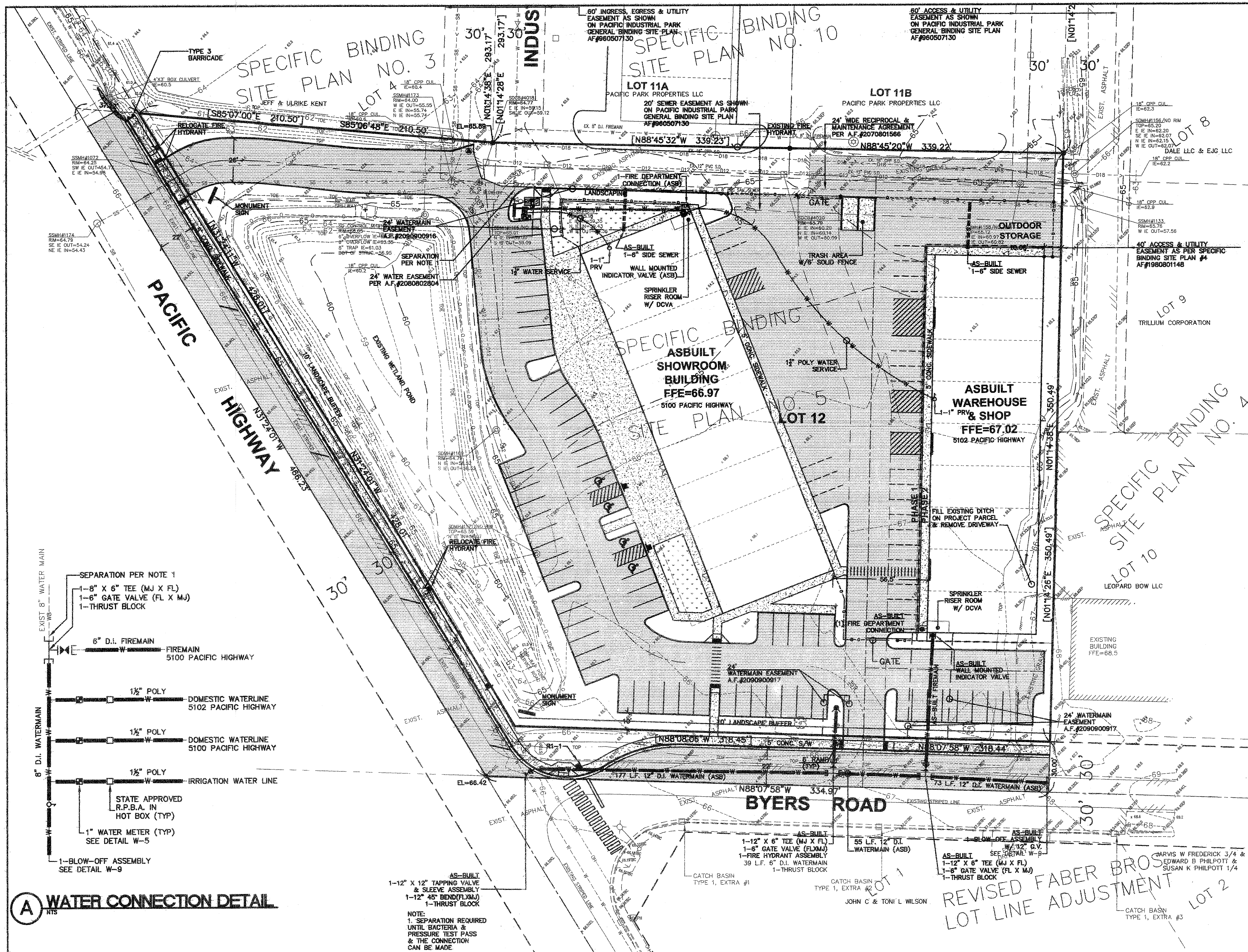
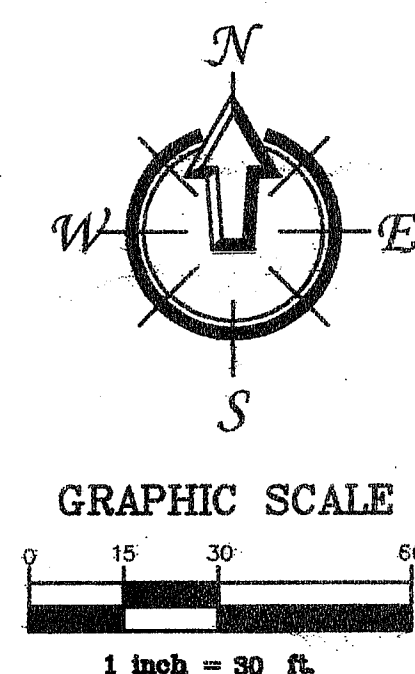
FREELAND & ASSOCIATES
1408 North Garden Street
Bellingham, WA 98225
T: 360.650.1408
F: 360.650.1401

CLIENT: BARRON HEATING
4176 MERIDIAN STREET
BELLINGHAM, WA 98226
PROJECT LOCATION: LOT 12, SBSP NO.5
5100 PACIFIC HIGHWAY
FERDALE, WASHINGTON

SHEET CONTENTS:
PAVING, GRADING & DRAINAGE PLAN

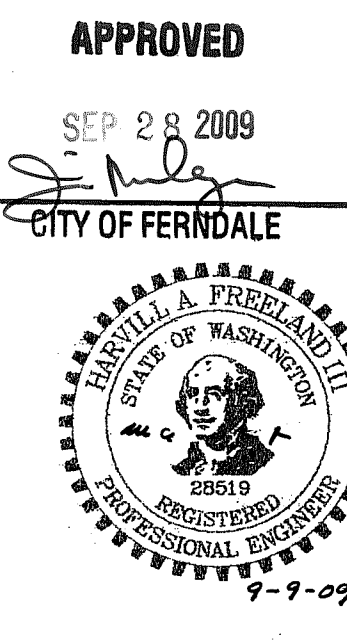
DWG #: 06085ASB2
JOB #: 06085
SCALE: H: 1"=30' V: n/a
DATE: 09-08-09
SHEET: **C5**

00397.006 10-12-01



Engineer's Certification
I HEREBY CERTIFY THAT THE IMPROVEMENTS IN BARRON HEATING HAVE BEEN INSPECTED BY FREELAND & ASSOCIATES, INC. AND TO THE BEST OF MY KNOWLEDGE, HAVE BEEN CONSTRUCTED IN CONFORMANCE WITH THE CITY OF FERNDALE DEVELOPMENT STANDARDS, THE CITY OF FERNDALE MUNICIPAL CODE, SUBSEQUENT STANDARDS ADOPTED BY REFERENCE THEREIN, AND STANDARD ENGINEERING PRACTICE.
By: *[Signature]* Date: 9-9-09

Surveyor's Certification
I CERTIFY THAT THE LOCATIONS, ELEVATIONS, DEPTHS, AND AS-BUILT COMMENTS REFLECTING MATERIALS ACTUALLY USED DURING CONSTRUCTION ACCURATELY REFLECT EXISTING FIELD CONDITIONS AS DETERMINED BY ME OR UNDER MY DIRECT SUPERVISION ON THIS DATE: *[Signature]* Date: 9-9-09



CALL BEFORE YOU DIG
FOR BURIED UTILITY LOCATIONS
1-800-424-5555

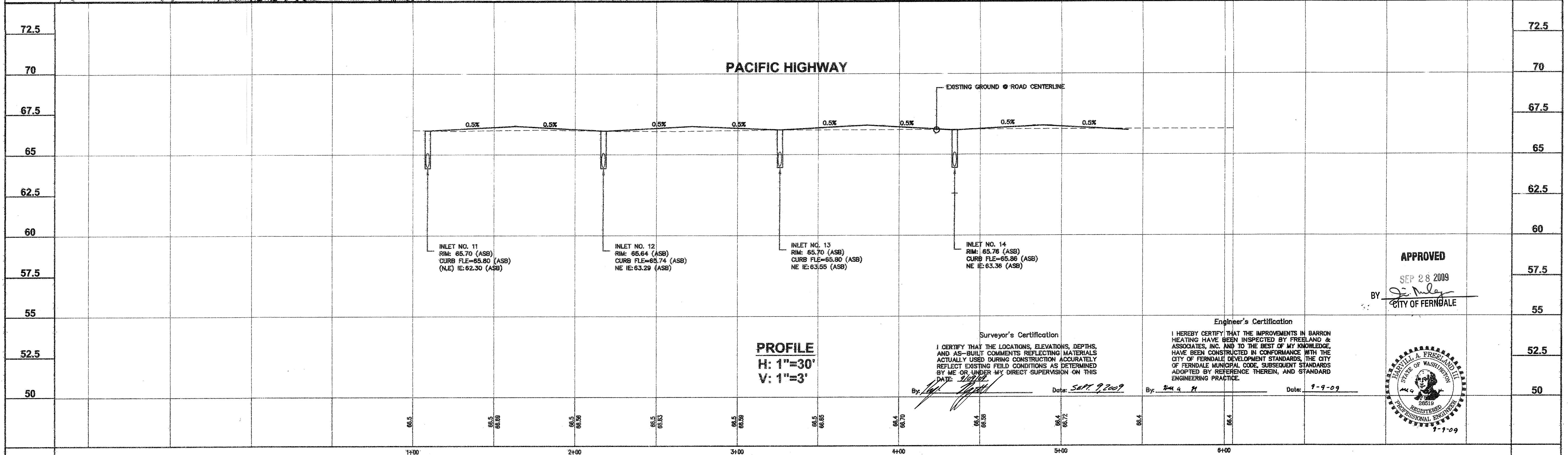
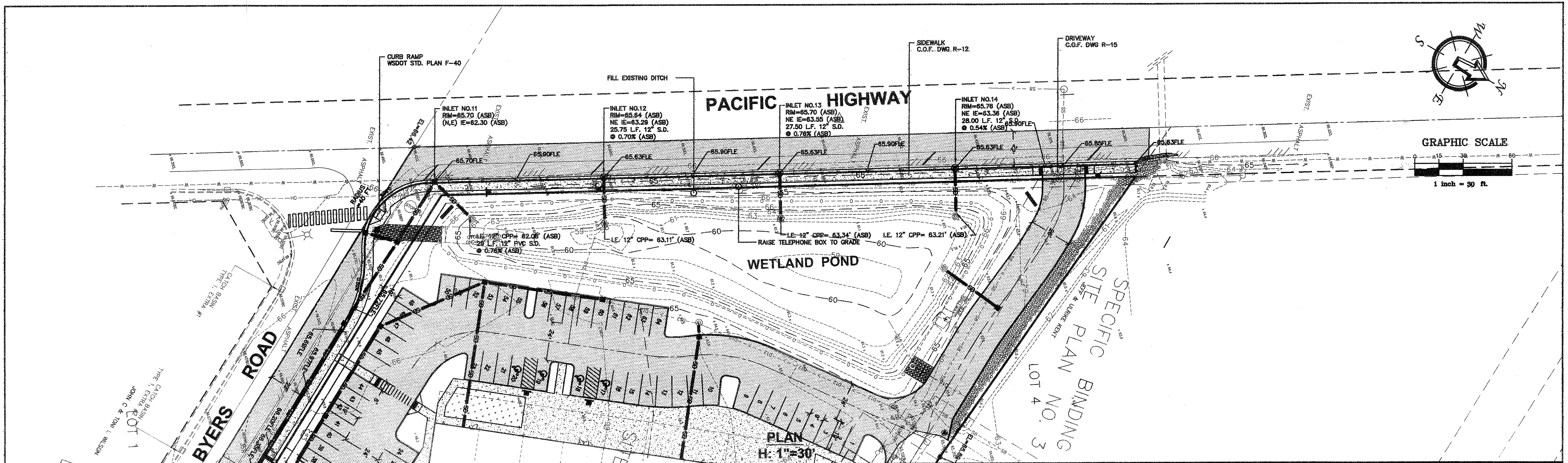
| No. | Date | REVISION | By |
|-----|------|----------|----|
| | | | |
| | | | |
| | | | |

DESIGNED BY: HAF
DRAWN BY: AHM
CHECKED BY: HAF
FREELAND & ASSOCIATES
1408 North Garden Street
Bellingham, WA 98225
T: 360.650.1408
F: 360.650.1401

CLIENT: BARRON HEATING
4176 MERIDIAN STREET
BELLINGHAM, WA 98226
PROJECT LOCATION: LOT 12, SSPP NO. 5
5100 PACIFIC HIGHWAY
FERDALE, WASHINGTON

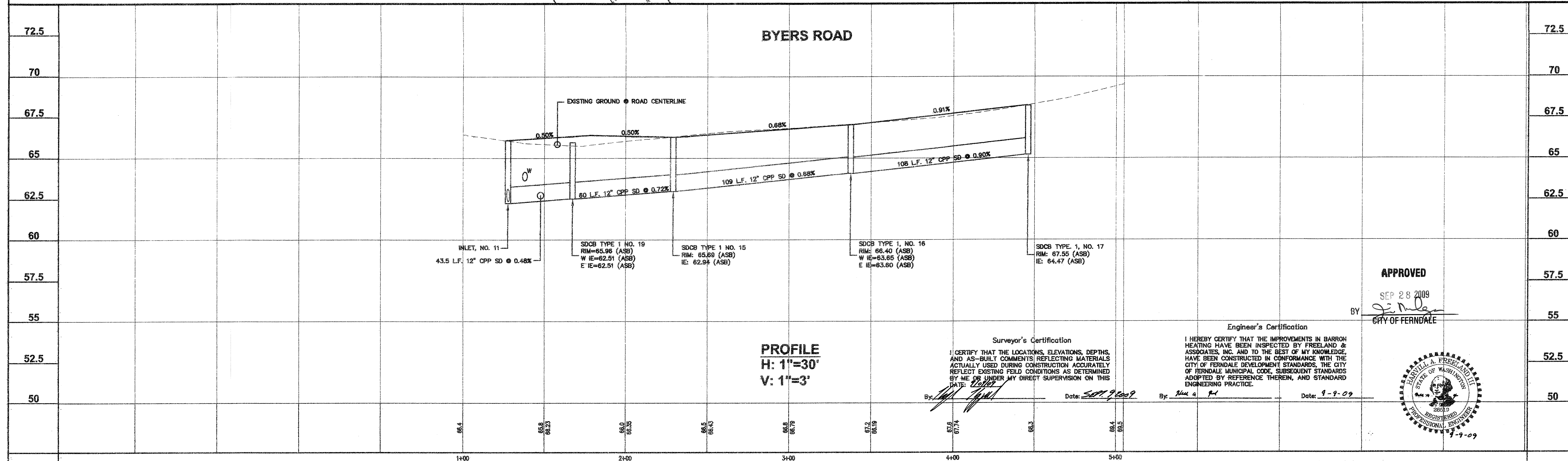
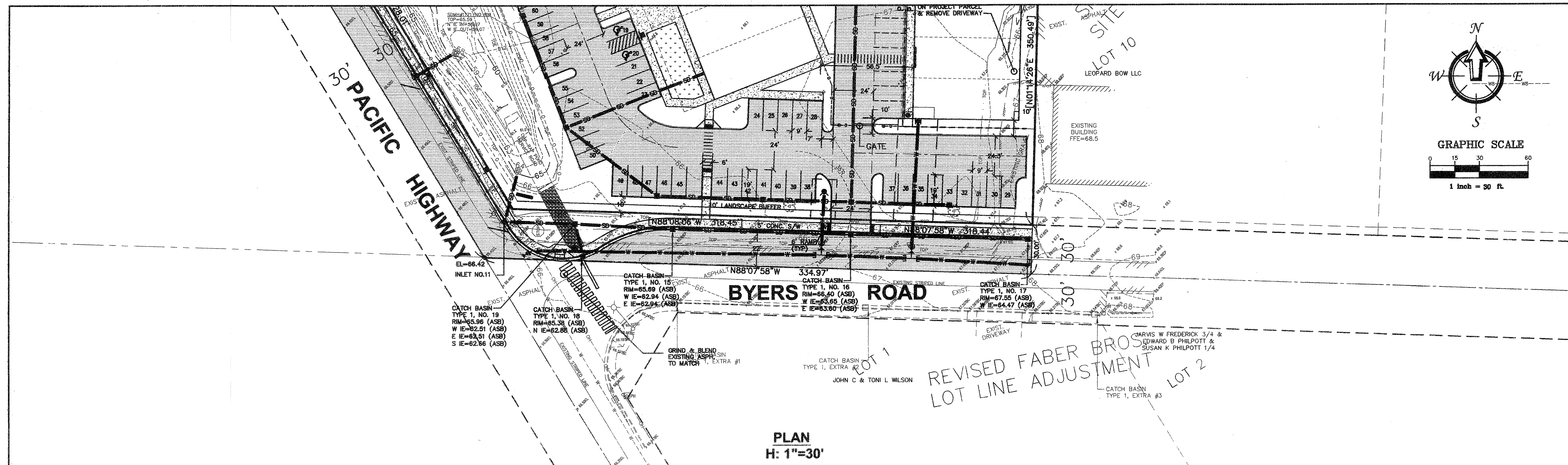
SHEET CONTENTS: SANITARY SEWER & WATER DISTRIBUTION PLAN

DWG #: 0808SASB2
JOB #: 06085
SCALE: H: 1"=30' V: n/a
DATE: 09-09-09
SHEET: C6



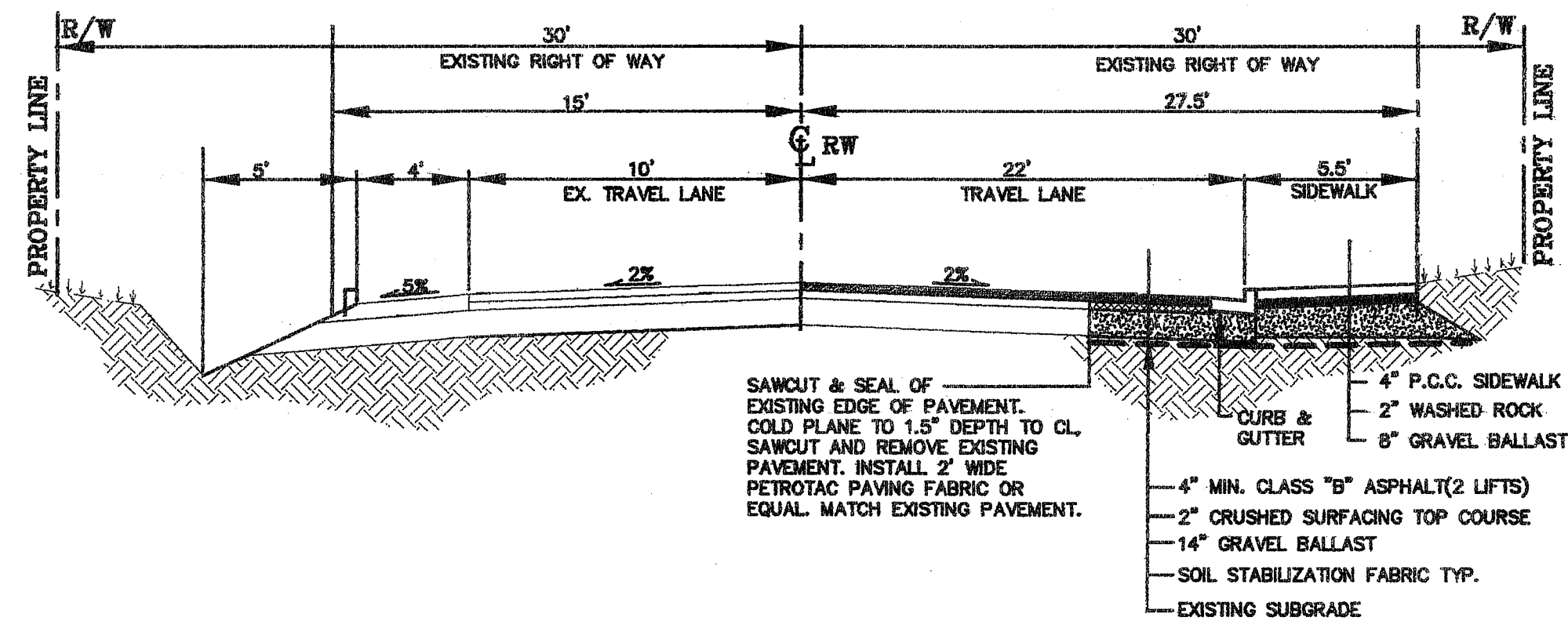
| | | | | | | | | | | |
|--|--|---------------------|--|----------|---|--|--|--|--|--|
| CALL BEFORE YOU DIG FOR BURIED UTILITY LOCATIONS 1-800-424-5555 | | 9/23/08 No. Date | REVISION 9/23/08 REVISED PIPE OUTLETS & SIZES | SR By | DESIGNED BY: HAF DRAWN BY: AMM CHECKED BY: HAF | 1408 North Garden Street Bellingham, WA 98225 FREELAND & ASSOCIATES t. 360.650.1408 f. 360.650.1401 | CLIENT: BARRON HEATING 4178 MERIDIAN STREET BELLINGHAM, WA 98226 PROJECT LOCATION: LOT 12 PACIFIC INDUSTRIAL PARK 5100 PACIFIC HIGHWAY FERDALE, WASHINGTON | SHEET CONTENTS: PACIFIC HIGHWAY PLAN AND PROFILE | DWG #: 06085ASB2 JOB #: 06085 SCALE: H: 1"=30' V: 1"=3' | DATE: 09-09-09 SHEET: C7 |
|--|--|---------------------|--|----------|---|--|--|--|--|--|

00397.007 10-27-09 DD

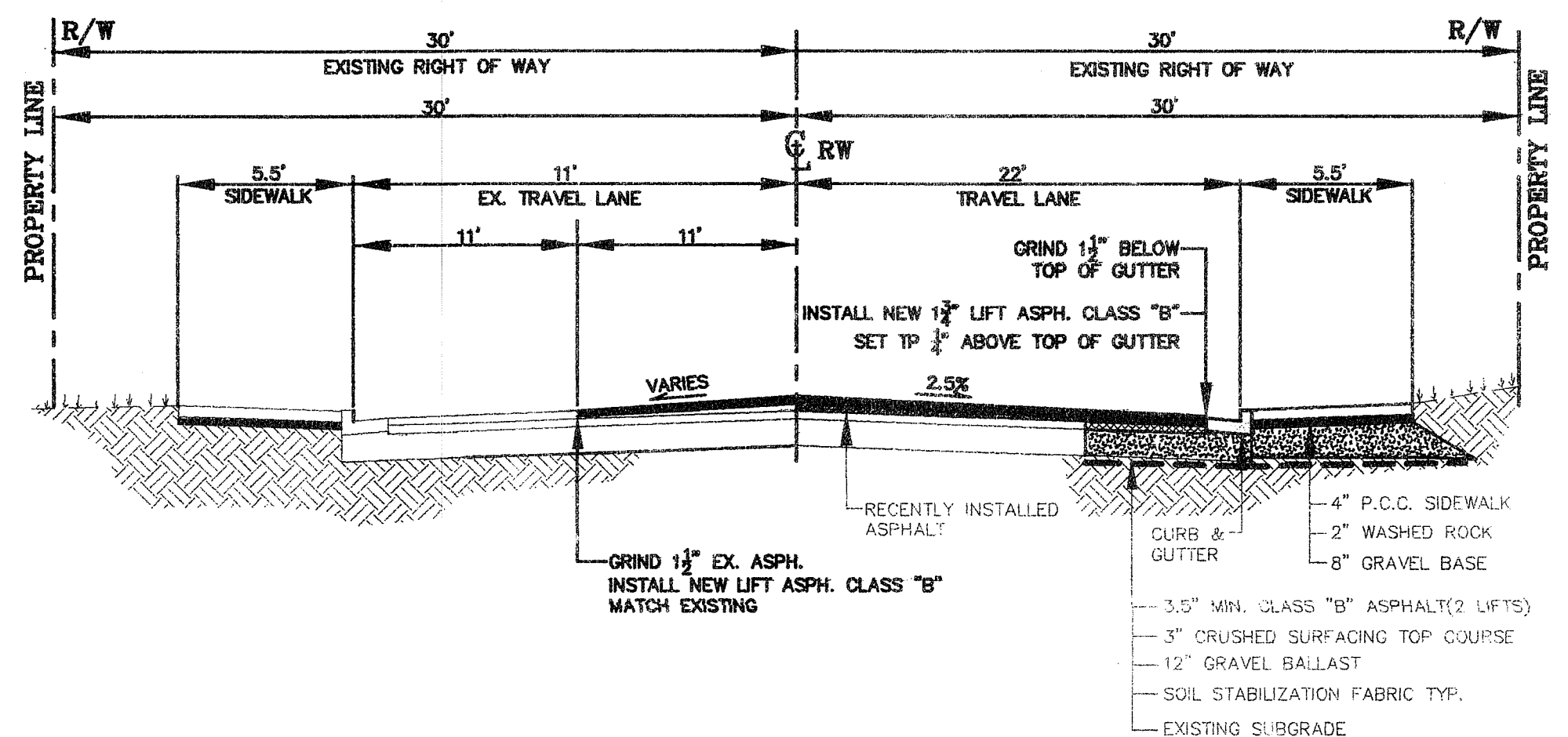


| | | | | | | | |
|---|--|-------------------------------------|--|--|---|--|---|
| CALL BEFORE YOU DIG FOR BURIED UTILITY LOCATIONS 1-800-424-5555 | | No. Date REVISION By | DESIGNED BY: HAF DRAWN BY: AMM CHECKED BY: HAF | 1408 North Garden Street Bellingham, WA 98225 FREELAND & ASSOCIATES t: 360.650.1408 f: 360.650.1401 | CLIENT: BARRON HEATING 4176 MERIDIAN STREET BELLINGHAM, WA 98226 PROJECT LOCATION: LOT 12 PACIFIC INDUSTRIAL PARK 5100 PACIFIC HIGHWAY FERDALE, WASHINGTON | SHEET CONTENTS: BYERS ROAD PLAN & PROFILE | DWG #: 05085ASB2 JOB #: 06085 SCALE: H: 1"=30' V: 1"=3' DATE: 09-08-09 SHEET: C8 |
|---|--|-------------------------------------|--|--|---|--|---|

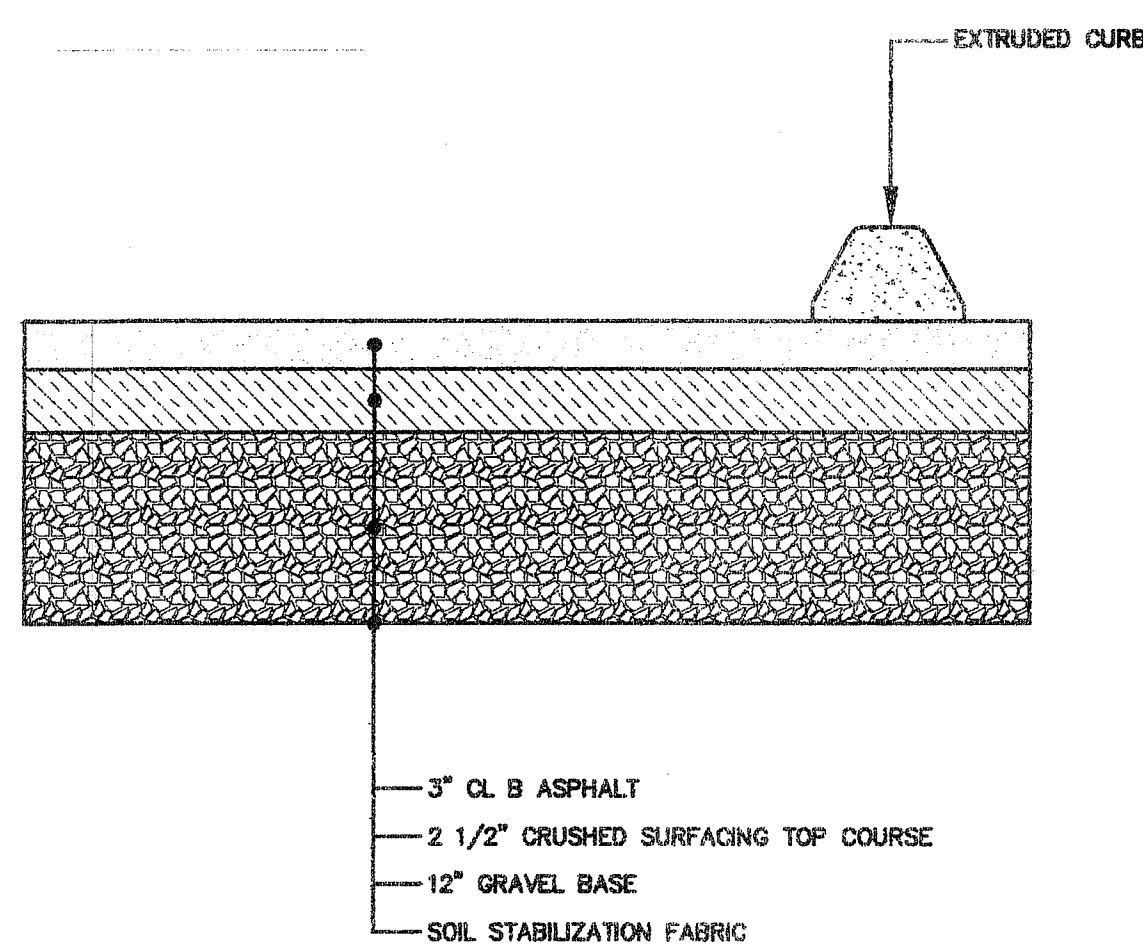
00397.008 10-27-09 DD



A ASPHALT PAVEMENT SECTION
nts PACIFIC HWY. (3/4 STREET)



B ASPHALT PAVEMENT SECTION
nts BYERS ROAD (3/4 STREET)



C ASPHALT PAVEMENT SECTION
nts

GENERAL REQUIREMENTS

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION, CURRENT EDITION AND THE CITY OF FERNDALE DEVELOPMENT STANDARDS AND SHALL BE SUBJECT TO APPROVAL BY THE CITY OF FERNDALE. IN THE EVENT OF A CONFLICT, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING SUB-SURFACE CONDITIONS AND SOILS TYPES.
- THE SURVEYOR SHALL LAY OUT AND SET ANY CONSTRUCTION STAKES AND MARKS NEEDED TO ESTABLISH THE LINES, GRADES, SLOPES OR CROSS-SECTIONS AS SHOWN ON THE PLANS OR AS STAKED BY THE ENGINEER.
- THROUGHOUT THE WORK, THE CONTRACTOR SHALL COMPLY WITH ALL PERMITS.
- THE CONTRACTOR SHALL PROTECT ALL PRIVATE AND PUBLIC UTILITIES FROM DAMAGE RESULTING FROM THE WORK.
- WHEN THE CONTRACTOR CONSIDERS THE WORK PHYSICALLY COMPLETE AND READY FOR FINAL INSPECTION, THE CONTRACTOR SHALL REQUEST THAT CITY INSPECTOR TO SCHEDULE A FINAL INSPECTION. THE INSPECTOR WILL MAKE A FINAL INSPECTION AND NOTIFY THE CONTRACTOR IN WRITING OF ALL PARTICULARS IN WHICH THE FINAL INSPECTION REVEALS THE WORK INCOMPLETE OR UNACCEPTABLE. THE CONTRACTOR SHALL IMMEDIATELY TAKE SUCH CORRECTIVE MEASURES AS ARE NECESSARY TO REMEDY THE LISTED DEFICIENCIES.
- BEFORE ANY CONSTRUCTION OR DEVELOPMENT ACTIVITY A PRE-CONSTRUCTION MEETING MUST BE HELD BETWEEN THE CONTRACTOR, OWNER, CITY ENGINEER AND PROJECT ENGINEER. (MINIMUM 3 DAYS PRIOR TO STARTING WORK)
- A COPY OF THESE APPROVED PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR. ANY WORK WITHIN THE TRAVELED RIGHT-OF-WAY THAT MAY INTERRUPT NORMAL TRAFFIC FLOW SHALL REQUIRE AT LEAST ONE FLAGGER FOR EACH LANE OF TRAFFIC AFFECTED. ALL SECTIONS OF THE WSDOT STANDARD SPECIFICATIONS 1-07.23-PUBLIC CONVENIENCE AND SAFETY, SHALL APPLY.
- PROOF OF LIABILITY INSURANCE SHALL BE SUBMITTED TO THE CITY PRIOR TO THE PRE-CONSTRUCTION MEETING.
- NO WORK SHALL OCCUR BETWEEN 7:00 PM & 7:00 AM.
- ALL HARD SURFACED PAVEMENTS MUST BE REPAIRED AT THE CLOSE OF EACH WORK DAY. THE REPAIRS CAN BE TEMPORARY WITH ASPHALT COLD MIX OR PERMANENT WITH HOT MIX ASPHALT OR CONCRETE. ALL REPAIRS SHALL BE ACCORDING TO CITY OF FERNDALE DRAWING R-11.
- ALL WORK MUST BE INSPECTED BY A REPRESENTATIVE OF THE CITY OF FERNDALE ENGINEERING DIVISION, AND 24 HOURS NOTICE MUST BE GIVEN PRIOR TO STARTING WORK OR TO SCHEDULE INSPECTIONS IN ACCORDANCE WITH SECTION 302 OF THE DEVELOPMENT STANDARDS.
- UPON COMPLETION OF THE PROJECT A CERTIFIED AS-BUILT PRINT SHALL BE PROVIDED TO THE CITY. AS-BUILTS SHALL BE ACCORDING TO CITY OF FERNDALE SPECIFICATION WA-8.
- THE LOCATIONS OF UNDERGROUND FACILITIES SHOWN ON THESE PLANS ARE BASED ON FIELD SURVEYS AND LOCAL UTILITY COMPANY RECORDS. IT SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES TO LOCATE THEIR FACILITIES PRIOR TO STARTING CONSTRUCTION. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR DAMAGE AND REPAIR TO THESE FACILITIES CAUSED BY HIS WORK FORCE. CALL 1-800-424-5555 FOR UTILITY LOCATE 48 HOURS PRIOR TO WORK, CONTRACT TO HOLD. THE CONTRACTOR SHALL NOTIFY THE ENGINEER PROMPTLY OF ANY CONFLICT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF ALL ADJACENT UTILITIES WHICH INCLUDE BUT ARE NOT LIMITED TO: WATER, SEWER, STORM, SEWER, POWER, TELEPHONE, CABLE TV, IRRIGATION, AND STREET LIGHTING. CONTRACTOR SHALL RESTORE ALL PRIVATE AND PUBLIC PROPERTY DISTURBED BY THE PROJECT UPON COMPLETION OF THE PROJECT.
- A REVOCABLE ENCROACHMENT PERMIT SHALL BE OBTAINED PRIOR TO COMMENCING WORK IN THE PUBLIC RIGHT OF WAY.

STORM DRAINAGE

- ALL PIPE AND APPURTENANCES SHALL BE LAID ON A PROPERLY PREPARED FOUNDATION IN ACCORDANCE WITH WSDOT 7-08. THIS SHALL INCLUDE LEVELING AND COMPACTING THE TRENCH BOTTOM, THE TOP OF THE FOUNDATION MATERIAL AND ANY REQUIRED PIPE BEDDING TO A UNIFORM GRADE SO THAT THE ENTIRE PIPE IS SUPPORTED BY A UNIFORMLY DENSE UNYIELDING BASE.
- ALL DRAINAGE STRUCTURES, SUCH AS CATCH BASINS AND MANHOLES, NOT LOCATED WITHIN A TRAVELED ROADWAY OR SIDEWALK, SHALL HAVE SOLID LOCKING LIDS. ALL DRAINAGE STRUCTURES ASSOCIATED WITH A PERMANENT RETENTION/DETENTION FACILITY SHALL HAVE SOLID LOCKING LIDS.
- ALL CATCH BASIN GRATES SHALL INCLUDE THE STAMPING "OUTFALL TO STREAM, DUMP NO POLLUTANTS."
- ALL DRIVEWAY CULVERTS LOCATED WITHIN THE RIGHT-OF-WAY SHALL BE OF SUFFICIENT LENGTH TO PROVIDE A MINIMUM 3:1 SLOPE FROM THE EDGE OF THE DRIVEWAY TO THE BOTTOM OF THE DITCH. CULVERTS SHALL HAVE BEVELED END SECTIONS PER WSDOT.
- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE LOCATIONS OF ALL STUB-OUT CONVEYANCE LINES WITH RESPECT TO THE UTILITIES (E.G. POWER, GAS, TELEPHONE, TELEVISION).
- DRAIN PIPE MATERIAL AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF WSDOT OR APWA SPECIFICATIONS AND SECTION 101.3 OF THE CITY OF FERNDALE DEVELOPMENT STANDARDS.

SANITARY SEWER SPECIFICATIONS

- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, CURRENT EDITION AND THE CITY OF FERNDALE DEVELOPMENT STANDARDS SECTION 5 AND SHALL BE SUBJECT TO APPROVAL BY THE CITY OF FERNDALE.
- FOUR INCH THROUGH TWELVE-INCH PIPE SHALL BE PVC PIPE CONFORMING TO ASTM D-3034, SDR-35 OR EQUAL. PIPE JOINTS SHALL BE MADE WITH FLEXIBLE GASKETS.
- TRENCH EXCAVATION SHALL BE ACCORDING TO SECTION 7-8.3(1)A OF THE STANDARD SPECIFICATIONS.
- THE BEDDING SHALL BE PEA GRAVEL PER SS-1.
- PIPE LAYING SHALL MEET THE REQUIREMENTS OF SECTION 7-08.3 OF THE STANDARD SPECIFICATIONS.
- ALL SIDE SEWERS SHALL BE CONSTRUCTED ACCORDING TO THE CITY OF FERNDALE STANDARD PLAN SS-6 THROUGH SS-8. CONNECT SIDE SEWERS PER COF DWG SS-12.
- ALL TRENCH BACKFILL UNDER EXISTING OR FUTURE PAVING SHALL BE BANK RUN GRAVEL, CLASS "B" AND SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY.
- ALL SEWER PIPE WILL BE PRESSURE TESTED AND WILL BE SCANNED BY MEANS OF A TV CAMERA PRIOR TO ACCEPTANCE BY THE CITY OF FERNDALE.
- ALL MANHOLES WILL BE ACCORDING TO THE CITY OF FERNDALE STANDARD PLAN NO. SS-2 THROUGH SS-4.
- ALL CLEANOUTS SHALL BE ACCORDING TO CITY OF FERNDALE STANDARD PLAN NO. SS-5.
- ALL HARD SURFACED PAVEMENTS MUST BE REPAIRED AT THE CLOSE OF EACH WORK DAY. THE REPAIRS CAN BE TEMPORARY WITH ASPHALT COLD MIX OR PERMANENT WITH HOT MIX ASPHALT OR CONCRETE.
- ALL WORK MUST BE INSPECTED AND APPROVED BY A REPRESENTATIVE OF THE CITY OF FERNDALE PUBLIC WORKS, AND 24 HOURS NOTICE MUST BE GIVEN PRIOR TO STARTING WORK OR TO SCHEDULE INSPECTIONS.
- ALL TESTING SHALL BE DONE IN THE PRESENCE AND UNDER THE SUPERVISION OF A REPRESENTATIVE OF THE CITY OF FERNDALE.

BASES

- GRAVEL BASES AND BALLAST MAXIMUM PARTICLE SIZE PASSING THE U.S. NO. 200 SIEVE SHALL NOT EXCEED 5X.
- BALLAST, GRAVEL BASE AND CRUSHED SURFACING SHALL BE COMPACTED TO AT LEAST 95% OF ITS MAXIMUM DRY DENSITY.
- THE CONTRACTOR OR PROPONENT SHALL BE RESPONSIBLE FOR ALL COMPACTION TESTING. ALL TESTING SHALL BE THROUGH ENGINEERING REVIEW ACCOUNT AND PAID FOR BY THE OWNER.

PAVEMENTS

- WHERE SHOWN ON THE PLANS, PAVEMENT MARKINGS SHALL BE OBLITERATED UNTIL BLEMISHES CAUSED BY THE PAVEMENT MARKING REMOVAL CONFORM TO THE COLORATION OF THE ADJACENT PAVEMENT.
- SOIL RESIDUAL HERBICIDE SHALL BE PLACED WITHIN 24 HOURS OF PAVING.
- A TACK COAT OF ASPHALT SHALL BE APPLIED BETWEEN ALL COURSES OF ASPHALT.
- ALL PAVEMENT REPAIR SHALL BE SAW-CUT BEFORE REMOVAL. AR-4000W SHALL BE APPLIED TO ALL EDGES OF EXISTING PAVEMENT.
- ASPHALT CONCRETE PAVEMENT SHALL NOT BE PLACED NOR COMPACTED DURING HOURS OF DARKNESS.
- SUBGRADE SHALL BE CERTIFIED IN WRITING BY THE ENGINEER PRIOR TO PAVING.
- PAVEMENT AND MARKINGS SHALL BE IN ACCORDANCE WITH THE MUTCD. ALL CENTERLINE STRIPING SHALL BE PROFILED MMA, METHYL METHACRYLATE, MMA SHALL BE APPLIED BY EITHER SPRAYING OR EXTRUSION, AND HAVE A MINIMUM THICKNESS OF 30 MILS.

WATER MAINS

- TEST PRESSURE FOR WATERMAIN ACCEPTANCE SHALL BE 225 p.s.i. AT THE HIGHEST POINT ON THE WATER LINE AND SHALL BE DONE ACCORDING TO CITY OF FERNDALE REQUIREMENTS. NO CONNECTION UNTIL PIPE PASSES PRESSURE & PURITY TESTING. ALL PURIFICATION ACCEPTANCE TESTING SHALL BE ACCORDING TO CITY OF FERNDALE REQUIREMENTS. THE PIPE WILL NOT PASS UNLESS A ZERO BACTERIA COUNT IS OBTAINED FOR TWO CONSECUTIVE TESTS 24 HOURS APART.
- ALL BACKFILL SHALL BE IMPORTED GRAVEL AND SHALL CONFORM TO SECTION 7-09.1(1)E OF THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION.
- ALL PIPE SHALL HAVE A MINIMUM COVER OF 3.5 FEET.
- NOTIFY THE CITY INSPECTOR FOUR DAYS PRIOR TO WA.
- WATERMAINS & MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 705 OF THE CITY OF FERNDALE DEVELOPMENT STANDARDS.

EARTHWORK

- THE CONTRACTOR SHALL CLEAR, GRUB AND CLEAN UP THOSE AREAS SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL EXCAVATE AND GRADE TO THE ALIGNMENT, GRADE AND CROSS-SECTIONS SHOWN IN THE PLANS OR ESTABLISHED BY THE ENGINEER. IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL ENGINEERING STUDY.
- MAXIMUM DENSITY AND OPTIMUM MOISTURE FOR GRANULAR MATERIALS WILL BE DETERMINED USING ASTM D-1557 TEST METHOD.
- UNSATURABLE MATERIAL NOT FIT FOR A SUB-GRADE SHALL BE EXCAVATED TO THE BOUNDARIES SET BY THE ENGINEER AND REPLACED WITH A SUITABLE BACKFILL MATERIAL.

Engineer's Certification

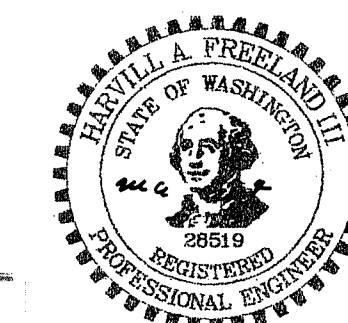
I HEREBY CERTIFY THAT THE IMPROVEMENTS IN BARRON HEATING HAVE BEEN INSPECTED BY FREELAND & ASSOCIATES, INC. AND TO THE BEST OF MY KNOWLEDGE HAVE BEEN CONSTRUCTED IN CONFORMANCE WITH THE CITY OF FERNDALE DEVELOPMENT STANDARDS, THE CITY OF FERNDALE MUNICIPAL CODE, SUBSEQUENT STANDARDS ADOPTED BY REFERENCE THEREIN, AND STANDARD ENGINEERING PRACTICE.

APPROVED

SEP 28 2009

BY *J. Miller*

CITY OF FERNDALE



Surveyor's Certification

I CERTIFY THAT THE LOCATIONS, ELEVATIONS, DEPTHS, AND AS-BUILT COMMENTS REFLECTING MATERIALS ACTUALLY USED DURING CONSTRUCTION ACCURATELY REFLECT EXISTING FIELD CONDITIONS AS DETERMINED BY ME OR UNDER MY DIRECT SUPERVISION ON THIS DATE: 9/28/09

By *J. Miller* Date: 9-28-09

CALL BEFORE YOU DIG
FOR BURIED UTILITY LOCATIONS
1-800-424-5555

No. Date REVISION

DESIGNED BY: HAF
DRAWN BY: AMM
CHECKED BY: HAF

1408 North Garden Street
Bellingham, WA 98225
t: 360.650.1408
f: 360.650.1401
FREELAND & ASSOCIATES

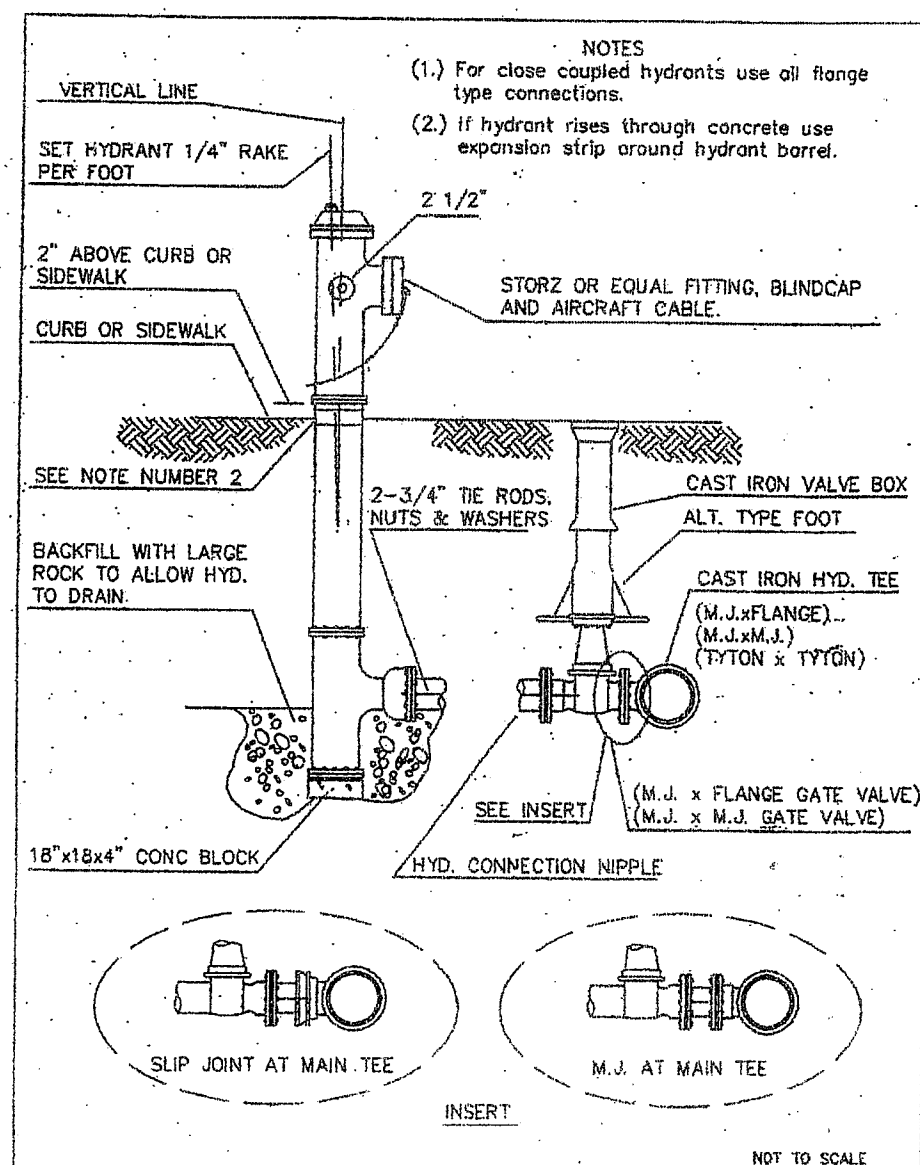
CLIENT: BARRON HEATING
4176 MERIDIAN STREET
BELLINGHAM, WA 98226
PROJECT LOCATION: LOT 12, SBSP NO. 5
5101 PACIFIC HIGHWAY
FERNDALE, WASHINGTON

SHEET CONTENTS:

GENERAL NOTES & DETAILS

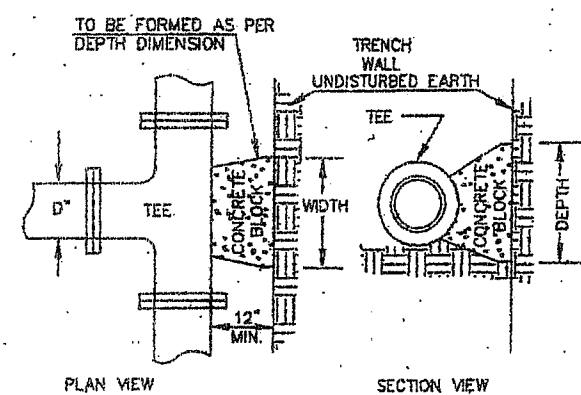
DWG #: 06085ASB2
JOB #: 06085
SCALE: H: n/a V: n/a
DATE: 09-08-09
SHEET: C9

003971.004 10-27-09 DD



APPROVED *John & Elly*
Public Works Director Date
JUNE 1995

CITY OF FERDALE
FIRE HYDRANT ASSEMBLY
DRAWING W-1

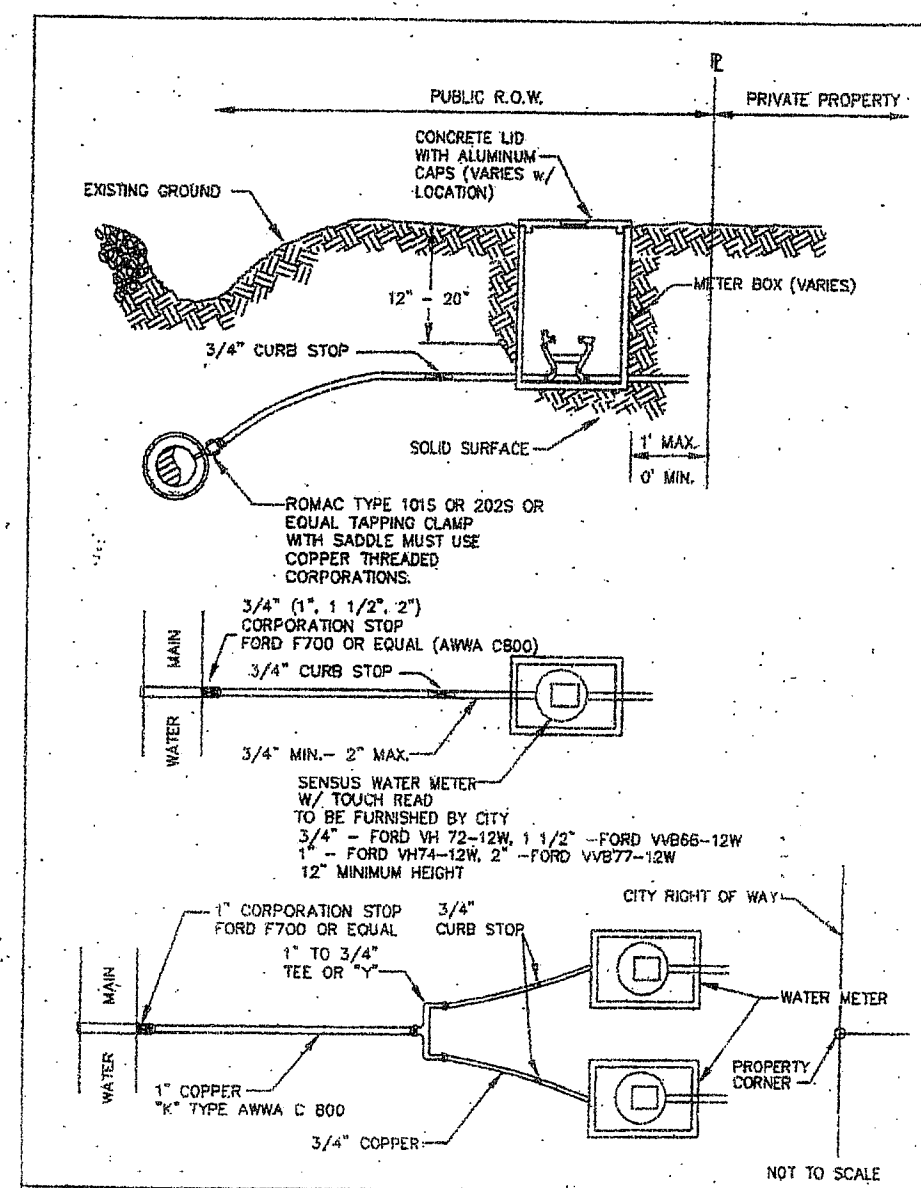


| SIZE | WIDTH | DEPTH |
|------|-------|-------|
| 6" | 1'-0" | 1'-0" |
| 8" | 1'-0" | 1'-0" |
| 10" | 1'-0" | 1'-0" |
| 12" | 1'-0" | 1'-0" |
| 14" | 1'-0" | 1'-0" |
| 16" | 1'-0" | 1'-0" |
| 18" | 1'-0" | 1'-0" |
| 20" | 1'-0" | 1'-0" |

NOTE:
ALL ABOVE DIMENSIONS APPLY TO STABLE TRENCH WALLS, UNDER VARIABLE CONDITIONS SIZE OF THRUST BLOCK SHALL BE DETERMINED BY ENGINEER.

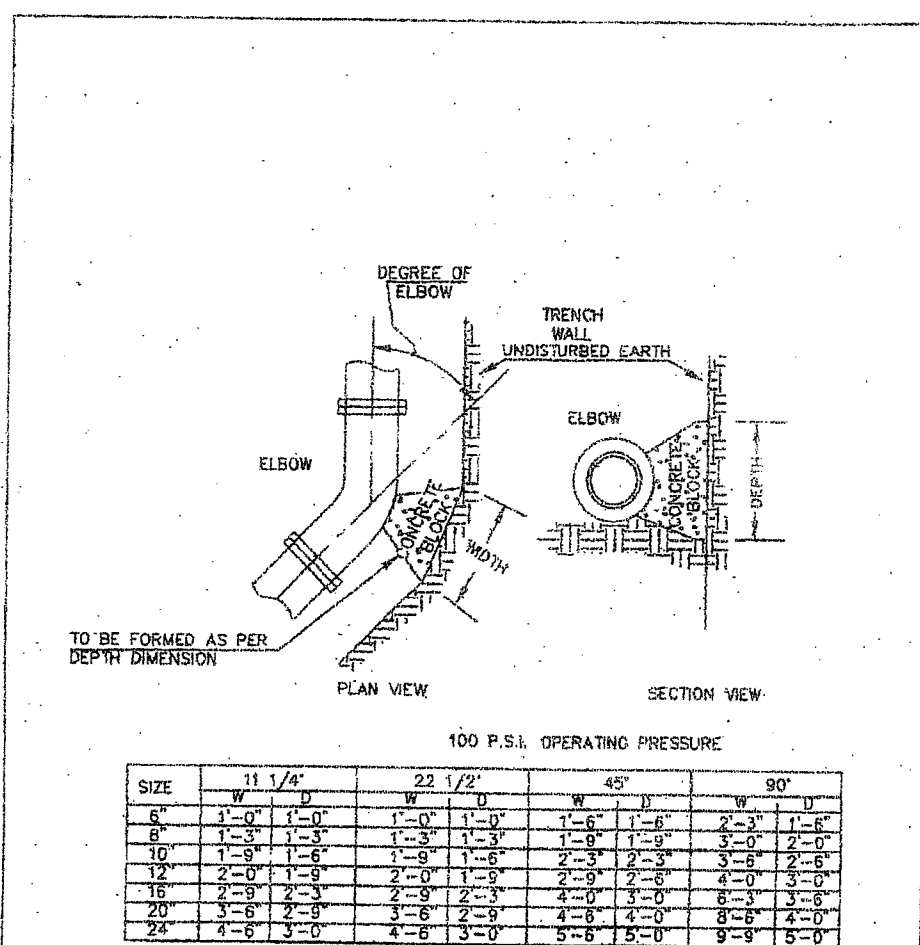
APPROVED *John & Elly*
Public Works Director Date
JUNE 1995

CITY OF FERDALE
THRUST BLOCKING TEES
DRAWING W-3



APPROVED *John & Elly*
Public Works Director Date
JUNE 1995

CITY OF FERDALE
TYPICAL WATER SERVICE (3/4" TO 2")
DRAWING W-5

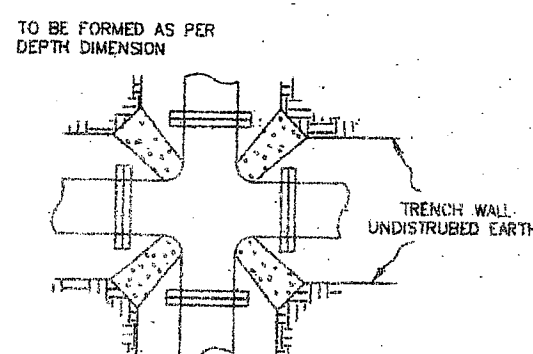


| SIZE | 11 1/4" | 22 1/2" | 45" | 90" |
|------|---------|---------|-------|-------|
| 6" | 1'-0" | 1'-0" | 1'-0" | 1'-0" |
| 8" | 1'-0" | 1'-0" | 1'-0" | 1'-0" |
| 10" | 1'-0" | 1'-0" | 1'-0" | 1'-0" |
| 12" | 1'-0" | 1'-0" | 1'-0" | 1'-0" |
| 14" | 1'-0" | 1'-0" | 1'-0" | 1'-0" |
| 16" | 1'-0" | 1'-0" | 1'-0" | 1'-0" |
| 18" | 1'-0" | 1'-0" | 1'-0" | 1'-0" |
| 20" | 1'-0" | 1'-0" | 1'-0" | 1'-0" |

NOTE:
ALL ABOVE DIMENSIONS APPLY TO STABLE TRENCH WALLS, UNDER VARIABLE CONDITIONS SIZE OF THRUST BLOCK SHALL BE DETERMINED BY ENGINEER.

APPROVED *John & Elly*
Public Works Director Date
JUNE 1995

CITY OF FERDALE
THRUST BLOCKING ELBOWS
DRAWING W-2

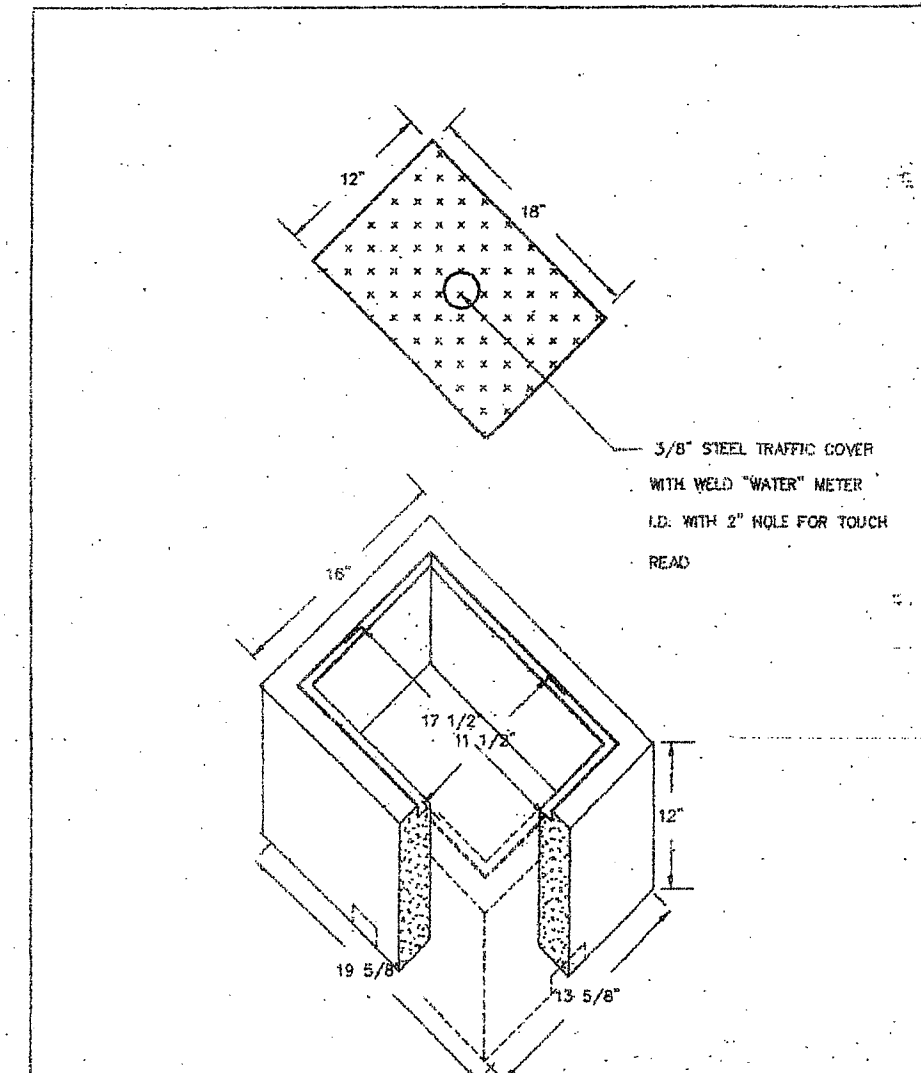


| SIZE | WIDTH | DEPTH |
|------|-------|-------|
| 6" | 1'-0" | 1'-0" |
| 8" | 1'-0" | 1'-0" |
| 10" | 1'-0" | 1'-0" |
| 12" | 1'-0" | 1'-0" |
| 14" | 1'-0" | 1'-0" |
| 16" | 1'-0" | 1'-0" |
| 18" | 1'-0" | 1'-0" |
| 20" | 1'-0" | 1'-0" |

NOTE:
ALL ABOVE DIMENSIONS APPLY TO STABLE TRENCH WALLS, UNDER VARIABLE CONDITIONS SIZE OF THRUST BLOCK SHALL BE DETERMINED BY ENGINEER.

APPROVED *John & Elly*
Public Works Director Date
JUNE 1995

CITY OF FERDALE
THRUST BLOCKING 4-WAY INTERSECTION
DRAWING W-4



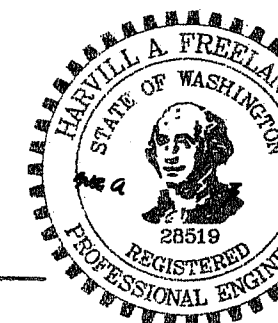
APPROVED *John & Elly*
Public Works Director Date
JUNE 1995

CITY OF FERDALE
NO. 2 METER BOX FOG TIE
DRAWING W-8

Engineer's Certification
I HEREBY CERTIFY THAT THE IMPROVEMENTS IN BARRON HEATING HAVE BEEN INSPECTED BY FREELAND & ASSOCIATES, INC. AND TO THE BEST OF MY KNOWLEDGE, HAVE BEEN CONSTRUCTED IN CONFORMANCE WITH THE CITY OF FERDALE DEVELOPMENT STANDARDS, THE CITY OF FERDALE MUNICIPAL CODE, SUBSEQUENT STANDARDS ADOPTED BY REFERENCE THEREIN, AND STANDARD ENGINEERING PRACTICE.

Surveyor's Certification
I CERTIFY THAT THE LOCATIONS, ELEVATIONS, DEPTHS, AND AS-BUILT COMMENTS REFLECTING MATERIALS ACTUALLY USED DURING CONSTRUCTION ACCURATELY REFLECT EXISTING FIELD CONDITIONS AS DETERMINED BY ME OR UNDER MY DIRECT SUPERVISION ON THIS DATE: 9-9-09

APPROVED
SEP 28 2009
BY *John & Elly*
CITY OF FERDALE



CALL BEFORE YOU DIG
FOR BURIED UTILITY LOCATIONS
1-800-424-5555

| No. | Date | REVISION | By |
|-----|------|----------|----|
|-----|------|----------|----|

DESIGNED BY: HAF
DRAWN BY: AMM
CHECKED BY: HAF

1408 North Garden Street
Bellingham, WA 98225
t: 360.650.1408
f: 360.650.1401

FREELAND & ASSOCIATES

CLIENT: BARRON HEATING
4176 MERIDIAN STREET
BELLINGHAM, WA 98226
PROJECT LOCATION: LOT 12, SBSP NO. 5
5100 PACIFIC HIGHWAY
FERDALE, WASHINGTON

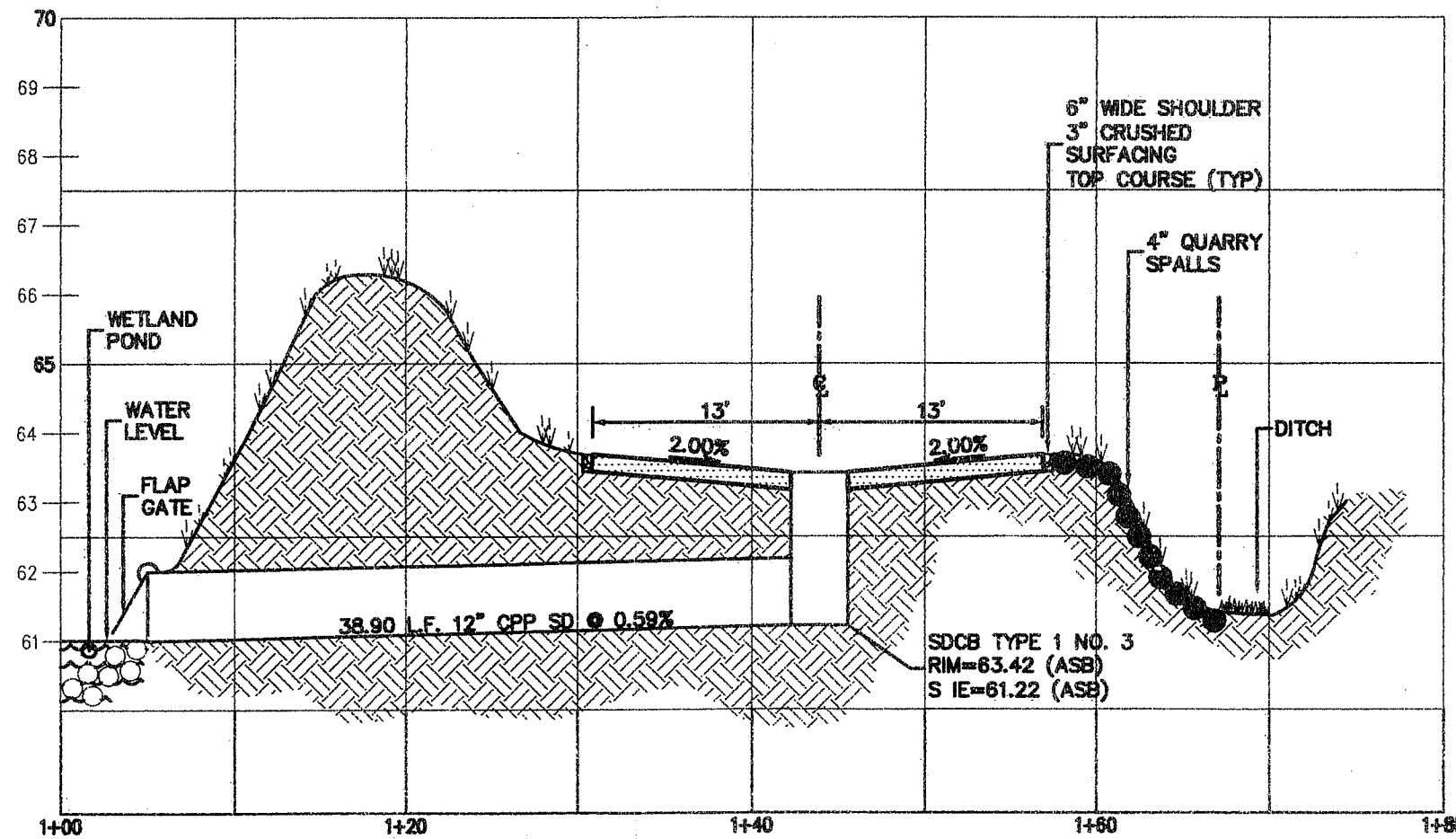
SHEET CONTENTS:

DETAILS

DWG #: 06085ASB2
JOB #: 06085
SCALE: H: n/a V: n/a
DATE: 09-09-09
SHEET: C10

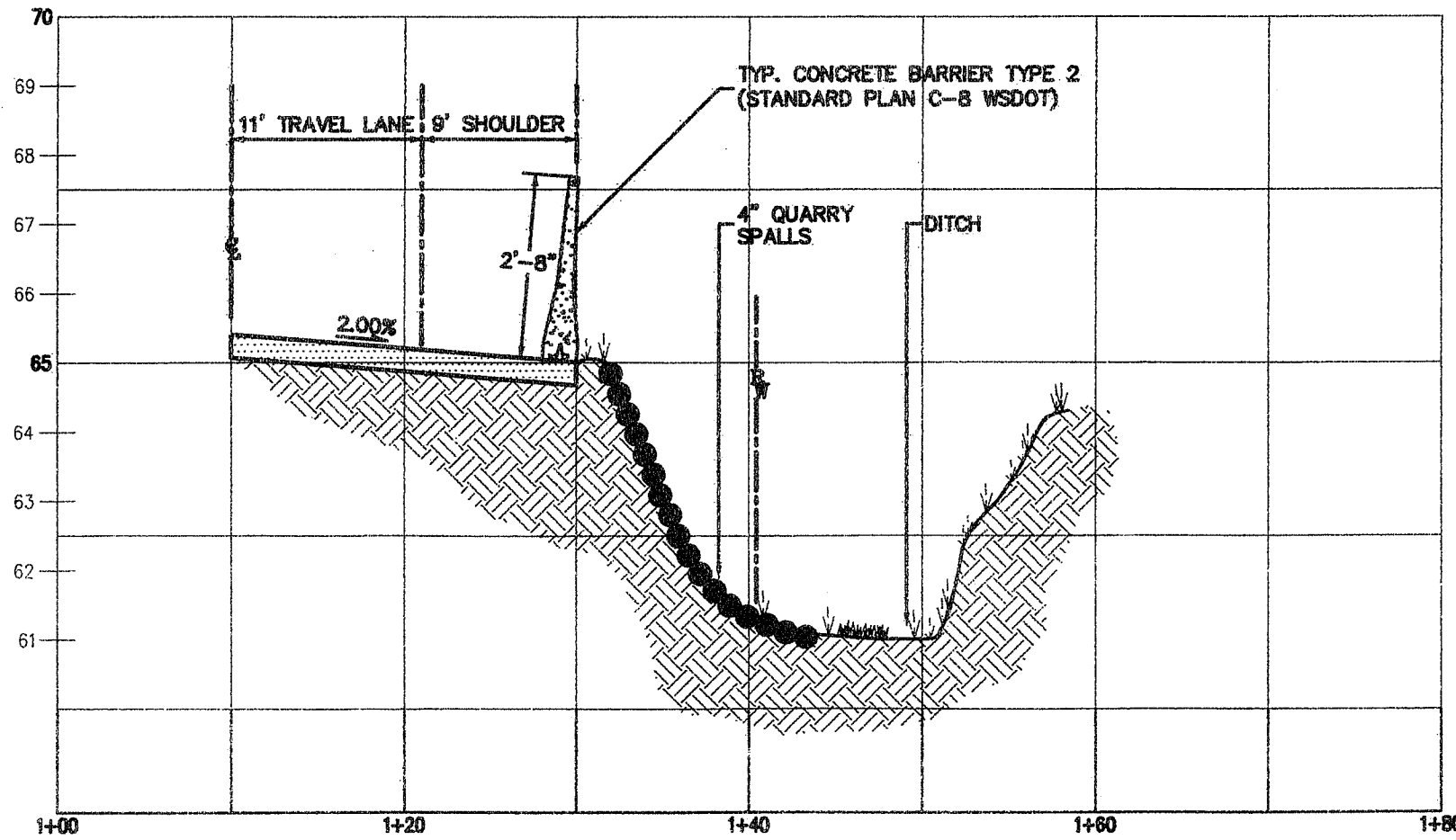
00397.011 10.27.09 DD

60-27-01 210-15500



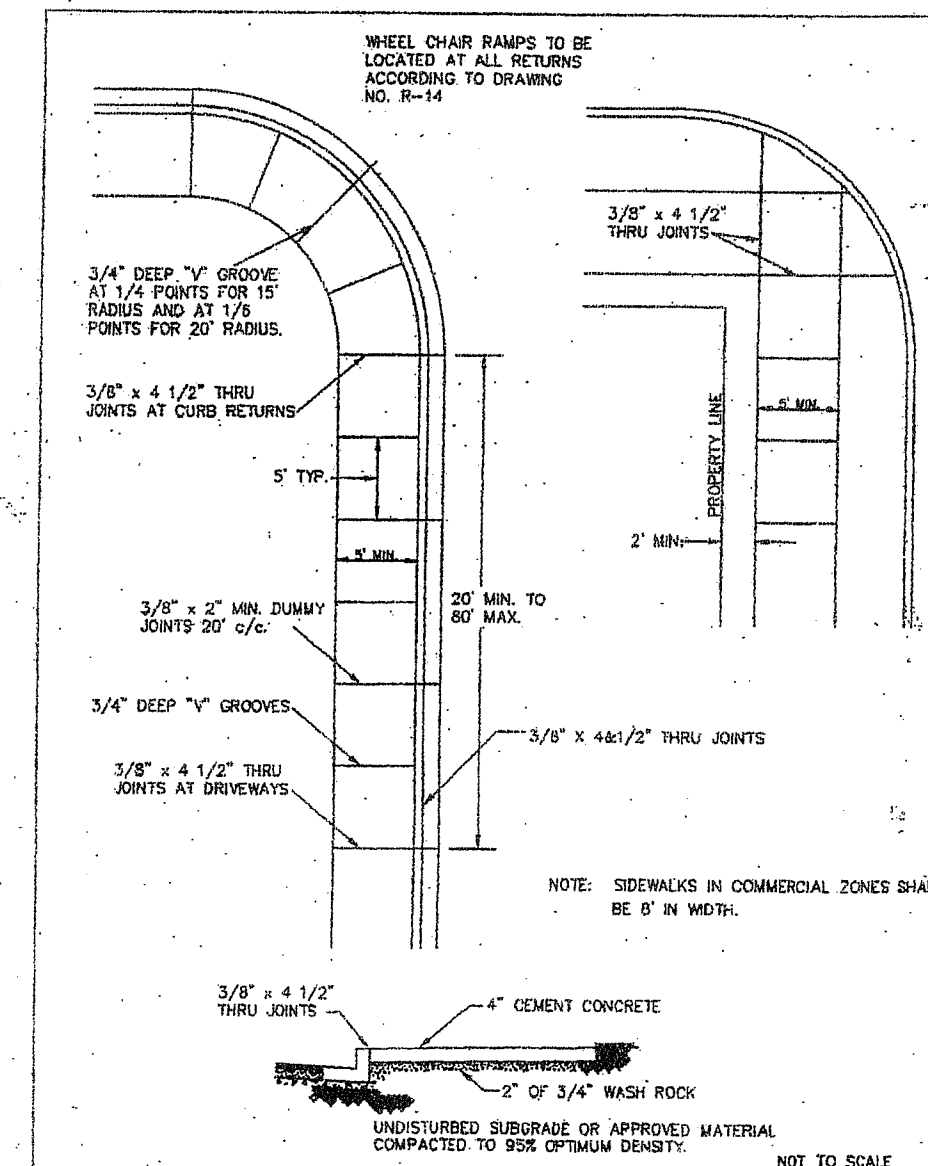
A NORTH ACCESS ROAD

H: 1"=10'
V: 1"=2.5'



B PACIFIC HWY DITCH CROSS-SECTION

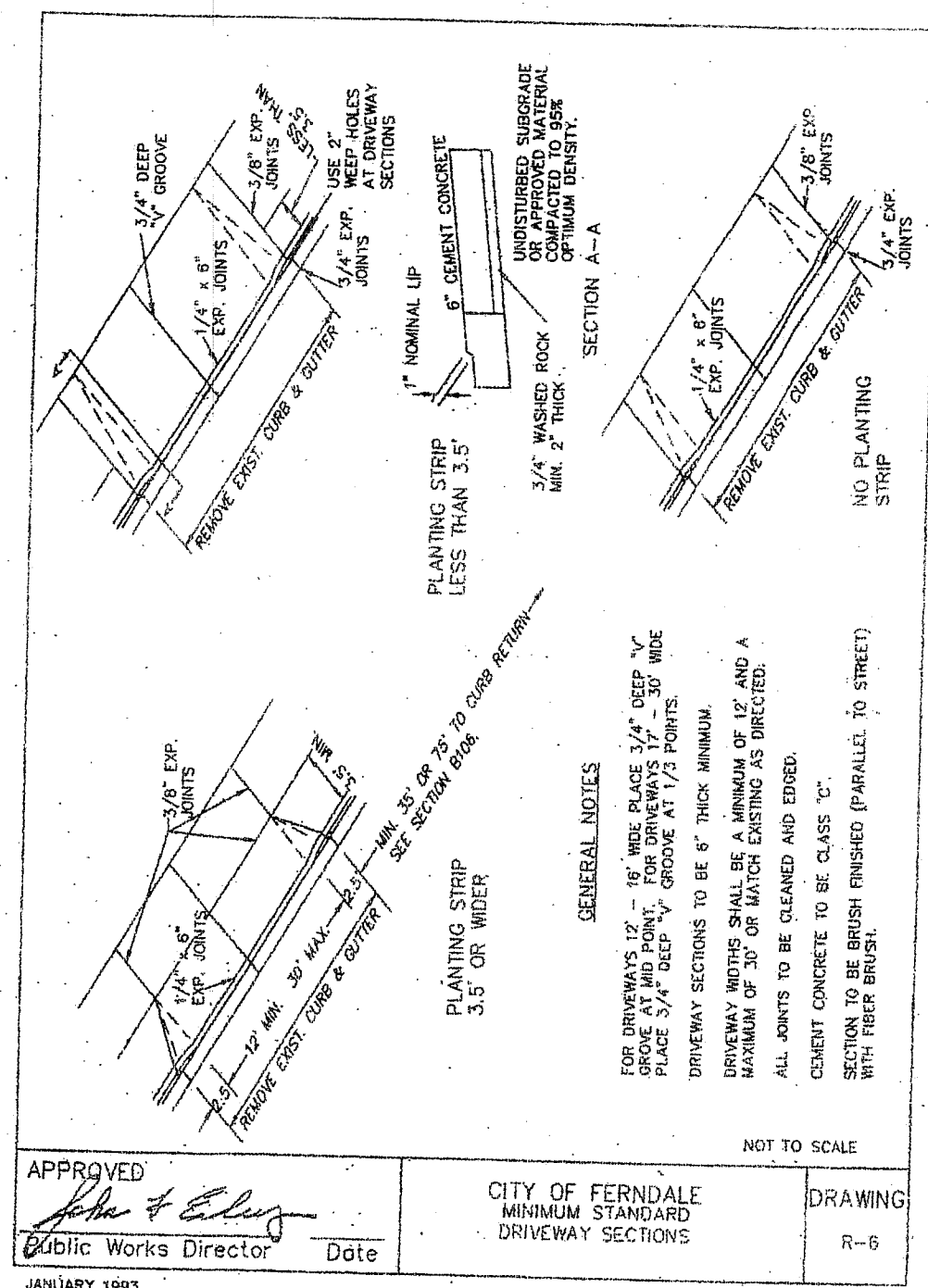
H: 1"=10'
V: 1"=2.5'



APPROVED
Public Works Director
JUNE 1995

CITY OF FERDALE
TYPICAL SIDEWALK PLAN
AND CROSS SECTION

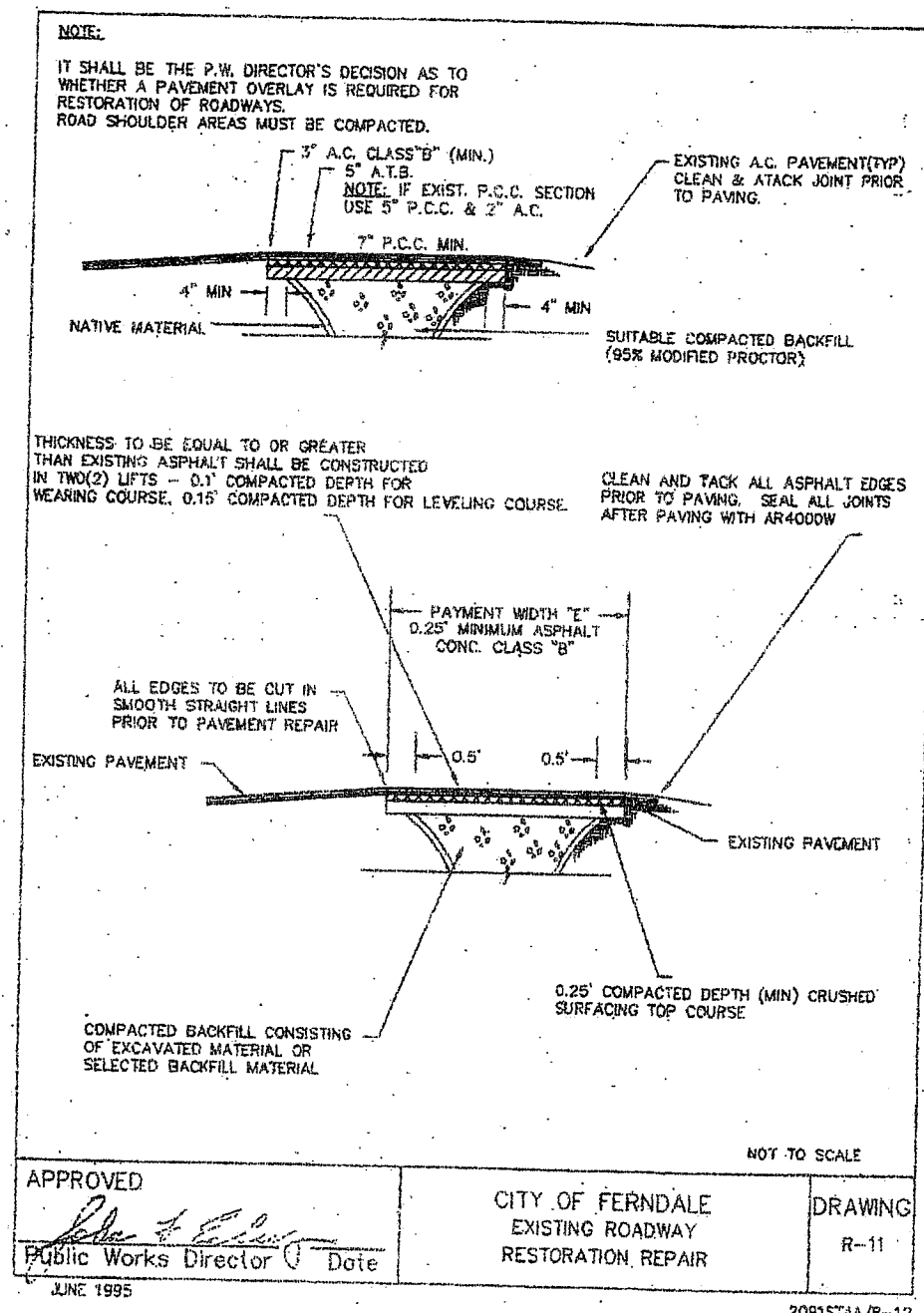
DRAWING
R-12



APPROVED
Public Works Director
JANUARY 1993

CITY OF FERDALE
MINIMUM STANDARD
DRIVEWAY SECTIONS

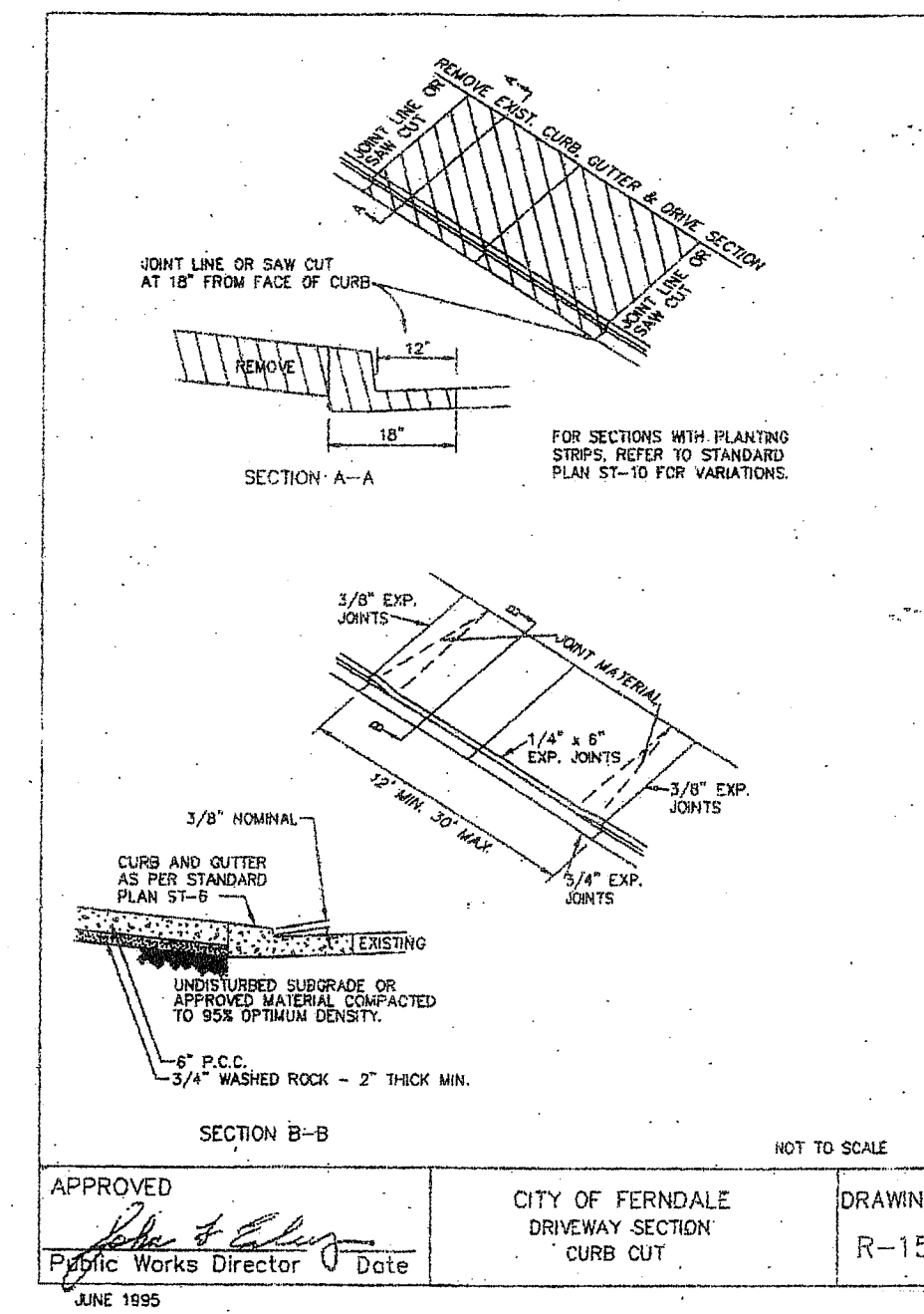
DRAWING
R-6



APPROVED
Public Works Director
JUNE 1995

CITY OF FERDALE
EXISTING ROADWAY
RESTORATION REPAIR

DRAWING
R-11



APPROVED
Public Works Director
JUNE 1995

CITY OF FERDALE
DRIVEWAY SECTION
CURB CUT

DRAWING
R-15

Engineer's Certification

I HEREBY CERTIFY THAT THE IMPROVEMENTS IN BARRON HEATING HAVE BEEN INSPECTED BY FREELAND & ASSOCIATES, INC. AND TO THE BEST OF MY KNOWLEDGE, HAVE BEEN CONSTRUCTED IN CONFORMANCE WITH THE CITY OF FERDALE MUNICIPAL CODE, SUBSEQUENT STANDARDS ADOPTED BY REFERENCE THEREIN, AND STANDARD ENGINEERING PRACTICE.

By: *M. A. P.* Date: 1-9-09

Surveyor's Certification

I CERTIFY THAT THE LOCATIONS, ELEVATIONS, DEPTHS, AND AS-BUILT COMMENTS REFLECTING MATERIALS ACTUALLY USED DURING CONSTRUCTION ACCURATELY REFLECT EXISTING FIELD CONDITIONS AS DETERMINED BY ME OR UNDER MY DIRECT SUPERVISION ON THIS DATE: 9/2/09

By: *[Signature]* Date: 9/2/09

APPROVED
SEP 28 2009
BY: *[Signature]*
CITY OF FERDALE

APPROVED
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
9-9-09

CALL BEFORE YOU DIG
FOR BURIED UTILITY LOCATIONS
1-800-424-5555

| No. | Date | REVISION |
|-----|------|----------|
|-----|------|----------|

DESIGNED BY:
HAF

DRAWN BY:
AMM

CHECKED BY:
HAF

1408 North Garden Street
Bellingham, WA 98225

1. 360.850.1408
F. 360.850.1401

FREELAND & ASSOCIATES

CLIENT:
BARRON HEATING
4176 MERIDIAN STREET
BELLINGHAM, WA 98226

PROJECT LOCATION:
LOT 12, SBSP NO. 5
5100 PACIFIC HIGHWAY
FERDALE, WASHINGTON

SHEET CONTENTS:

DETAILS

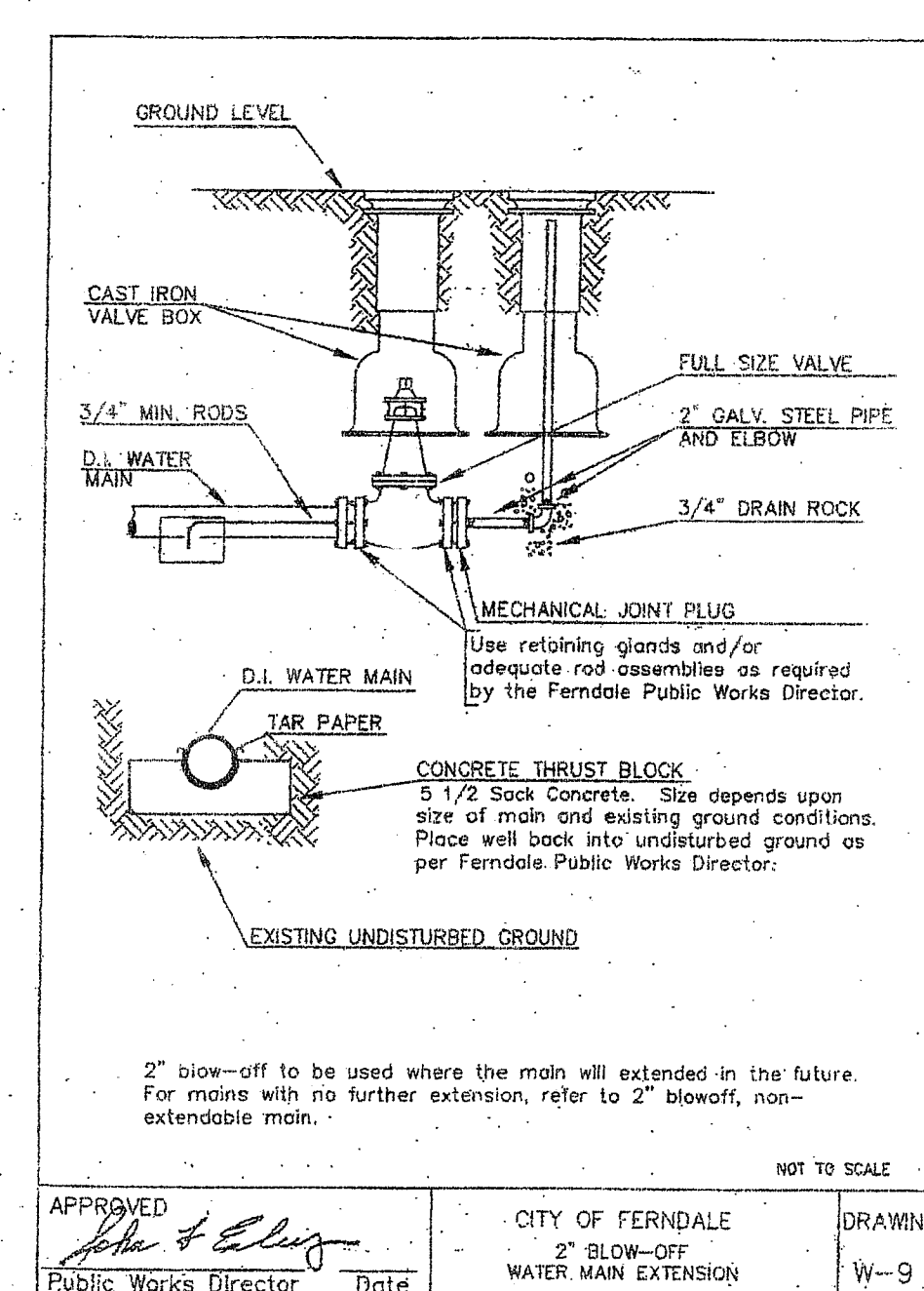
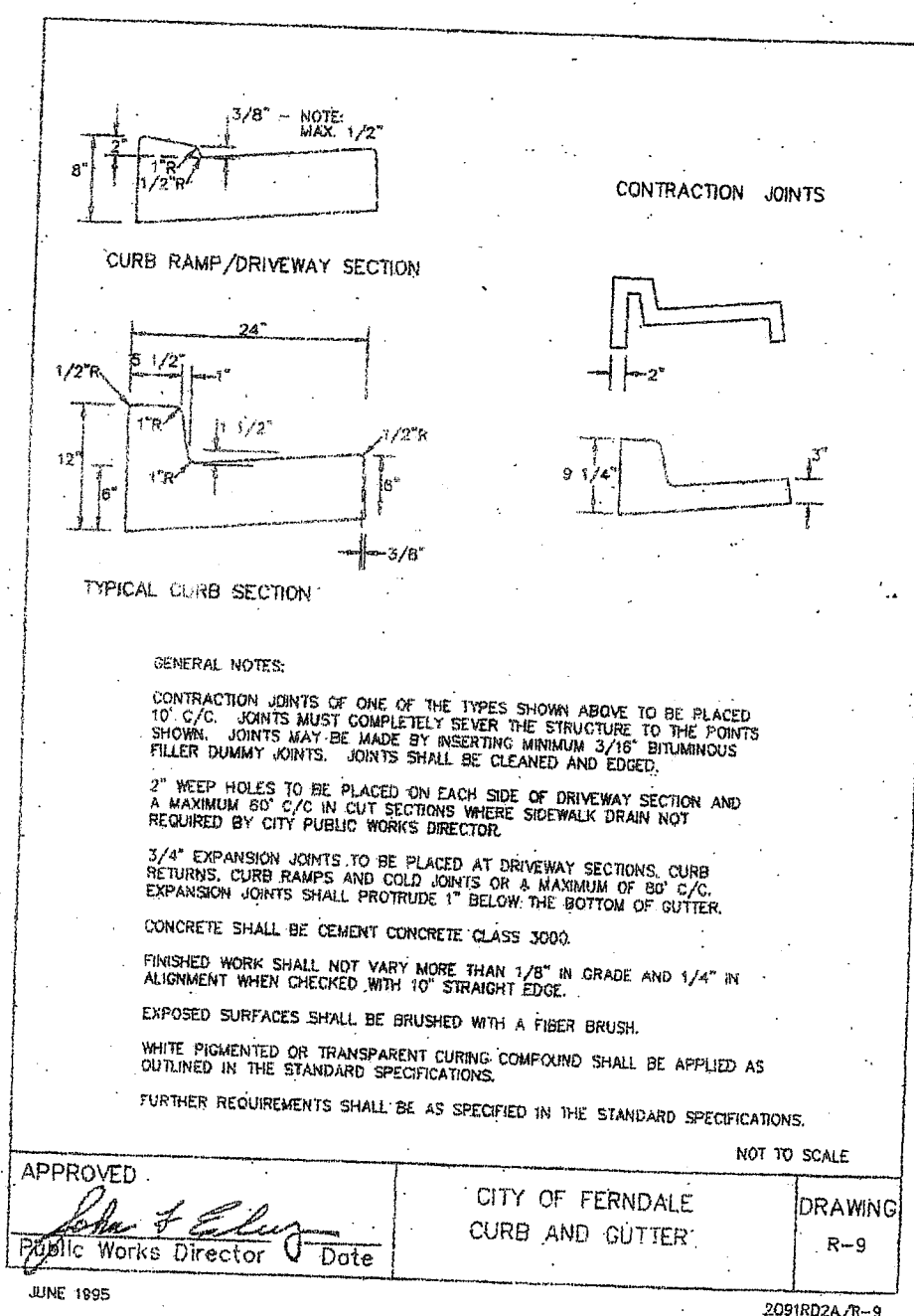
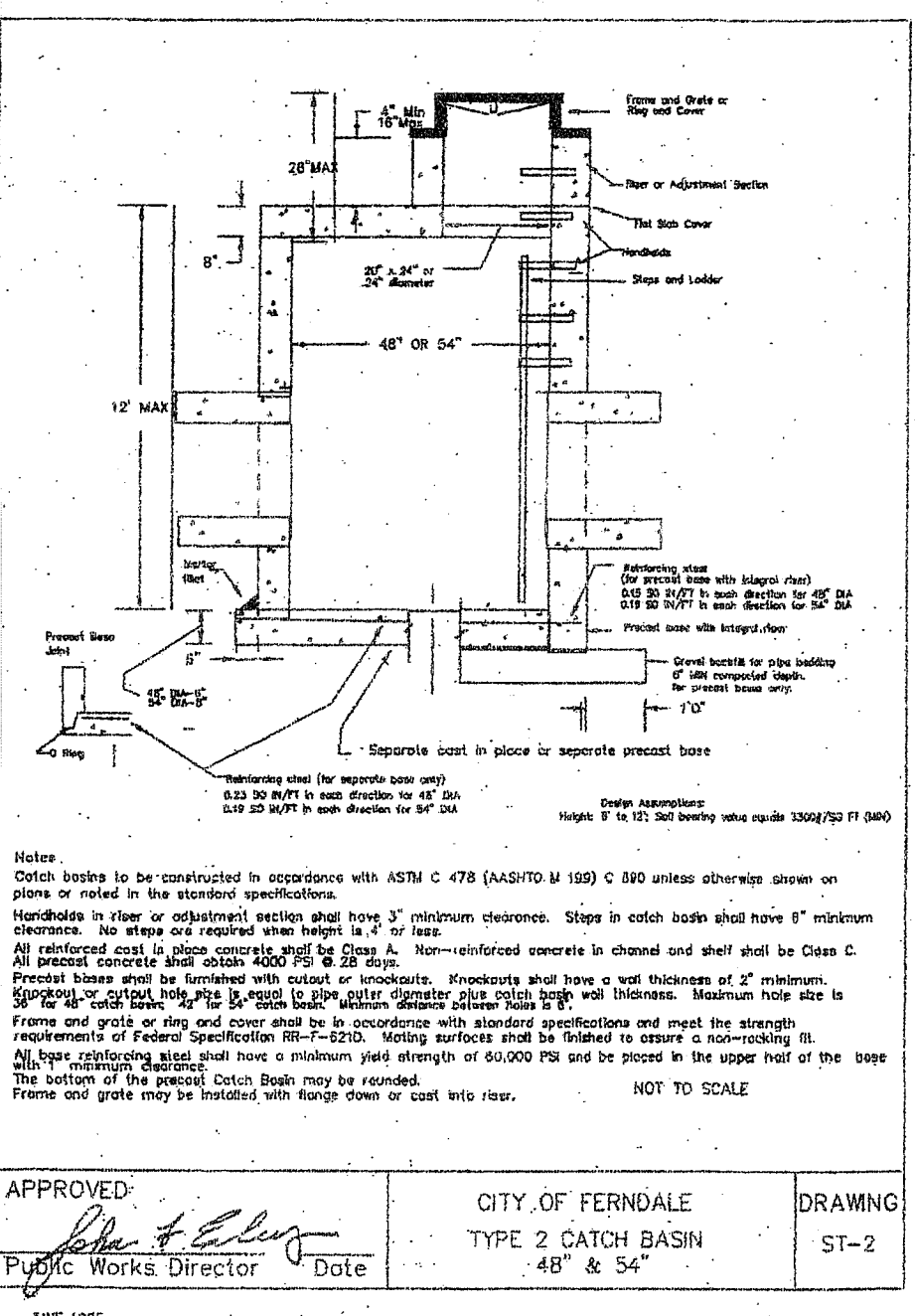
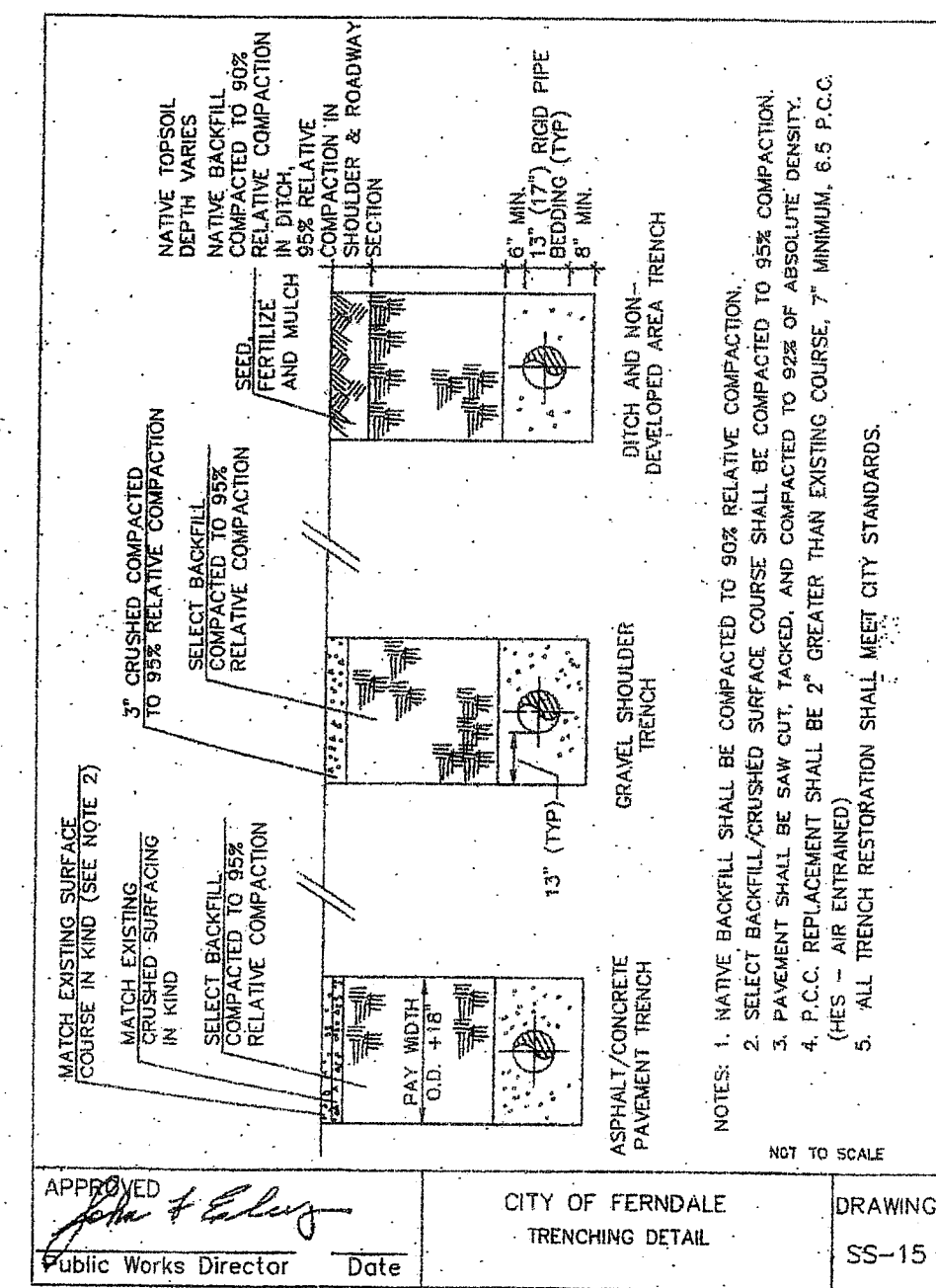
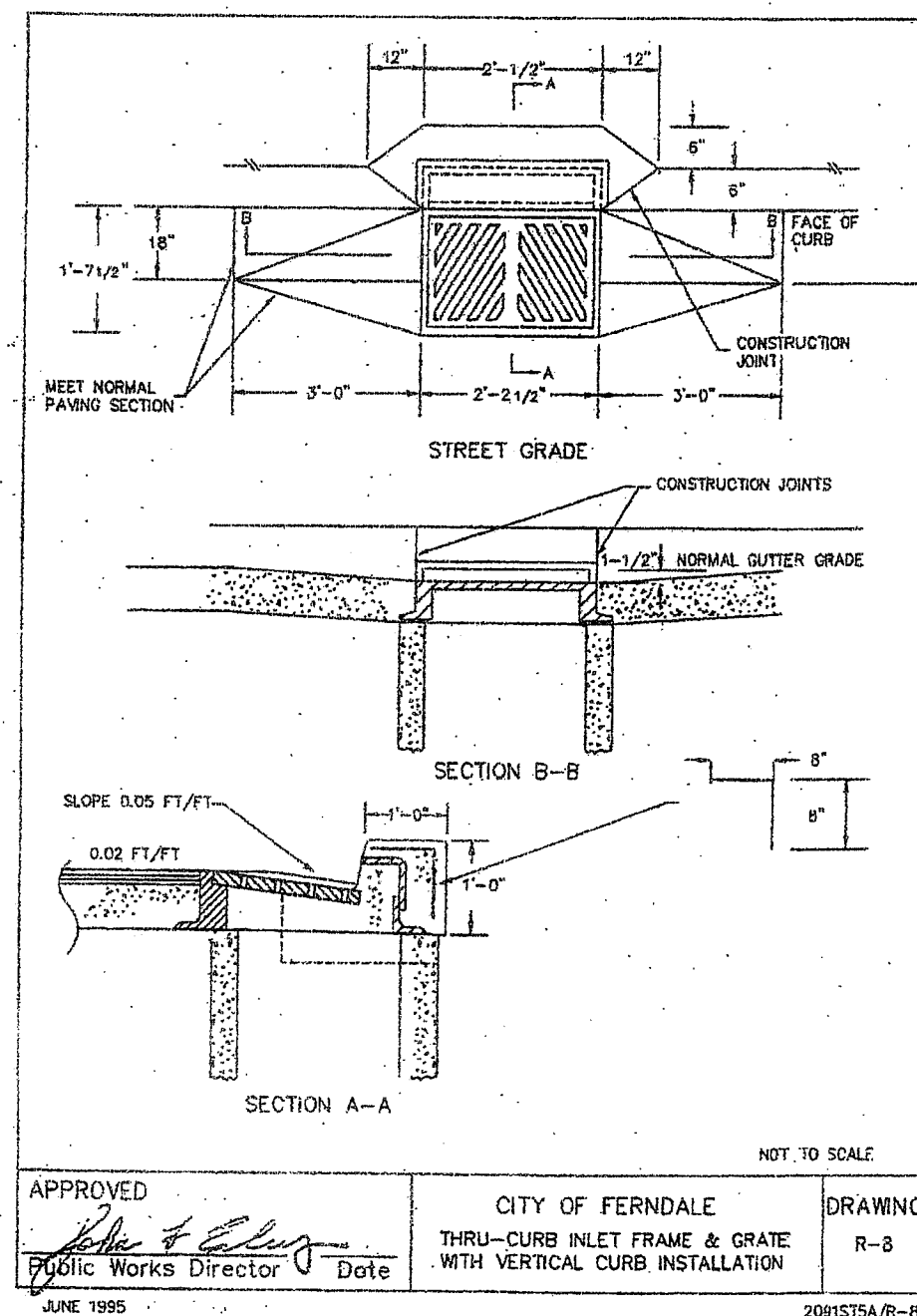
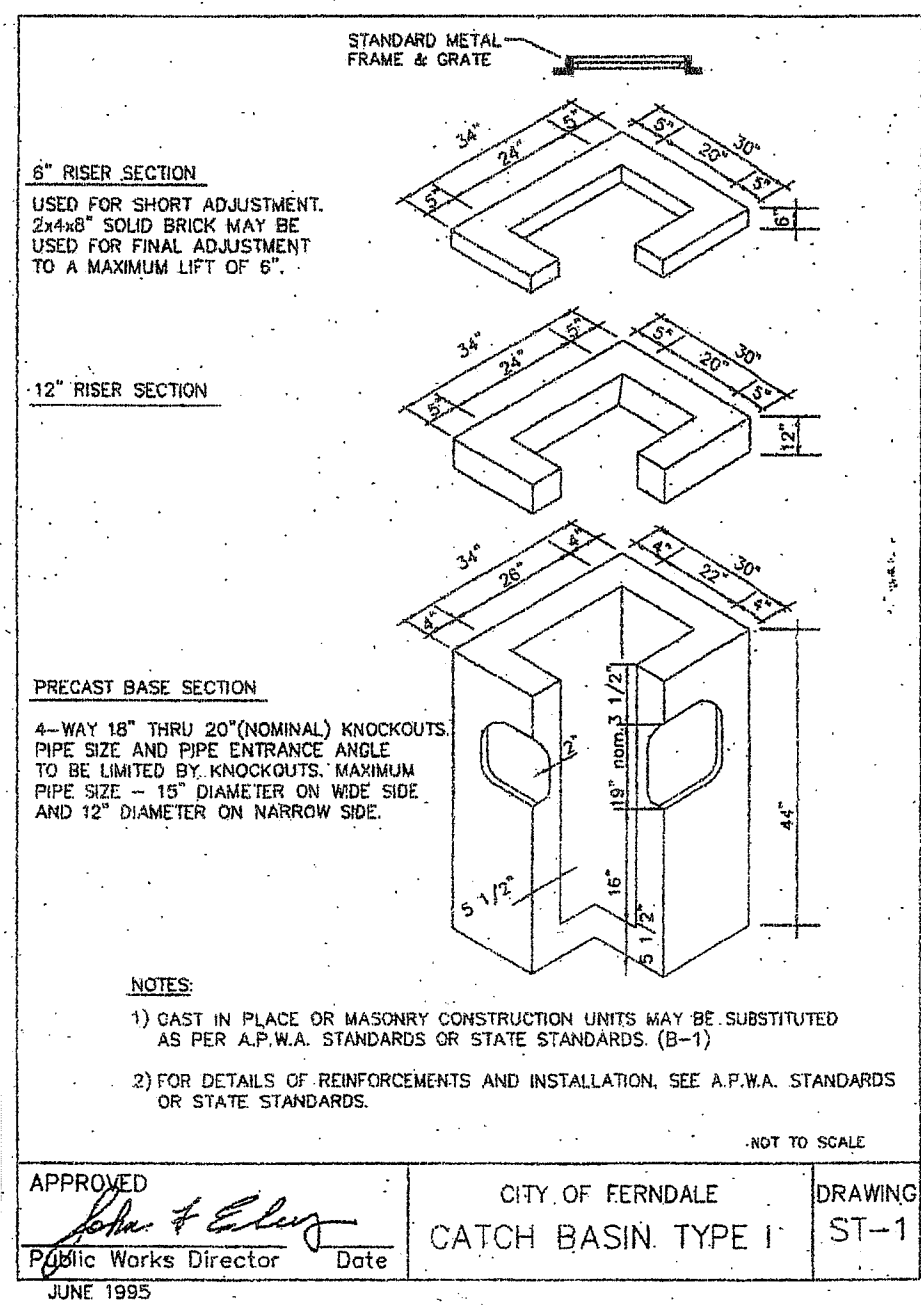
DWG #: 06085ASB2

JOB #: 06085

SCALE: H: n/a V: n/a

DATE: 09-09-09

SHEET: C12



Engineer's Certification
I HEREBY CERTIFY THAT THE IMPROVEMENTS IN BARRON HEATING HAVE BEEN INSPECTED BY FREELAND & ASSOCIATES, INC. AND TO THE BEST OF MY KNOWLEDGE, HAVE BEEN CONSTRUCTED IN CONFORMANCE WITH THE CITY OF FERDALE DEVELOPMENT STANDARDS, THE CITY OF FERDALE MUNICIPAL CODE, SUBSEQUENT STANDARDS ADOPTED BY REFERENCE THEREIN, AND STANDARD ENGINEERING PRACTICE.

By: *[Signature]* Date: 9-9-09

Surveyor's Certification
I CERTIFY THAT THE LOCATIONS, ELEVATIONS, DEPTHS, AND AS-BUILT COMMENTS REFLECTING MATERIALS ACTUALLY USED DURING CONSTRUCTION ACCURATELY REFLECT EXISTING FIELD CONDITIONS AS DETERMINED BY ME OR UNDER MY DIRECT SUPERVISION ON THIS DATE: 9-9-09

By: *[Signature]* Date: 9-9-09

APPROVED
SEP 28 2009
CITY OF FERDALE

REGISTERED PROFESSIONAL ENGINEER
HARVEY A. FREELAND
STATE OF WASHINGTON
19538

CALL BEFORE YOU DIG
FOR BURIED UTILITY LOCATIONS
1-800-424-5555

No. Date REVISION

By

DESIGNED BY: HAF
DRAWN BY: AMM
CHECKED BY: HAF

FREELAND & ASSOCIATES
1408 North Garden Street
Bellingham, WA 98225
t: 360.650.1408
f: 360.650.1401

CLIENT:
PROJECT LOCATION:

BARRON HEATING
4176 MERIDIAN STREET
BELLINGHAM, WA 98226
LOT 12, SBSP NO. 5
5100 PACIFIC HIGHWAY
FERDALE, WASHINGTON

SHEET CONTENTS:

DETAILS

DWG #: 06085ASB2
JOB #: 06085
SCALE: H: n/a V: n/a
DATE: 09-09-09
SHEET: C13

00397.013 10-27-09 BD

STORMWATER POLLUTION PREVENTION PLAN

Stormwater Pollution Prevention Plan

Each of the following twelve elements were used to determine the BMPs that will mediate any limitations of the site.

Element #1: Mark Clearing Limits

Clearing limits, sensitive areas and their buffers, and trees to be preserved within the construction area will be clearly marked prior to beginning land disturbing activities, which includes clearing and grading. These areas will be clearly marked, both in the field and on site plans, to prevent damage and offsite impacts.

Washington State Department of Ecology BMPs considered for Element #1 include:

- BMP C101: Preserving Natural Vegetation
- BMP C103: High Visibility Plastic or Metal Fence
- BMP C104: Stake and Wire Fence

Element #2: Establish Construction Access

Construction access will be limited to one route. Access points will be stabilized with quarry spalls and asphalt. Roads will be cleaned at the end of each day. Sediment transported to roads from the site will be swept and disposed of at a controlled sediment disposal area on site. If street washing is needed, it will only occur after sediment has been removed as described. The resulting wash wastewater would then be controlled by pumping it back on site.

All construction access points will be restored to pre-construction condition.

Washington State Department of Ecology BMPs considered for Element #2 include:

- Housekeeping/Maintenance BMP: Daily Street Sweeping

Element #3: Control Flow Rates

A detention facility will be used to detain on-site runoff and to protect downstream properties from erosion due to increases in the volume, velocity, and peak flow rate of stormwater runoff from the project site. The detention facility is designed and constructed as outlined in Volume III of the Stormwater Management Manual, Chapter 3 Section 3.2.1.

Stormwater detention facilities will be constructed as a first step in construction and will be functional prior to construction of site improvement (e.g. impervious surfaces).

Washington State Department of Ecology BMPs considered for Element #3 include:

- Stormwater Detention

Element #4: Install Sediment Controls

The duff layer, native topsoil, and natural vegetation will be retained in an undisturbed state to the maximum extent practicable. Element #1 of this plan including implementing BMP C101: Retaining Natural Vegetation will help retain some areas in an undisturbed state.

Stormwater runoff from disturbed areas will pass through sediment control devices prior to leaving the construction site. As identified in Element #3, detention facilities will be implemented as one of the sediment control measures.

Other sediment control measures that may be implemented on site include:

- Use of straw bales below disturbed areas that may be subject to sheet erosion. If straw bales are used, they will be installed and maintained as outlined in BMP C230. In addition, they will be used in conjunction with other erosion control measures as identified throughout the Construction SWPPP.
- Construction of a gravel filter berm (BMP C232) to retain sediment from rights-of-way or construction traffic areas, if applicable.
- Silt fences may be used to control transport of coarse sediment from the site. Installation of silt fences will be done as outlined in BMP C233 and will be used in combination with other erosion control methods.
- Vegetated strips will be used where appropriate. If vegetated strips are used as an erosion control measure, they will be implemented as outlined in BMP C234.
- Straw wattles may also be considered as part of the erosion control measures for this site. If straw wattles are installed, they will be done as outlined in BMP C235.

A combination of these BMPs will need to be in place to effectively manage the site for erosion control. Evaluation of BMP effectiveness and maintenance of the installed BMPs will continue throughout construction. Modifications to the combinations of BMPs may occur as a result of ongoing site evaluation.

Washington State Department of Ecology BMPs considered for Element #4 include:

- BMP C230: Straw Bale Barrier
- BMP C232: Gravel Filter Berm
- BMP C233: Silt Fence
- BMP C234: Vegetated Strip
- BMP C235: Straw Wattles
- BMP C241: Temporary Sediment Pond

Element #5: Stabilize Soils

If construction occurs in the wet season (10/1 through 4/30) soils will not remain exposed and unworked for more than 2 days. When active grading is in progress, the deadline for soil stabilization may be extended upon determining that the likelihood of erosion impacts is low based on the type and amount of soil exposed, site topography, potential for discharge to critical areas and lakes, and other factors. In addition, weather conditions will continually be monitored including before holidays and weekends for purposes of preparing the site for predicted weather conditions. BMPs that are effective in stabilizing soils and protecting them from exposure to rain and wind or other climatic conditions will be implemented throughout the project. Evaluation and monitoring of BMP effectiveness will occur on a daily basis. In addition, in the event of forecasted precipitation events, additional measures to stabilize soils will be taken.

BMPs that will be considered throughout construction include but are not limited to temporary and permanent seeding, sodding, mulching, plastic covering, erosion control fabrics and matting, the early application of gravel base on areas to be paved, and dust control.

Washington State Department of Ecology BMPs considered for Element #5 include:

- BMP C120: Temporary and Permanent Seeding
- BMP C121: Mulching
- BMP C122: Nets and Blankets
- BMP C123: Plastic Covering
- BMP C124: Sodding
- BMP C125: Topsoiling
- BMP C130: Surface Roughening
- BMP C131: Gradient Terraces
- BMP C140: Dust Control

Element #6: Protect Slopes

Cut and fill slopes have been designed to a grade of 2:1 or flatter to minimize erosion and to provide slope stability. Construction will be phased so that the slopes can be stabilized immediately after their construction.

Slope runoff velocities will be reduced by having flatter cut slopes, roughening the slopes after excavation, and immediate application of ground cover.

Stabilize soils on slopes, as specified in Element #6.

Washington State Department of Ecology BMPs considered for Element #6 include:

- BMP C120: Temporary and Permanent Seeding
- BMP C130: Surface Roughening
- BMP C131: Gradient Terraces
- BMP C200: Interceptor Dike and Swale
- BMP C201: Grass-Lined Channels
- BMP C204: Pipe Slope Drains
- BMP C205: Subsurface Drains
- BMP C206: Level Spreader
- BMP C207: Check Dams
- BMP C208: Triangular Silt Dike (Geotextile-Encased Check Dam)

Element #7: Protect Drain Inlets

All storm drain inlets made operable during construction shall be protected so that stormwater runoff shall not enter the conveyance system without first being filtered or treated to remove sediment.

Operable storm drain inlets on the site and within 500 feet downstream of the construction area roads will be protected so that stormwater runoff does not enter the conveyance system without filtration or other treatment for sediment. BMP C220: Storm Drain Inlet Protection will be used to determine the most appropriate inlet protection design for the site and the downstream area.

Inlets will be inspected weekly at a minimum and daily during storm events. Inlet protection devices should be cleaned or removed and replaced before six inches of sediment can accumulate.

Construction access points and approaches will be monitored and swept to minimize the potential of sediment transport. If street washing occurs, the wash wastewater will be pumped back on site. Any storm water runoff that reaches the storm drain for discharge will have received treatment through the BMPs identified in Elements 1, 2, 3, and 4.

Washington State Department of Ecology BMPs considered for Element #7 include:

- BMP C220: Storm Drain Inlet Protection

Element #8: Stabilize Channels and Outlets

Temporary on-site conveyance channels will be designed, constructed, and stabilized to prevent erosion from the expected flow velocity of a 2-year, 24-hour frequency storm. BMP C202: Channel Lining will be used to determine the most effective channel design for the site (i.e. blankets versus riprap). The design, construction and stabilization of the conveyance channels will be consistent with the methods outlined in BMP C202.

Outlets of all conveyance systems will be protected and stabilized to prevent erosion of outlets and swales. There are a number of approaches outlined in BMP C209: Outlet Protection that will be considered for purposes of designing and implementing the most effective outlet protection approach.

Washington State Department of Ecology BMPs considered for Element #8 include:

- BMP C202: Channel Lining
- BMP C209: Outlet Protection

Element #9: Control Pollutants

Waste materials generated on site will be handled and disposed of in a manner that does not cause contamination of stormwater, including covering dumpsters and stockpiles. Routine inspections of the waste material storage areas will be conducted to make sure that leaks or spills do not occur. Any leakage or spills will be cleaned up immediately. A spill response kit that includes absorbent material will be available on site. Used absorbent material will be disposed of properly.

Maintenance of heavy equipment involving oil changes, hydraulic system drain down, solvent and de-greasing cleaning and/or other activities that may result in discharge or spillage of pollutants to the ground or into stormwater runoff will be conducted with spill prevention measures in place, including conducting maintenance on a temporary pad that can be used to capture large spills and the use of drip pans. In the event that emergency repairs need to be performed and climatic conditions may result in a precipitation event prior to the repair being completed, the repair area, which includes the vehicle, will be covered with tarps or other plastic sheeting. Discharges, spills, or leaks will be cleaned immediately. The notification procedure outlined in the permanent site SWPPP is as follows:

- Notify key personnel -- During construction, the project engineer will be providing project oversight and will be contacted in the event of a spill. The project engineer will contact the site owner and the Department of Ecology. Any spills with potential to discharge to storm drains, sanitary sewer system, or surface waters will be reported to City of Bellingham Public Works.
- All spills will be reported to the Department of Ecology, Spill Response Program (425) 649-7000.

Washington State Department of Ecology BMPs considered for Element #9 include:

- Spill Cleanup and Response Practices

Element #10: Control De-Watering

Foundation, vault, and trench de-watering water shall be discharged into a controlled conveyance system prior to discharge to a sediment pond. Channels must be stabilized, as specified in Element #6.

Clean, non-turbid de-watering water, such as well-point ground water, can be discharged to systems tributary to State surface waters, as specified in Element #8, provided the de-watering flow does not cause erosion or flooding of receiving waters. These clean waters should not be routed through stormwater sediment ponds.

Highly turbid or contaminated dewatering water from construction equipment operation, concrete tremie pour, or work inside a cofferdam shall be handled separately from stormwater.

Other disposal options, depending on site constraints, may include:

1. Infiltration
2. Transport off site in vehicle, such as a vacuum flush truck, for legal disposal in a manner that does not pollute state waters
3. On-site treatment using chemical treatment or other suitable treatment technologies,
4. Sanitary sewer discharge with local sewer district approval, or
5. Use of a sedimentation bag with outfall to a ditch or swale for small volumes of localized dewatering.

Element #11: Maintain BMPs

All temporary and permanent erosion and sediment control BMPs will be inspected, maintained, and repaired to assure continued performance of their intended function. Maintenance and repair shall be conducted in accordance with the relevant BMP identified in Elements #1 through #10.

Temporary erosion and sediment controls identified above will be inspected daily during the wet season. Needed repairs and maintenance will occur as soon as practicable or, in the event of a forecast of inclement weather, repairs and maintenance will occur immediately.

Temporary erosion and sediment control BMPs will be removed within 30 days after final site stabilization is achieved or after the temporary BMPs are no longer needed. Trapped sediment will be removed or stabilized on site. Disturbed soil resulting from removal of BMPs or vegetation shall be permanently stabilized.

Element #12: Manage the Project

Phasing of Construction

To the extent practicable, site disturbance and construction will be phased where feasible. Revegetation of exposed areas and maintenance of that vegetation will occur as part of the clearing activities.

Clearing and grading activities will occur after the applicable permits have been obtained. When establishing clearing and grading areas, consideration will be given to minimizing removal of existing trees and minimizing disturbance and compaction of native soils except as needed for building purposes. Element #1 outlines BMPs that will effectively minimize removal and damage to native vegetation and protect these areas by being clearly delineated and marked.

Seasonal Work Limitations

From October 1 through April 30, soil will not remain exposed and unworked for more than 2 days. In addition, weather conditions will continually be monitored including before holidays and weekends for purposes of preparing the site for predicted weather conditions. As discussed in Element #6, BMPs that are effective in stabilizing soils and protecting them from exposure to rain and wind or other climatic conditions will be implemented throughout the project. Inspection and evaluation of the effectiveness of the BMPs will occur on a daily basis. In addition, in the event of forecasted precipitation events, additional measures to stabilize soils will be taken.

Coordination with Utilities and Other Contractors

The stormwater management requirements for all aspects of the construction project, including utilities, were considered in preparing the Construction SWPPP.

Inspection and Monitoring

As previously mentioned, all BMPs will be inspected, maintained, and repaired as needed to assure continued performance of their intended function.

In the event that inspection and/or monitoring reveals that the BMPs identified in this Construction SWPPP are inadequate, due to the actual discharge of or potential to discharge a significant amount of any pollutant, this SWPPP shall be modified, as appropriate, in a timely manner.

Maintenance of the Construction SWPPP

The Construction SWPPP will be retained on-site and will be updated on a regular basis. A log will be attached to the construction SWPPP to facilitate regular updates. Modifications to the Construction SWPPP will be made whenever there is a significant change in the design, construction, operation, or maintenance of any BMP.

APPROVED

SEP 28 2009

By: *[Signature]*
CITY OF FERDALE

Engineer's Certification

I HEREBY CERTIFY THAT THE IMPROVEMENTS IN BARRON HEATING HAVE BEEN INSPECTED BY FREELAND & ASSOCIATES, INC. AND TO THE BEST OF MY KNOWLEDGE, HAVE BEEN CONSTRUCTED IN CONFORMANCE WITH THE CITY OF FERDALE DEVELOPMENT STANDARDS, THE CITY OF FERDALE MUNICIPAL CODE, SUBSEQUENT STANDARDS ADOPTED BY REFERENCE THEREIN, AND STANDARD ENGINEERING PRACTICE.

Surveyor's Certification

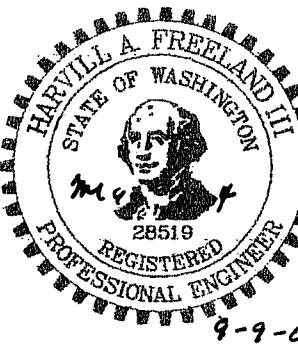
I CERTIFY THAT THE LOCATIONS, ELEVATIONS, DEPTHS, AND AS-BUILT COMMENTS REFLECTING MATERIALS ACTUALLY USED DURING CONSTRUCTION ACCURATELY REFLECT EXISTING FIELD CONDITIONS AS DETERMINED BY ME OR UNDER MY DIRECT SUPERVISION ON THIS DATE: *9/24/09*

By: *[Signature]*

Date: *9/24/09*

By: *[Signature]*

Date: *9-9-09*



CALL BEFORE YOU DIG
FOR BURIED UTILITY LOCATIONS
1-800-424-5555

No. Date REVISION

DESIGNED BY:
HAF
DRAWN BY:
AMM
CHECKED BY:
HAF

1408 North Garden Street
Bellingham, WA 98225
t: 360.650.1408
f: 360.650.1401
FREELAND & ASSOCIATES

CLIENT:
PROJECT LOCATION:

BARRON HEATING
4176 MERIDIAN STREET
BELLINGHAM, WA 98226
LOT 12, SBSP NO. 5
5100 PACIFIC HIGHWAY
FERDALE, WASHINGTON

SHEET CONTENTS:

**STORMWATER
POLLUTION PREVENTION PLAN**

DWG #:

06085ASB2

JOB #:

06085

SCALE:

H: n/a

V: n/a

DATE:

09-09-09

SHEET:

C15